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CONTENT – SOMMAIRE – INHALT – CUPRINS

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STUDY OF THE INFLUENCE OF EMOTIONAL INTELLIGENCE UPON SPORT PERFORMANCE OF GYMNASTS

NUŢ RAMONA ANCUŢA[1*]

ABSTRACT. Trainers and parents have always been interested in sport achievement and children's emotional adaptation both inside and outside of the official framework provided by a sport club. However, in the last period, the researchers found out that the child's emotional life has a significant impact on the aforesaid two aspects. Thus, the Emotional Intelligence has become an important area of research in the field of human resources, management, sport and psychology. Goleman (1995) believes that development of the students' emotional aptitudes is as important as the development of their cognitive abilities, therefore the EI concept has the same importance as the well known IQ. Moreover, the latest studies show that the IE predicts in a proportion of 80% the achievements of a person during the lifetime. The topic of this research consists in the study of the importance of *emotional intelligence* for *sport performance of gymnasts.* The research starts from the fact that certain individuals have outstanding results in practice and succeed better in life than others who have a greater (cognitive) IQ.

Key words*: sport performance, emotional intelligence*

REZUMAT. ***Studiu cu privire la influenţa inteligenţei emoţionale asupra performanţei sportive a gimnaştilor***. Antrenorii şi părinţii au fost mereu interesaţi de succesul sportiv şi de adaptarea emoţională a copiilor, atât în cadrul formal oferit de clubul sportiv cât şi în afara acestuia. Însă, doar în ultimul timp, cercetătorii au realizat că viaţa emoţională a copilului are un impact semnificativ asupra celor două aspecte amintite. Astfel, Inteligenţa emoţională a devenit un câmp important de cercetări în domeniul resurselor umane, management, sport şi psihologie. Goleman (1995) susţine că dezvoltarea aptitudinilor emoţionale ale elevilor este la fel de vitală ca dezvoltarea abilităţilor lor cognitive, astfel că IE este un concept la fel de important ca mult mai familiarul IQ. Mai mult, studiile recente au demonstrat faptul că IE prezice aproximativ 80% din succesul unei persoane în viaţă. Tema acestei cercetări o reprezintă studiul asupra importanţei *inteligenţei emoţionale* în *performanţa sportivă* a gimnastelor. Cercetarea porneşte de la adevărul cuprins în afirmaţiile referitoare la faptul că anumite persoane au rezultate deosebite în practică şi reuşesc mai bine în viaţă decât altele, care au un IQ (cognitiv) mai mare.

Cuvinte cheie*: performanţă sportivă, inteligenţă emoţională*

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Objective

The objective consists in the study of the relation between emotional intelligence and sport performance of gymnasts.

Hypothesis

Level of the emotional intelligence has influence on the sport performances of gymnasts.

Operational hypotheses

1. The high sport performance is significantly associated to a high level of emotional intelligence;
2. Gymnasts with a high level of emotional intelligence achieve a significantly increased sport performance than the ones with low level of emotional intelligence.

Subjects

We have chosen a random sample of 36 persons, professional gymnasts with ages between 7-12 years.

Variables and experimental design

This study is a non-experimental design (observational) study with 2 variables.

Variables used for evaluation by statistical analysis are independent and unmodified by the researcher, and the dependent variables are considered to be modified by the influence of the independent ones.

The independent variable is the emotional intelligence.

The dependent variable is the sport performance.

For a better evaluation, the study also uses the age variable as an independent variable with the purpose of clarifying the differences taking into consideration this factor.

Method

In what concerns the framework of this study, our intention was not to make a comprehensive and complex research, but rather a study of the two variables. Therefore, we focused on analyzing the questionnaire and observation

charts. No other studies in which these tests were implemented are taken into view and since we don't know the limits of the tests implementation, the research results are fallible.

This research precedes some elaborated studies related to emotional intelligence and sport performance and represents a starting point in this direction.

In order to achieve the proposed objective, we have used the inquiry method based on questionnaire for checking the level of emotional intelligence and the observation method to find out the sport performance of gymnasts.

Instruments – measurements

1. For measuring the level of emotional intelligence we used the BarOn and Goleman EI Test, (adapted by Roco 2001, version for children). The questionnaire includes 10 items presenting situations (scenarios) in which any child may find himself/herself at some point. Each item has 4 answer options out of which the child will choose the one that best describes his/her reaction in that particular situation. By adding the points obtained at these ten answers, we can assess the level of emotional intelligence of each child as follows: less than 100 – bellow average; 100-150 – average; more than 150 – over average; 200 – outstanding.

2. In order to measure the sport performance level we have used the observation charts in which we wrote the gymnasts evolution during contest. Data related to the sport performance are represented by the general averages of grades obtained during the contest at the four events.

Procedure

The study was conducted for a period of two months by administering to each gymnast the questionnaire for assessment of EI. To avoid the distortion of test statistical results, the possibility of some errors sources as bellow mentioned, has been excluded:

- loss of subjects – the tested group was formed by randomly chosen subjects;
- selection errors – tests have been administered once to all subjects, in order to avoid the loss of subjects due to their absence;
- the diffusion effect – testing was not previously announced, so that the answers were not prepared or debated before testing by the participants and the testing intention was not interpreted.

The testing took place in a relaxed manner. The questionnaire was administered in the gym before training, and for gymnasts aged 7-8 years the questionnaire was administered to each gymnast by an adult who read the questions and then wrote the answers received.

The study continued with assessment of the sport performance of gymnasts. It was conducted during a contest which covered all the conditions of an important contest (audience, arbiters, specific competitive environment). The performances obtained by gymnasts were assessed by a jury of arbiters, who assigned the grades in accordance with the IFG Code of Points.

Results

Data have been analyzed from the statistical perspective using the SPSS 15 Program, and the graphs have been drawn in Microsoft Excel 2010.

For data statistical analysis and for graphical representations (histograms) we have utilized the SPSS v 15 Package (SPSS Inc., Chicago, USA). Microsoft Excel (Microsoft Office Prof. 2010). The statistical significance threshold was established at $p < 0,05$ (accepted error margin $\alpha=0.05$). Data distribution was checked by using Shapiro-Wilk and Kolmogorov-Smirnov tests. All three variables have normal distribution as we can see in the bellow graphs made in the form of histogram.

Correlations inside the lot were established using the correlation coefficient r (Bravais-Pearson), in addition an appropriate signification test was administered. At the interpretation of correlation coefficients we utilized the empirical rules of Colton.

Univariate regression was used to express the sport performance (PS) in relation with emotional intelligence (IE) (PS – dependent variable, IE – independent variable).

Multivariate regression was used to determine the sport performance depending on the emotional intelligence and age (PS-dependent variable, IE, age – independent variable).

The descriptive statistics for the three variables is presented in the table bellow:

Table 1. Description of data resulted from study

Variable	Minim	Maxim	Total	Mediate	Standard error	Standard deviation	Variation
Age	7	12	318	8,83	0,24	1,42	2,02
Score IE	35	170	3480	96,67	6,87	41,25	1701,43
Score PS	16,5	41,7	1074,2	29,84	1,22	7,311	53,51
IE = emotional intelligence; PS = sport performance							

The distribution of variables is shown in the histograms bellow:

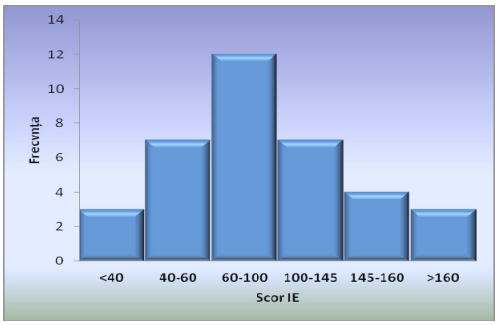

Figure 1. Histogram of emotional intelligence score

From the above histogram results that the highest frequency of the emotional intelligence scores ranged from 60 to 100 (12 gymnasts).

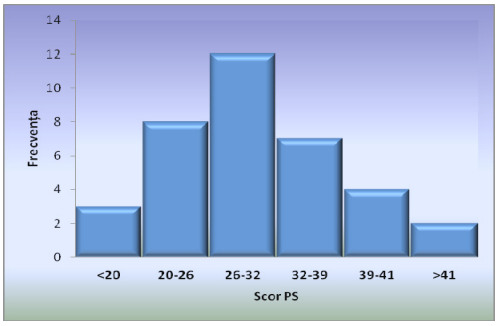

Figure 2. Histogram of sport performance score

The maximum frequency of sport performance scores ranged from 26 to 32 (12 gymnasts).

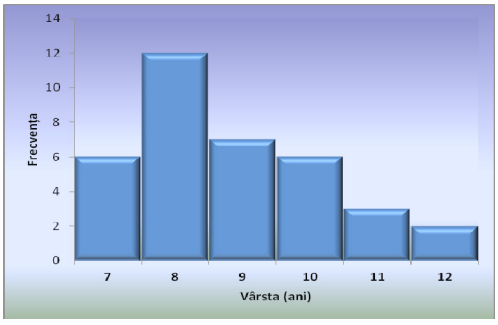

Figure 3. Histogram of Age

The analysis of frequency *sport performance* in relation with *the emotional intelligence* is described in the following tables.

Table 2. The frequencies of sport performance depending on the emotional intelligence

Level emotional intelligence		Level sports performance		Total
		Low average and low	High average and high	
Low	Frequent	16	1	17
	Expect frequent	13.1	3.9	17.0
	% after emotional intelligence level	95,2%	4,8%	100%
	% after sport performance level	57,1%	12,5%	48,8%
	% total	**46,5%**	2,3%	48,8%
High	Frequent	14	5	19
	Expect frequent	14.9	4.1	19.0
	% after emotional intelligence level	68,2%	31,8%	100%
	% after sport performance level	42,9%	87,5%	51,2%
	% total	**34,9%**	16,3%	51,2%
Total	Frequent	30	6	36
	Expect frequent	30.0	6.0	36.0
	% after emotional intelligence level	81,4%	18,6%	100%
	% after sport performance level	100%	100%	100%
	% total	81,4%	18,6%	100%

The proportion of those with a low sport performance level and low emotional intelligence level is 46.5% comparing with 34.9% low sport performance level and high emotional intelligence level. This proportion is reversed in case of high sport performance group. The highest frequency in the studied sample appears at the subjects with a low emotional intelligence level and low sport performance level, almost half.

Table 3. School performance – emotional intelligence interdependent relationship

Emotional intelligence – Sport performance	Values	gl	Significance
$\chi 2$ (Pearson)	5.183	1	**0.024**
No. cases	36		

Test χ2 test reveals sport performance as being closely related to the emotional intelligence as results from the bellow data and graph.

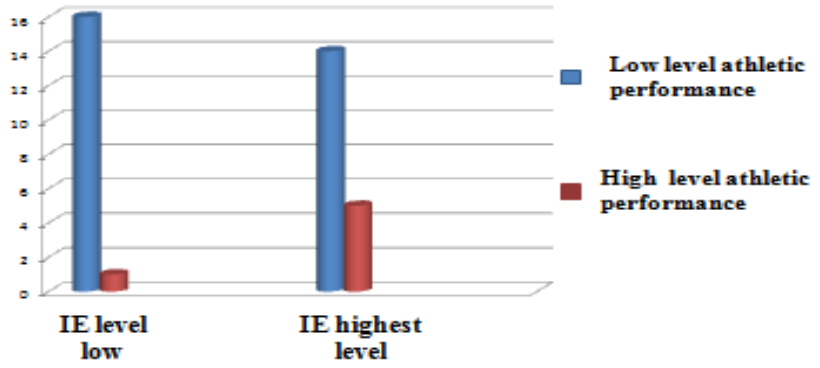

Chart 1. Sport performance – emotional intelligence

This graph presents from the quantitative perspective (number of cases) the proportion of the level of sport performance in two situations (low and high).

More cases with low sport performance level are met in case of low emotional intelligence, comparing with the cases of high emotional intelligence level where less cases of low performance are met and the other way around for a high sport performance level.

Correlations between the values of variables *emotional intelligence and sport performance* are presented in the table bellow.

Table 4. *Bravais-Pearson Correlations related to sport performance*

Correlation PS	r	p
Score IE	0,96	<0,001
Age	0,37	0,02

After calculating the correlations, we found out that a very good correlation between sport performance and emotional intelligence exists ($r=0.96$ $p<0.001$ $r^2=0.91$) (the high level of emotional intelligence is linked to a high level of sport performance). 91% of the variation of sport performance is due to the linear relation with emotional intelligence (figure 4). There is an acceptable correlation between sport performance and age ($r=0.37$ $p=0.02$) (figure 4).

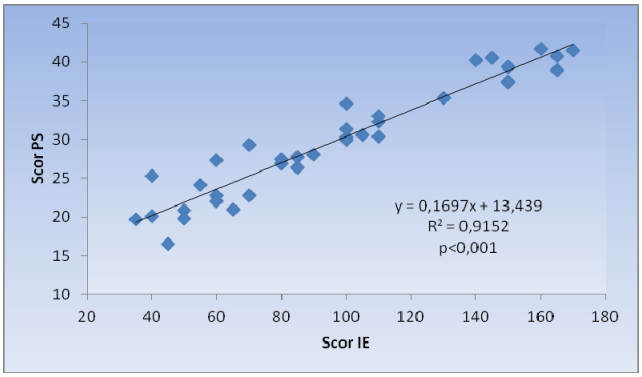

Figure 4. Graphical representation of the correlation between sport performance and emotional intelligence

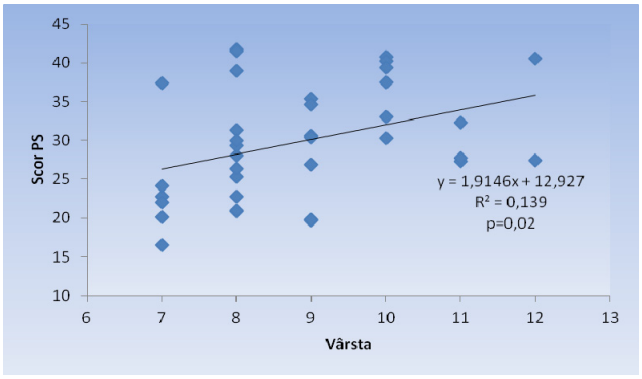

Figure 5. Graphical representation of the correlation between sport performance and age

Next, we present the steps followed in SPSS for obtaining the multidimensional regression (sport performance, emotional intelligence and age).

Table 5. Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Score IE, Age(a)	.	Enter

a All requested variables entered.
b Dependent variable: Score athletic performance

Table 6. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,962(a)	,925	,921	2,0594

a Predictors: (Constant), Score emotional intelligence, Age

Table 7. ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1732,904	2	866,452	204,292	,000(a)
	Residual	139,961	33	4,241		
	Total	1872,866	35			

a Predictors: (Constant), Score emotional intelligence, Age
b Dependent variable: Score athletic performance

Table 8. Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9,207	2,195		4,194	,000
	Age	,538	,255	,105	2,106	,043
	Score IE	,164	,009	,926	18,634	,000

a Dependent variable: Score athletic performance

Equation of multivariate regression (obtained from the above table) is:

$$PS=0.164\times Score\ IE+0.538\times Age+9,207$$

Univariate regression for sport performance and emotional intelligence:

Table 9. Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Scor IE(a)	.	Enter

a All requested variables entered.
b Dependent variable: Score athletic performance

Table 10. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,957(a)	,915	,913	2,1610

a Predictors: (Constant), Score emotional intelligence

Table 11. ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1714,089	1	1714,089	367,050	,000(a)
	Residual	158,777	34	4,670		
	Total	1872,866	35			

a Predictors: (Constant), Score emotional intelligence
b Dependent variable: Score athletic performance

Table 12. Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	13,439	,929		14,470	,000
	Score IE	,170	,009	,957	19,159	,000

a. Dependent variable: Score athletic performance

Equation of univariate regression (obtained from the above table) is:

$$PS=0.17\times \text{Score IE}+13.439$$

Conclusions

During this study we followed the link between the emotional intelligence and sport performance of gymnasts. This study attempts to check the hypothesis according to which the level of emotional intelligence has influence on the sport performance of gymnasts.

After data analysis and interpretation made with the purpose of studying the relation between *emotional intelligence and sport performance* by using:

- the *emotional intelligence – sport performance* interdependent relationship
- the influence of *emotional intelligence* on *sport performance*, in what concern the hypotheses of this study, the following conclusions can be established.

The emotional intelligence and sport performance of the gymnasts in the studied sample are in interdependent relationship. Emotional intelligence is closely linked to the sport performance as results from the above data.

The gymnasts with a high level of emotional intelligence have a significantly greater performance than the ones with a low level of emotional intelligence.

This analysis confirms the hypothesis according to which the level of emotional intelligence has influence upon the sport performance of gymnasts.

The development of emotional intelligence in gymnasts' preparation facilitates the improvement of intellectual aptitudes and creativity which in time lead to professional achievements. By means of personal capacity of identification and management of individual emotions in relation with the (target) purposes, the gymnasts (who acquired knowledge) can reach favourable results and increase their sport performance.

Application of certain methods and changes of the conditions and relations in the school, family and group environment may lead along with other necessary factors to an increased school performance of students.

It is necessary to confer more attention to the emotional development. Our purpose as trainers is not only to provide practical knowledge for athletes but to help them to develop their survival abilities in order to successfully face life in the contemporary world.

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ANXIETY LEVEL AND THE BODY MASS INDEX AMONG STUDENTS

NEGRU IOAN NICULAIE, ANDRAS ALMOS[1*]

ABSTRACT. Nowadays we hear frequently speaking about the link between the BMI values and humans` s health state. Increased levels of BMI are often associated with cardiovascular diseases, eating disorders, low self-esteem, and with increased levels of anxiety too. The aim of our study is to emphasize, at the level of the first year students, if there is a relation between the BMI level and the anxiety state level.

Key words: *body mass index, anxiety, students*

REZUMAT. ***Indicele de masă corporală şi gradul de anxietate în rândul studenţilor*****.** La ora actuală se vorbeşte, tot mai des, despre legătura dintre valorile indicelui de masă corporală şi starea de sănătate a indivizilor. Valori crescute ale indicelui de masă corporală sunt adesea asociate cu boli cardiovasculare, cu dereglări în alimentaţie, ale imaginii/stimei de sine, şi nu în ultimul rând cu valori crescute ale anxietăţii. Studiul de faţă îşi propune să evidenţieze dacă, la nivelul studenţilor de anul I, există o corelaţie între valorile indicelui de masă corporală şi gradul de anxietate al subiecţilor.

Cuvinte cheie: *indicele de masă corporală, anxietate, studenţi*

Introduction

Nowadays we frequently hear speaking about how obesity affects the people's health state. Obesity and overweight are often associated with mental health difficulties (Tichener & Wong, 2015).

American Psychiatric Association (2013) approached the term social anxiety disorder which can be translated by an intense fear induced by evaluation from others. Their studies have shown a positive association between obesity and social anxiety disorders, especially in female's subjects (Tichener & Wong, 2015). Anxiety is considered a tension, a reaction to stress situations, an answer for an imaginary or a real danger (Feldman, 2011; Bassi,

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2014). Weinberg and Gould (as cited in Jarvis, 2006) presents the concept of anxiety as being "a negative emotional state with feelings of nervousness, worry and apprehension associated with activation or arousal of the body" (p.114). Some authors describe the anxiety like a reaction to stress which can sustain our activities. In the absence of this anxiety, people wouldn't be motivated for studying or working with responsibility at their job. Some people manifest anxiety even there are not real reasons. When this kind of anxiety affect the people efficiency, the specialists name it anxiety disorders (Feldman, 2011).

Material and methods

In our study we have used the following research methods: bibliography study, M. Hamilton anxiety scale, and statistical analysis. The data was analyzed using SPSS 19 statistical program. We have also used Chi square test at a p=.05 significance level and the Pearson Correlation.

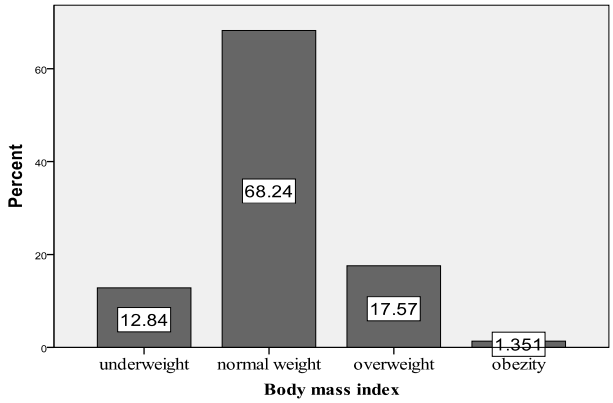


Chart no. 2 Body mass index percent

The anxiety level was established by adding up scores from all 14 items.

Every item had five level of scale, from 0 till 4, where 0 means that anxiety is not present and 4 means the presence of a sever anxiety level. We have used the weight and the height measurements of the subjects for establishing the body mass index. The BMI is calculated by dividing the body mass to the square of the body height, being expressed in units of kg/m^2 (National Heart Lung and Blood institute, Calculate your body mass index, n.d. para. 1). Our study involved 148 students enrolled in Babeș-Bolyai University, students from Faculty of Educational Sciences and from Faculty of History.

Results

There is a statistically significant difference, at the level of gender regarding the participation in sport activities (χ^2=12.63, df = 1, p<0.001). According to our results 63 boys from 70 declare that they are involved in sport activities, meanwhile just 51 girls from 78 declared the same answer (Chart no.1).

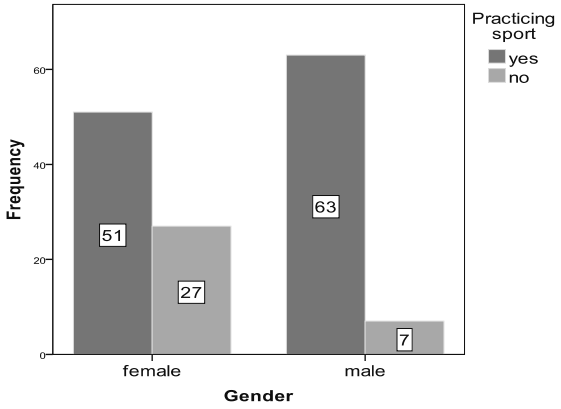


Chart no.1 Practicing sport - by gender

The graphic no. 2 emphasizes the way in which the BMI levels spread/ divide the subjects in categories like normal weight (68.24%), underweight (12.84%), overweight (17.57%) and 1.35% represented by those who can be registered with obesity.

Concerning the anxiety, the majority of subjects involved in our study (76.35%) present a mild severity, 14.19% from mild to moderate severity of anxiety, 6.08% from moderate to severe anxiety and 3,37% have a severe anxiety level (Chart no 3).

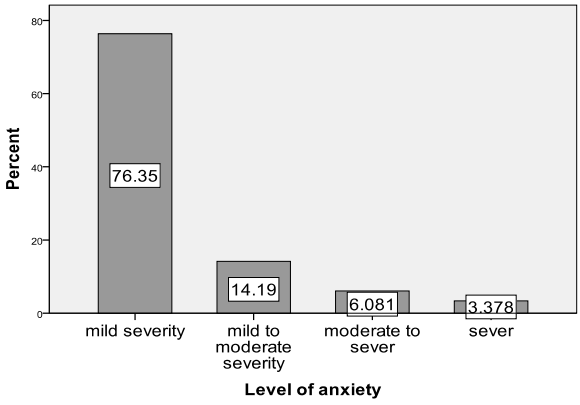
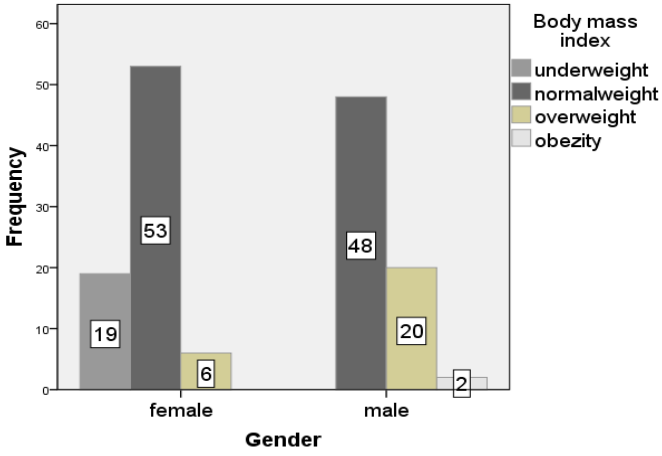


Chart no. 3 Level of anxiety



Grafic no.4 Gender and BMI

The graphic no. 4 presents the way in which the subjects are spread out in their gender and the values of BMI. There is a statistically significant difference at the level of gender regarding the BMI, (χ^2= 28.437, df.=3, p<0.001).

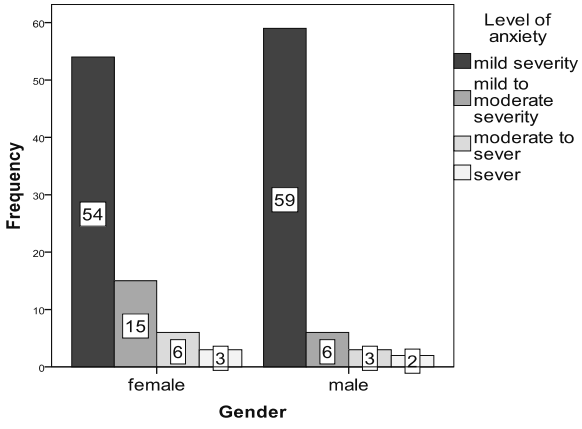


Chart no. 5 Gender and the level of anxiety

The gender differences regarding the anxiety level, are represented in graphic no. 5. According to our results, there is not a statistically significant difference, between the female and male subjects, concerning the anxiety level (χ^2= 4.86, df. = 3, p= .182).

The diagram shows us that there is no evidence regarding a curve relationship or a negative influence in aberrant values (fig.1)

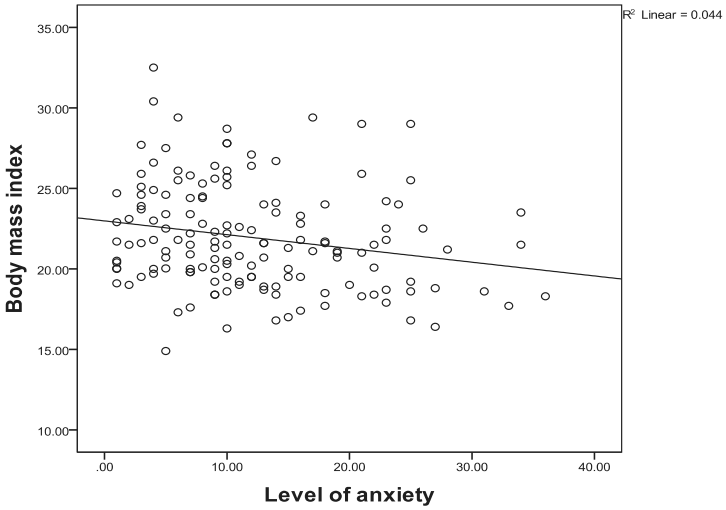


Figure 1. Correlation of BMI and anxiety

Statistical analysis of our data emphasizes the presence of a statistical negative relation (r= -.209, df 146, p=.005) between the level of BMI and the level of anxiety (Table 1). The data shows us that if the level of BMI increase, the level of anxiety will decrease.

Table 1. Pearson Correlation BMI and the level of anxiety

		Level of anxiety	Body mass index
Level of anxiety	Pearson Correlation	1	-.209**
	Sig. (1-tailed)		.005
	N	148	148
Body mass index	Pearson Correlation	-.209**	1
	Sig. (1-tailed)	.005	
	N	148	148

**. Correlation is significant at the 0.01 level (1-tailed).

Conclusions

In the collecting data instrument we have introduced an item connected with activity sport participation. The sport activity concept was described. We were surprised, in a good way, by the number of those subjects who declared that they are usually involved in sport activities.

Regarding the BMI values, the majority of the students have a normal weight, but this fact is certainly linked to their age 20.13 ± 2.5. Applying the Chi-square test, between gender and BMI variables, the results have emphasized a statistically significant difference (χ^2= 28.437, df. = 3, p<0.001).

Starting from the premise that the subjects are students in the first year, meaning that everything is new for them, colleagues, disciplines, professors, and the fact that they have roommates from different corner of the country, we expected to find high levels of anxiety. We were surprised by the fact that the majority of the subjects have a mild severity level of anxiety.

Applying the Chi-square test between gender and the anxiety level, the statistical analyzes reveal that there isn't a statistically significant difference between gender and the level of anxiety.

In our study we found a negative relation between the BMI and the level of anxiety. The diagram shows that meanwhile the level of BMI increases the anxiety level decreases. It would be interesting to involve, in a similar study, older subjects (around 30 years old), the results, regarding the relation between BMI and anxiety, might be different. In another study (Bassi et al. 2014) has obtained a positive correlation, at the level of students (hostelers), between BMI and the anxiety level.

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STUDIA UBB EDUCATIO ARTIS GYMN., LX, 4, 2015, pp. 23 - 29
(RECOMMENDED CITATION)

SPORT ACTIVITIES AMONG STUDENTS UBB CLUJ-NAPOCA

POP GABRIELA MARIA[1*], POP HOREA[1]

ABSTRACT. The importance of a working life for a healthy lifestyle has been proven in many studies and researches. A healthy life cannot be conceived without daily exercise. The exercises conducted regularly and physical activity have proved vital to the health condition of the individual and in the long term. In order to bring health improvements may include physical activity every day. They established many benefits of practicing sport, both anatomically speaking and mentally, emotionally and socially. This paper aims to highlight students' preferences vis-à-vis the sport and the forms of sport practiced by them during their free time. A questionnaire on 465 students aged between 18 and 40 years, coming from the faculties of "Babes-Bolyai" University of Cluj-Napoca in years I and II. The data shows that most students (62.4%) prefer individual sports and declare themselves followers of a minority team sports (15.7%). A high percentage say they do not practice any sport in their free time. In the sport that students would like to practice it, swimming is the girls agreed, followed by aerobics and fitness, while boys would play football, would swim and placed third in basketball items.

Keywords*: sports, leisure, individual sports, team sports.*

REZUMAT. ***Practicarea activităţilor sportive în rândul studenţilor UBB Cluj-Napoca.*** Importanţa unei vieţi active pentru un stil de viaţă sănătos a fost demonstrată în foarte multe studii şi cercetări. O viaţă sănătoasă nu poate fi concepută fără mişcare zilnică. Exerciţiile efectuate în mod regulat şi activitatea fizică s-au dovedit vitale pentru sănătatea individului şi pentru starea sa de bine pe termen lung. Cu scopul de a aduce îmbunătăţiri ale sănătăţii pot fi incluse activităţi de natură fizică în fiecare zi. Au fost stabilite multiple beneficii ale practicării sportului, atât anatomic vorbind, cât şi psihic, emoţional şi social. Această lucrare urmăreşte evidenţierea preferinţelor studenţilor vis-a-vis de activităţile sportive dar şi formele de sport cele mai practicate de aceştia în timpul lor liber. S-a aplicat un chestionar pe un număr de 465 de studenţi cu vârste cuprinse între 18 şi 40 de ani, proveniţi din facultăţi ai Universităţii „Babeş-Bolyai" din Cluj-Napoca din anii I şi II. Datele ne arată că majoritatea studenţilor (62.4%) preferă sporturi individuale şi doar o minoritate se declară adepţii sporturilor de echipă (15.7%). Un procent destul de mare declară că nu practică nici un sport în timpul liber. În ce priveşte sportul pe care studenţii ar dori să-l practice, înotul

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este cel mai agreat de fete, urmat de gimnastica aerobică şi fitness, pe când băieţii ar juca fotbal, ar face înot şi pe locul trei în preferinţe se plasează baschetul.

***Cuvinte cheie**: activităţi sportive, timp liber, sport individual, sport de echipă.*

Introduction

Cultural metamorphosis of modern society, have led several models of free time, accepted as a generic term under the influence of the social, traditions, moral values, religious etc. These models reflect the individual's wishes regarding disposition of their own time in an organized manner as personal. Leisure and recreation as is often regarded as a mood (D. Hurd A. Anderson, 2011, p. 10), during which the individual experiences a transformation marked by freedom of choice and enrichment personal. This can be considered a social institution because of the interest shown by professionals from many fields as economics, sociology, and other scientists in the field of social sciences.

It is wrong to argue that sport is intended only for persons with special physical abilities. Some play sports movement itself, some to make friends. Some seek fame and wealth through sport, while others simply use it to detach the demands of everyday life. Whatever the reasons, sport plays an essential role in society (Leonard, WM, 1993). The sport can be both recreational and game such as a meeting with friends in a park to play basketball, the recreational activity, but there is also the objective of winning. There are physical activities available that do not require excessive costs: Moderate exercise, brisk walking, cycling, swimming, all helping to strengthen the immune system, thereby reducing the possibility of physical or mental illness.

Adrian Dragnea (2000) claime about sport that is a privileged form of contemporary culture, whose complexity makes it difficult to define. This sport is "individual and institution experience, specializing in leisure and competition level, spontaneous expression and a technical, educational and entertainment practice, play and work, physical exercise and mental conduct." All these traits, he says, are different, but the techniques are similar achievement and cultural forms specific to different areas of the world (Dragnea, 2000, p. 76).

Objectives

1. How to divide students by type of sport by gender?
2. What are the favorite sports practiced by students according to gender, in order of importance and their attractiveness?

Methods and Materials

The study was conducted on a sample of 465 students, boys (n = 116) and girls (n = 349) aged between 18 and 40 years of years of study I and II, most of Vashti between 19-21 years (91.3% of students). Students come from 13 faculties of "Babes-Bolyai" University of Cluj-Napoca. The research was based on a questionnaire that contained more questions about the sport activities by young students in their free time.

One of the items requested specification sport or physical activity that students practice more frequently, if not practice any sport in a box to tick species. The questionnaire was finally attached to a table of 40 sports, some of the most popular and the most elite sports, sports grouped into categories: individual, racket, team and sports not included in the previous categories. Another item request list of five sports in order of importance for respondents, even sports that were not in the attached table.

Data obtained using research tools and techniques have been processed and presented in interpreting and drawing conclusions. To achieve the plots we used Microsoft EXCELL computer product, version 2007 and SPSS 20 statistical analysis program.

Results

Table 1. Practiced sports students by gender

Girls		Boys	
Sport	**No. practitioners**	**Sport**	**No. practitioners**
Jogging	81	Football	33
Fitness	41	Jogging	12
Aerobic	37	Fitness	7
Swimming	20	Basketball	6
Dance	14	Martial Arts	4
Athletics	10	Bodybuilding	4
Volleyball	10	Swimming	4
Basketball	9	Volleyball	3
Tennis	8	Aerobic	2
Cycling	6	Athletics	2
Badminton	6	Billiards	2
Football	6	Weightlifting	2
Climbing	4	Mountain-biking	2
Martial Arts	3	Tennis	2
Handball	3	Handball	2
Gymnastic	2	Climbing	1
Ice skating	2	Cycling	1

Girls		Boys	
Billiards	1	Skiing	1
Bowling	1	Motorsports	1
Equitation	1	Badminton	1
Judo	1	Dance	1
Snowboarding	1	Hunting	1
Ping Pong	1	Do not participate in any sport or physical activity	22
Rugby	1	**Total**	**116**
Fishing	1		
Do not participate in any sport or physical activity	79		
Total	**349**		

In Table 1 we find sports practiced by students enter our research and the frequency of their practice. The results show that the most popular sport for girls is running (jogging), followed by fitness and aerobics. All these are part of individual sports. The boys prefer team sports, so the first are those who say that football practice, followed by running (jogging) and the top three is completed by those who go to fitness. We have large numbers of students who do not do sports.

Graphical representation of students' preferences in the category of sport show that most students prefer individual sports. Figure 1 shows the graphic image that reveals the differences between girls and boys to the type of sport. Specifically, individual sport is preferred by almost 70% of respondents and only 42% of respondents. The order is reversed when it comes to team sports, where almost 38% of boys compared to 8.3% declares practitioners of the girls. Moreover, these differences are statistically significant, so that girls prefer individual sports to a greater extent, and the boys on the team ($p < .000$, phi = 0.356, C = 0.356, V = 0.336).

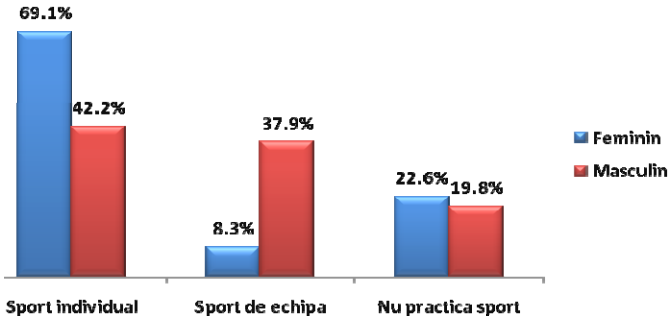

Figure 1. Distribution of the type of sport by gender

In Tables 2 and 3 have listed for both girls and boys, a top 10, depending on the number of students for each desired sporting activity.

For girls, swimming is almost always the first option. Aerobics and fitness among the top desired physical activity of students in perspective the importance of physical appearance, body image as well as dance and athletics and cycling. Along with these, and relevant to girls appear tennis and riding, as the category of elite sports and skiing and ice skating in winter sports group. With high-risk sports are also included and are preferred by girls climbing and skydiving. For girls, among the team sports, only favorite sport is the volleyball.

Table 2. Sports that the students would like to practice - top 10

Fete									
Act.1		**Act. 2**		**Act. 3**		**Act. 4**		**Act. 5**	
Sport	**No**	**Sport**	**No**	**Sport**	**No**	**Sport**	**No**	**Sport**	**No**
Swimming	73	Swimming	38	Swimming	38	Swimming	29	Skiing	23
Aerobic	28	Tennis	26	Skydiving	23	Volleyball	20	Swimming	20
Fitness	27	Aerobic	25	Tennis	21	Fitness	18	Volleyball	19
Tennis	19	Fitness	25	Equitation	19	Ice skating	18	Dance	17
Cycling	15	Skydiving	20	Aerobic	18	Skydiving	17	Equitation	16
Equitation	15	Climbing	17	Fitness	18	Tennis	17	Cycling	15
Volleyball	15	Equitation	17	Dansuri	17	Climbing	16	Skydiving	15
Dance	15	Ice skating	16	Climbing	15	Cycling	15	Tennis	14
Athletics	12	Volleyball	15	Ice skating	14	Equitation	12	Aerobic	13
Climbing	12	Cycling	13	Volleyball	14	Skiing	12	Ice skating	13

Table 3 shows that the main options are for boys soccer, swimming and billiards. The preference is evident for sports games than girls. Tennis is a sport that fascinates and boys in largely the same as girls. The importance of physical appearance has great importance and guys, as evidenced by the choice of sporting activities which aim body shaping and fitness and bodybuilding. The table reveals also the boys' desire to practice some sports with a higher risk leading to extreme sports like motorsports, skydiving, rock climbing. If the girls have expressed preference for dance, a sport of grace and coordination, the boys were oriented to sports predominantly male such as martial arts, judo, fishing, bowling.

Table 3. Sports that students would like to practice - top 10

Băieți									
Act. 1		**Act. 2**		**Act. 3**		**Act. 4**		**Act.5**	
Sport	**No**	**Sport**	**No**	**Sport**	**No**	**Sport**	**No**	**Sport**	**No**
Football	15	Swimming	13	Billiards	8	Swimming	8	Billiards	10
Swimming	11	Cycling	7	Swimming	8	Tennis	8	Swimming	8
Basketball	9	Tennis	7	Cycling	6	Bowling	5	Hunting	5

Băieţi									
Tennis	8	Rowing	5	Tennis	6	Cycling	5	Cycling	4
Martial Arts	6	Tennis	5	Bodybuilding	5	Jogging	4	Equitation	4
Handball	6	Basketball	5	Skiing	5	Athletics	4	Judo	4
Athletics	5	Handball	5	Football	5	Skydiving	4	Volleyball	4
Cycling	4	Football	4	Volleyball	5	Skiing	4	Athletics	3
Bodybuilding	4	Fishing	4	Athletics	4	Motorsports	4	Climbing	3
Fitness	3	Jogging	3	Fitness	4	Basketball	4	Bodybuilding	3

Conclusion

The conclusions to be drawn from these tables that students engage in various sports activities, but most addresses physical activity accessible to both the material basis and from a financial standpoint. But when we follow what they would like these young people see that their wishes are turning to sports involving techniques of greater difficulty and were not found in the habits formed during school education, and require techniques that involve greater difficulty and high financial costs as swimming, tennis, horse riding. For boys, football is the sport most commonly practiced followed by jogging and fitness, and he is the most desirable sports activity followed by swimming and basketball instead girls jogging, fitness and aerobics but they want most to Practical swimming, aerobics and fitness succeeded. The spirit of emulation and measurement of forces with other boys from the perspective characterizes participation in physical activities, while girls are interested in physical appearance, body maintenance. Worrying is the high percentage of students who do not do any kind of sporting activity, which found no incentive to engage in some form of physical exercise.

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FROM THE VELODROM TO THE STREETS – THE RECREATION SCENES OF FIXED GEAR BIKES. A COMPARATIVE STUDY ON HUNGARIAN AND FOREIGNER FIXED GEAR BIKERS

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ABSTRACT. In the present study our aim was to find answers in connection with the increasingly popular fixed gear bicycle (fixie) cultures. We wanted to find out, how popular fixies are among recreational activities in Hungarian and foreigner biking populations. We designed a questionnaire to find out who the bikers are, who they ride with, what their motivations are, how regularly they ride their bikes whose characteristic features are significantly different from other types of bikes and vehicles.

Keywords: *fixed gear, recreation, bicycle, riding habits, subculture*

Introduction

If we rely on data recently recorded, the ancestor of the bike was designed in France in 1791, by a zany noble called Mede de Sivrac. The vehicle, which was named a célérifére referred to its desired rapidity. The device was wooden and two-wheeled, with the fork and a holding beam. It was very easy to use. People sat on it and rode it with their feet. It was pretty much like engine-shaped die-cast toys that are available nowadays for young children. After a while, the first bikes have become luxury items for the rich, decorated with arts and crafts carvings with almost all kinds of animal imitations, from slugs, to lions. Although they were beautiful and technically advanced, it was difficult to move with them because of their weight. Hence the lack of steering, the "rider" always had to stop before changing direction. Since Mede de Sivrac

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did not patent his idea, it was quickly copied by craftsmen who began to sell it. They not only earned well, but they set the fashion, according to the contemporary press of that time (Baroni, 2010).

The fixie bicycle

The closest relative of the fixie bike is the track bike. Track races were held much earlier than road races, but later the stage races became more and more popular among the lovers of cycling sports. At first glance, a track bike looks very similar to a road bicycle, but there is no brake, no derailleur gear on it. There is only one gear, which is fixed, so the racer's feet can never relax. If the bike is moving, they are moving too. Pedaling is much more efficient then. Track bikes have to meet quite different requirements to road bikes, therefore the angle of the frame is different, and the crank-arm is shorter so that it does not touch the ground when the cyclist is leaning into the bend (Baroni, 2010).

Szathmári (Szatmári, 1994) describes the frame of track bikes in the following way: "… the geometry of it is significantly different from the road bike's frame. The axle-base is shorter, head- and seat-tube angles are more pitched (they are more approached towards the perpendicular) therefore the wheels are closer to each other. Why does it matter? The shorter a bicycle, the rider is more humped, in a more aerodynamic position, whit the tensed back muscles the sprinter can pass to the crank-arm more force. The shorter wheelbase and steep head-tube allow direct steering, which is good at the positioning in the field and at the shoving comes in handy. The bike responds instantly, exactly follows the biker's the movements.

The frame is built higher, the chain stay is almost horizontal, and the crank bearing is also in a high position. It is important at the curves, because the down position pedal has to get in a higher position to the area of the surface of the bend. It is not allowed for the pedal to touch the ground. The center of gravity of the biker also gets higher, he/she can roll in a more agile way, and the sprinter can "drag the bike to itself". The most original part of the track bike is the fork. Compared to road bikes' fork, the forward inclination is smaller; the rubber almost touches the fork shoulder. This is also because of the direct steering and the axle distance reduction (therefore it is not advisable to build road fork to a track frame).

The specialty of frames built by former Hungarian masters is the fall of the 55mm crank bearing (chain-stay), which is specifically designed for the Millennial slope. "It is also a sport-technical heritage that we should remember…"

Role of subcultures in recreation in general

Time (if it is spent together with others) and common interests make social atmosphere no matter what kind of recreation activity is performed. Recreation subcultures do not go against society and its rules; they are the tools of self-realization and the feeling of integrity (Piczil, 2002).

A process began in Hungary a couple of years ago leading to the existence of biking subculture. Biking has become a sport and means of transport, also a form of self-expression. Protecting the environment and leading a healthy life have become fashionable. More and more money is being invested in developing bike routes in the center and in the suburbs, so people have begun to ride bikes instead of riding motorcycles or using their cars (Criticalmass, 2007).

Cycling subcultures are not formed by anarchists at all. The members are willing to express themselves with the help of their bikes. They are desperately in love with riding. It means freedom, a way out of society for them. In this running world of ours, everybody wants to belong to someone or something. People feel the need of being a group member. Biking subcultures thus provide an excellent possibility for young people to practice self-expression and cooperation at the same time. The rides, various games, competitions help them to relax. The bike is not only a machine, but a part of their lives, a piece of their souls (Papp, 2011).

The fixed gear bike

Definition of a fixed-gear bike (fixie) (Edwards & Leonard, 2009): „A fixed gear bike is a thoroughbred racing machine, the cycle messenger's workhorse and, for many street riders, an aesthetic choice. Each bike is a statement of individuality that stands out from the hundreds of grey hybrids, lined up at the traffic lights. A global fixed gear culture has come into being."

Graeme Obree defines fixie bikes when presenting *Fixed* (2009), a book written by Edwards: "You can always add something to the bike, bout you come to the point where where you can't take any more away, and that's a fixe-wheel bike" – then Ewards compose his own notion about the theme: „The bike is a blank canvas upon which riders express an individuality, or community. Sripped down and spartan, its simplicity and purity are expressed both in the clean lines of its design and in its ride."

According to Ryan (Ryan, 2005), fixie means that the pedals and the back wheel are only connected to a gear fixed to the back wheel. Opposed to standard road bikes, there is no possibility to change the gears, there is only one gear and

the brake is also optional. The mechanism is easy like the concept of trikes: if you want to stop, you have to use your muscles. Many bikers (not all of them) install a front brake, but the brave ones (or crazy ones) don't. They pay no heed to this concept. Strangely, when this configuration was first presented in the late 19th century, it was called the „safe bike" as a solution after introducing the unstable „big wheel" bikes. Although manual brakes and the free back wheels were developed a lot later, fixies remained popular for decades, including the early years of Tour de France. Using a fixed gear bike in town started with messenger services. The bikes were taken to the roads from the track as they were fast, simple and undemanding. Fixies became fashionable. Many realized that it is not only a means of transport any longer, but it is perfect for tricks and games, too. The group of fixie lovers slowly started to grow and the basics of fixie subculture emerged. A couple of years ago, when mass media started to pay more attention on fixies, the sub culture began to flourish. Bike manufacturing companies realized all over the world that there is a growing need in the market for a street bike to be developed. They went back to the basics and the reproduction of beautifully shaped, steel framed bikes began that were designed to invoke the atmosphere of old track bikes.

During a ride on a fixed gear bike, a so-called *mental-riding* emerges in the self, which results in a merely different way of riding (Béres, 2014). Since riding a fixie is not safe at all, a 100%-focus is expected from the cyclists. They have to pay attention to the road, to themselves and to all the other drivers. A fixie rider has to think in advance, at least to a 50-meter distance in order to decide if it is necessary to use the brake, whether passing by is possible or not. In the case of other kinds of bikes, the mental focus is eased, knowing that the brakes are there to be used at any time if emergency. Therefore fixie cyclists are more responsible than other bikers.

Hypothesis

According to our hypothesis, the same population use fixed gear bicycles, mostly because of their special characteristics. We believe that Hungarian and foreign fixed gear cyclists will not differ in the age and socio-metric details.

Since fixie riding is essentially influenced by the USA, fixie riding can be called a fashion trend. Therefore we assume there will not be significant differences between Hungarian and foreigner habits and motivations in the answers regarding sub cultural activities.

It can also be assumed that the knowledge and understanding of traffic regulations will result in a difference among cyclists who ride a fixed gear

bike. Details will show that foreign riders are more self-conscious than riders in Hungary.

We assume that foreigners cycle more than Hungarians due to the fact that they have to bridge longer distances in big towns and in the suburbs.

As fixie cycling subculture is young in Hungary, its competition habits are also in its infancy, therefore I assume that questions related to this matter will show significant differences between foreigners and Hungarians. However, there will also be similarities. Answers basically related to fixie riding as a recreation activity will not show a significant difference between the two groups. In our opinion, the use of fixed geared bicycles can be implied in recreation, as a beneficial free time activity.

To prove our hypothesis, we raised the following questions: is there reason for the existence for fixies in transportation and recreation? Is there any difference between the age, and domicile of fixed geared bike riders? Is there a significant difference in the cycling habits of the two groups examined? (How long have they ridden a fixie, what is the daily distance they take? Who do they ride with? Do they cycle with or without using the brake? etc.) Will the knowledge of regulations referring to cycling show a difference between the two populations?

Methods

The place and time of the test - The questionnaire was loaded to the site: http://www.kerdoivem.hu. The Hungarian questionnaire was published on 31st January, 2013 (in Hungarian) and on 2nd February (in English). We uploaded the link mainly to sites that specialize in fixie bikes. The sites were the followings:

The last filling in was registered on 12th and 19th February (Hun) then we shut the questionnaire down. Filling the Hungarian questionnaire lasted for 13 days, the English one for 17 days.

Subjects

The average age of the 62 subjects was 24-27 years (Dispersion: ±6.01 years). The youngest subject was 13, while the oldest was 42 years old.

The average age of the 267 foreign subjects was 26-49 years (Dispersion: ±9.22 years). The youngest subject was 14, the oldest one was 68 years old.

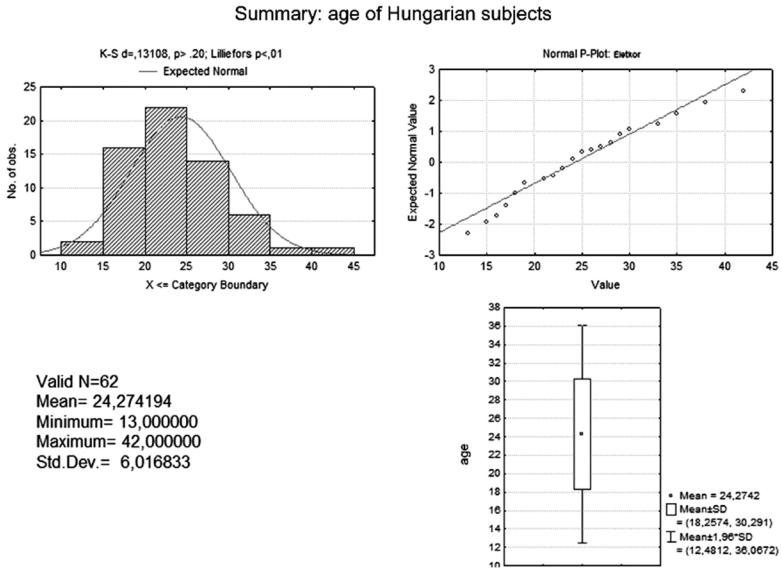


Figure 1. Age of Hungarian subjects (n= 62)

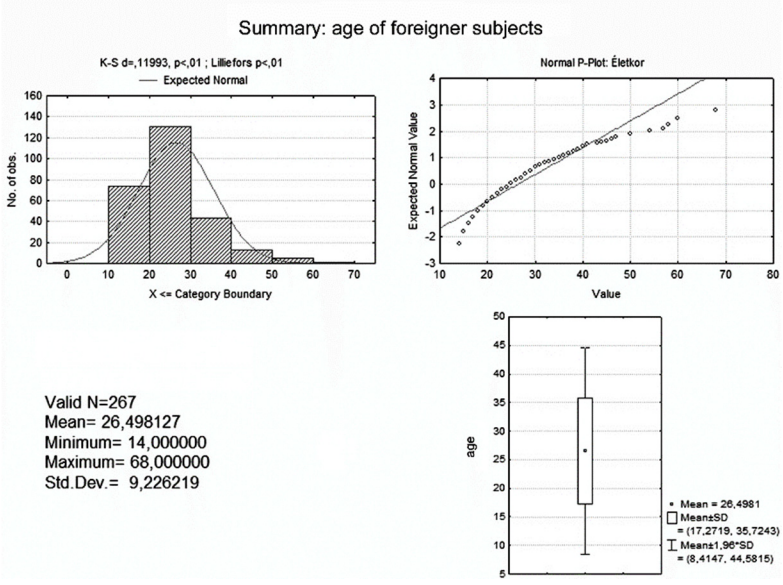


Figure 2. Age of foreigner subjects (n=267)

We examined the age of the subjects with a two-sample T-test. The results did not bring significant differences between the ages of the two groups.

The geographical distribution of the foreigner subjects is extremely colorful. We received questionnaires from almost everywhere in the world.

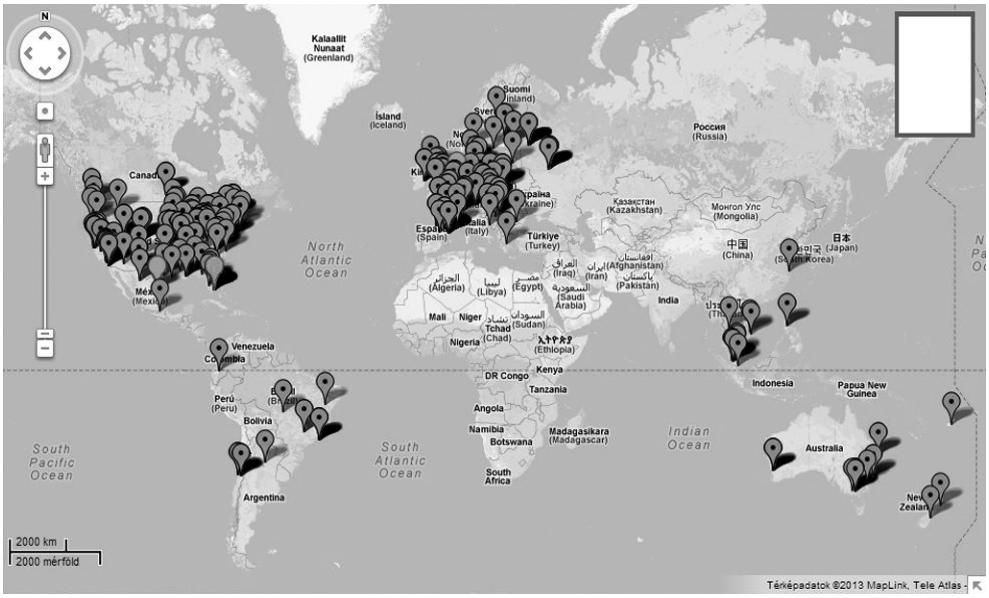


Figure 3. Geographical distribution of foreigner fixie riders
(source: www.googlemaps.com)

The questionnaire

We designed a questionnaire for the research. The questionnaire went through a validity procedure. The validity procedure was checked on the population of Szeged.

The database optimized for the SPSS statistical softer by www.kerdiovem.hu, went through a special conversion procedure to get its final file format. The statistical calculations were analyzed by an open-source coded Rstudio statistical software which is free for download. We have run the tests on a scripter written in statistical programming language.

Statistical methods

During the research we implied basic statistical – average, standard deviation calculations. Data referring to age were compared with a two-sample t-test.

Most questions made only one answer possible, the examined subject could only choose one answer from five. The discrete variables could take five values in each question. We visualized the observed incidence rates on a contingency chart where it was necessary. We calculated the expected incidence rates with a Chi-square test. These could be calculated with the assumption of a complete autonomy, which shows no difference between the examined groups concerning frequency.

The Chi-square test can only be interpreted, if the expected frequency is lower than 5 in the maximum 20% of the cells in the contingency chart (in the present study, the size of most charts are 5x2, containing 5 rows, 2 columns, 10 cells). If the expected frequency value appears in less than 20% of the cells, the 2-sided asymptomatic p value can be taken into account.

It is generally accepted that the result are only acceptable under a 0.05 p value (alpha significant level). If p is lower than alpha (0.05), it can be stated that the sample contains differences in the two examined groups of varied values (between the answers given by Hungarian and foreigner subjects). If p is not lower than 0.05, it cannot be rejected that they are independent according to the sample.

Results

The reason why people change to fixie

Both the Hungarian and foreigner fixie user groups chose this type of bicycle mainly because of its *practicality* and *rapidity*. C*ompany* and *training* as sources of motivation were equally unimportant point of views with a closely 10% ratio. The two groups answered in a very similar rate.

Why did you start riding a fixie?	Hungarian		foreigner	
I fell for it	17	27.4%	93	34.8%
It's fashionable	0	0%	6	2.2%
It's fast and practical	33	53.2%	115	43.1%
It's my daily training	6	9.7%	21	7.9%
On the influence of my companions	6	9.7%	32	12%
Total	62		267	

Figure 4. The answers of the Hungarian and foreigner fixie riders for question – Why did you start riding a fixie?

The result of the Chi-square test showed that there are no significant differences between the answers of the two groups (Chi-square test ($\chi 2$) = 3.8068, df [degree of freedom, n-1] = 4), where the p = 0.4328. The p value of the 2000 simulated Pearson Chi-square sample test is 0.4068, so there is no significant difference between the answers of the two groups. The distribution of the answers was similar between Hungarian and foreigner subjects: members of both groups started riding a fixie from the same purpose. It was also proved by the Fischer Exact test, where p = 0.5079.

What sports had you done before you started riding a fixie?

Most subjects chose "other" option (37.1% of Hungarians, 46.8% of foreigners). From the remaining four answers, most foreigners marked rolling sports (18.4%), while 27.4% of Hungarian subjects marked ballgames. Athletics was chosen in the same rate from the two groups examined (6.5% of Hungarians, 7.9% of foreigners).

What sports had you done before you started riding a fixie

	Hungarian		foreigner	
track & field	4	6.5%	21	7.9%
I was a ball game player	17	27.4%	45	16.9%
some rolling sport	14	22.6%	49	18.4%
some water sport	4	6.5%	27	10.1%
other sport	23	37.1%	125	46.8%
Total	62		267	

Figure 5. What sports had you done before you started riding a fixie? Hungarian and foreigner subject answers

We got a similar result as in the previous question. The answers of the two groups examined did not show a significant difference. In the Chi-square test ($\chi 2$) = 5.3549, df = 4, p = 0.2528. The value of p in the Pearson Chi-square test is 0.2714, so the distribution of the answers is similar statistically. The members of both groups had done the same types of sports before they started riding a fixie. That was also proved by the Fischer Exact test where p = 0.2728.

What distance do the riders take?

Most of the Hungarian and foreigner bikers (46.8% of Hungarians, 39.7% of foreigners) ride between 10 and 30 km per occasion. In both groups the 1-5 km distance was marked as an answer the fewest times. As a conclusion,

we can state that most of the Hungarian and foreigner subjects who ride a fixed gear bike ride 5-30 km/riding occasion. The distribution of the questions showed no significant differences between the two groups examined. (χ^2 = 1.5752, df [degree of freedom, n-1] = 4), p = 0.8132. Pearson χ^2 - p = 0.8046, Fischer Exact p = 0.8324).

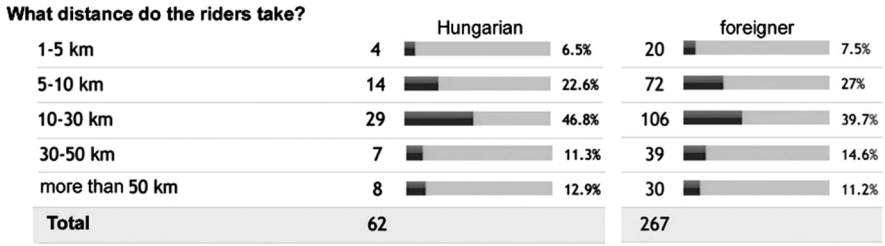


Figure 6. What distance do the riders take per occasion?

In what form do fixie riders cycle in most cases?

With the question above, our aim was to find out who the riders ride with, whether they ride alone or not. Members in both groups mostly ride on their own. (67.8% of Hungarians, 64.1% of foreigners). Nameably, Hungarians do not cycle in bigger groups at all, meanwhile 2.3% of foreigners do so. Cycling in a group of two or three was marked more among foreigners, too. According to the results, it can be stated that riding a fixie in a group is more fashionable in a foreign country than in Hungary. It is probable that traditional cycling would show the same tendency among the same subjects.

The distribution of answers of the two groups did not show a significant difference. (χ^2 = 3.4511, df = 4), p = 0.4854. Pearson χ^2 = 0.4511 - p = 0.5057, Fischer Exact p = 0.6343).

Figure 7. In what form do you ride a fixie in most cases?

What is the opinion of fixie riders about using a brake?

The answer to the question above shows a difference. Foreigners seem to be more careful in connection with this topic. The rate of foreigner riders who use a brake (but understand the ones who do not) was higher than the rate of Hungarians.

The distribution of the answers of the two groups do not show a significant difference based on statistical tests. (χ^2 = 4.7902, df = 4), p = 0.3095. Pearson χ^2 = 4.7902 - p = 0.2869, Fischer Exact p = 0.2961).

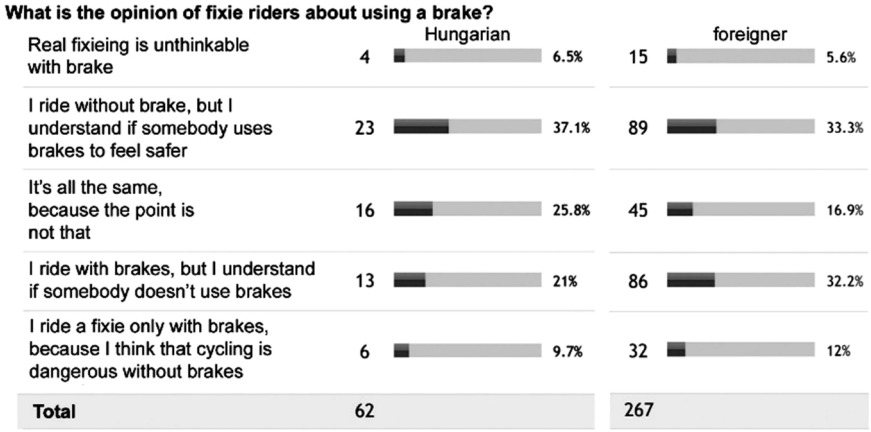


Figure 8. What is your opinion of fixie riders about using a brake?

How dangerous is fixie-riding?

The two groups gave almost the same answers to the question above. The most significant difference appears in the answers given to "not dangerous at all" question. A smaller rate of foreigners consider fixie riding to be entirely safe, a bigger rate of them think that it is entirely dangerous. However, subjects who consider fixie riding to be entirely dangerous are in a neglectable rate compared to others.

The statistical tests did not show a significant difference between the answers of the two groups. (χ2 = 3.7766, df = 4), p = 0.4371. Pearson χ2 = 3.7766 - p = 0.4288, Fischer Exact p = 0.5025).

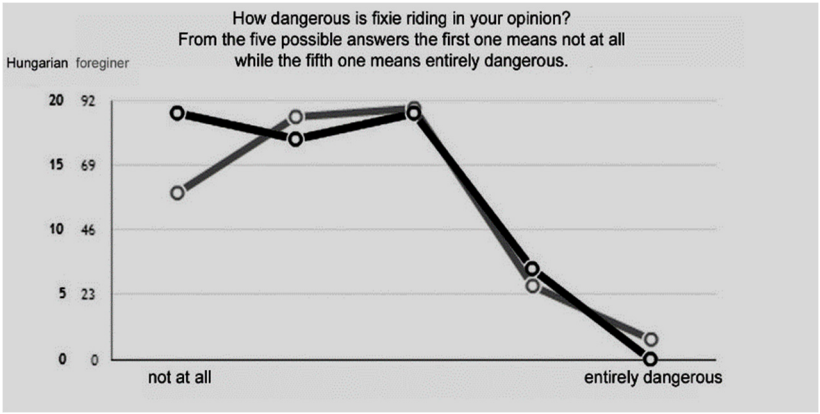


Figure 9. How dangerous is fixie riding in your opinion? From the five possible answers the first one means *not at all* while the fifth one means *entirely dangerous*. Levels between these two answers could be shaded in three additional answers.

In what extent are fixie riders aware of the traffic rule regulations concerning fixie riding?

Our aim was to measure how much bikers are aware of traffic regulations in Hungary (Horváth, 2010) and abroad. Based on the data, both groups claimed in a higher rate (35.5% of Hungarians, 43.5% of foreigners) that they are completely aware of the regulations referring to fixies. The results were very similar, except for "I think there is no regulation for that" answer, where we differences could be detected (clearly visible on the diagram).

According to the Chi-square test, p shows a probability level less than 0.05. We can confirm that there are statistically significant differences between the answers of the two groups. However, this statement still has to be treated with reservations, as the results of the two Chi-square tests (standard and Pearson) are beyond the level of 0.05, but the Fischer-Exact test did not show the significant result. (χ^2 = 9.5353, df = 4), p = *0.04903*. Pearson χ^2 = 9.5353 - p = *0.04548*, Fischer Exact p = 0.06524).

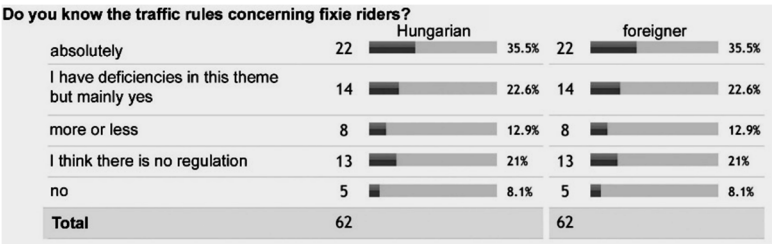


Figure 10. Are fixie riders aware of traffic rule regulations related to fixies?

How long have you been riding a fixie?

Since the fixie bicycle riding is a fresh phenomenon nowadays, it is important to know how long the owners have been using fixies. We also wanted to find out if there is any connection between the cycling trend and the number of fixie riders.

Data shows that fixie riders from foreign countries have known and used fixies for a lot longer than Hungarians. Most riders started 1-3 years ago. Therefore we can assume that the phenomenon began to flourish in that period.

In all the three estimation coherence examination statistical tests p value was lower than 0.05, which means that there were differences between the answers of the two groups. Years spent with riding on a fixie statistically reparse in a different way. (χ^2 = 12.0292, df = 4), p = *0.01714*. Pearson χ^2 = 12.0292 - p = *0.01899*, Fischer Exact p = *0.02103*)

How long have you been riding a fixie?

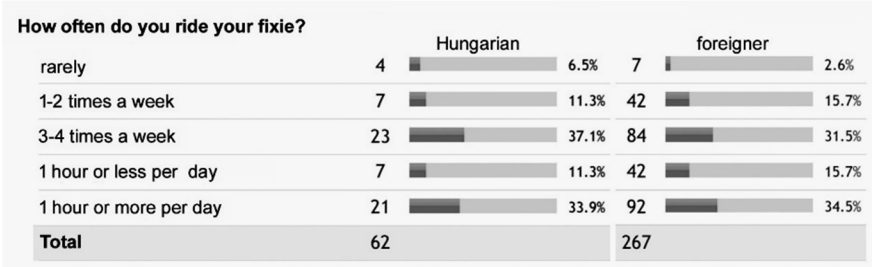
	Hungarian		foreigner	
less than 1 year	7	11.3%	58	21.7%
1-3 years	37	59.7%	101	37.8%
2-5 years	14	22.6%	70	26.2%
5-10 years	4	6.5%	27	10.1%
more than 10 years	0	0%	11	4.1%
Total	62		267	

Figure 11. How long have you been riding a fixie?

How often do you ride a fixie?

We were curious to know how much time fixie riders spend on riding. Observing the results it can be stated, that fixie riders do exercises on a regular basis. Hungarians marked the “two or three times a week” answer, while most foreigner subjects ride more than an hour every day. Further answers brought almost the same results in both groups.

In spite of the differences, no significant diversion can be shown between the answers of the two groups. (χ^2 = 4.0359, df = 4), p = 0.4012. Pearson χ^2 = 4.0359 - p = 0.4283, Fischer Exact p = 0.4063).



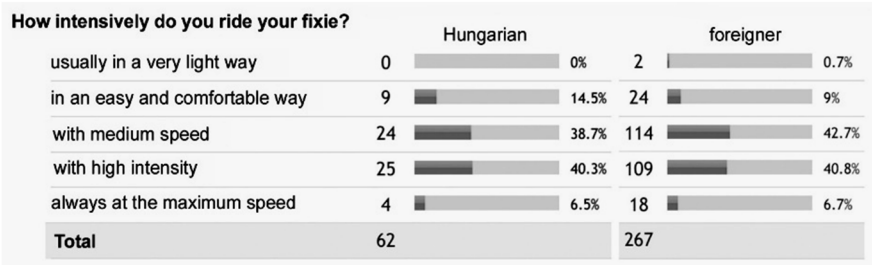
How often do you ride your fixie?	Hungarian		foreigner	
rarely	4	6.5%	7	2.6%
1-2 times a week	7	11.3%	42	15.7%
3-4 times a week	23	37.1%	84	31.5%
1 hour or less per day	7	11.3%	42	15.7%
1 hour or more per day	21	33.9%	92	34.5%
Total	62		267	

Figure 12. How often do you ride a fixie?

How intensively do you ride?

Since fixed gear bikes are chosen mostly because of their speed and practicality, it is clearly visible that who the fixie riders are. A great number of the subjects marked the medium speed and high intensity answer. Therefore we assume that the experience factor of a fixie is in direct ratio with its speed. Answers suggesting low and comfortable intensity were chosen in a lower rate. The number of "always with high intensity" riders is not significant among the subjects examined.

There are no significant differences between the answer of the two groups. (χ^2 = 2.1971, df = 4), p = 0.6996. Pearson χ^2 = 2.1971 - p = 0.7186, Fischer Exact p = 0.733)



How intensively do you ride your fixie?	Hungarian		foreigner	
usually in a very light way	0	0%	2	0.7%
in an easy and comfortable way	9	14.5%	24	9%
with medium speed	24	38.7%	114	42.7%
with high intensity	25	40.3%	109	40.8%
always at the maximum speed	4	6.5%	18	6.7%
Total	62		267	

Figure 13. How intensively do you ride your fixie?

Why is fixie a good alternative in urban transport?

There was more than one possible answer to this question (Hungarian n =156, foreigner n = 612). The opinion of the two groups was similar. Both groups marked the practicality and speed of a fixie as its most attractive characteristic features when considering fixie as an alternative form of urban transport. Its size and its reliable demand for service came in the second place. Foreigners emphasized its eco-friendliness, while Hungarians took financial matters into account.

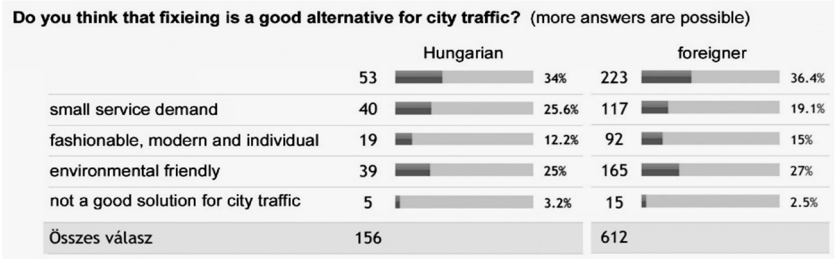


Figure 14. How good alternative is riding a fixie in urban transport? (Hungarian n =156, foreigner n = 612)

According to the opinions, fashionability, modernity and originality did not play a crucial role in this matter. The number of subjects who do not consider fixie as a good alternative in urban transport is relatively low.

Use of protective equipment and clothing

To the question related to protective equipment and clothing, most answers were "I never do" or "occasionally if I feel it is necessary" in both groups examined. The fewest of Hungarian subjects marked "only protective equipment", while the fewest foreigners marked "only protective clothing" options.

Answers of the groups show a significant difference according to statistical analysis. Hungarian and foreigner subjects share a different opinion about the habit of wearing *protective clothing*. In all the three statistical tests the value of p was lower than alpha. (0.05). (χ^2 = 19.2739, df = 4), *p = 0.0006943*. Pearson χ^2 = 19.2739 - *p = 0.001499*, Fischer Exact *p = 0.0002733*).

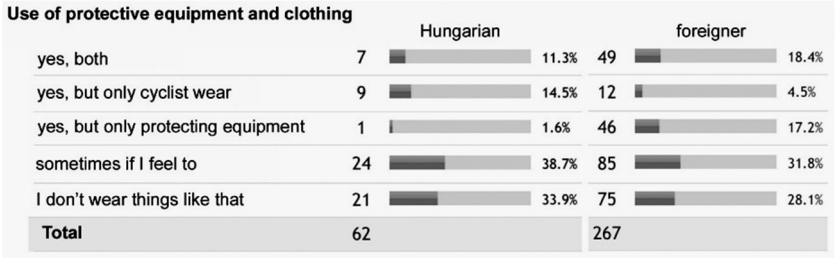


Figure 15. Answers related to protective equipment and clothing (Hungarian n = 62, foreigner n = 267)

What does fixie riding have beneficial effect on?

It is clearly seen from the montage of diagrams that foreigners and Hungarians shared the opinion about which fields of their lives are influenced positively by riding a fixie. Results are significant from recreation, also from physical and psychological point of view.

Table 1. Effects of fixie riding

Fixieing has positive effect to (1-5, 5=true, 1=don't true)		Hungarian		foreigner	
		n	**%**	n	%
my personal relationships	1	10	**16,1**	56	**21,0**
	2	6	**9,7**	38	**14,2**
	3	19	**30,6**	66	**24,7**
	4	13	**21,0**	50	**18,7**
	5	14	**22,6**	57	**21,3**
my personal schoolastic record	1	28	**45,2**	87	**32,6**
	2	8	**12,9**	32	**12,0**
	3	20	**32,3**	88	**33,0**
	4	4	**6,5**	33	**12,4**
	5	2	**3,2**	25	**9,4**
my social life	1	9	**14,5**	32	**12,0**
	2	3	**4,8**	28	**10,5**
	3	18	**29,0**	64	**24,0**
	4	25	**40,3**	72	**27,0**
	5	7	**11,3**	71	**26,6**
my work place mood	1	12	**19,4**	38	**14,2**
	2	6	**9,7**	16	**6,0**
	3	12	**19,4**	49	**18,4**
	4	13	**21,0**	67	**25,1**
	5	19	**30,6**	97	**36,3**
my integration to other communities	1	14	**22,6**	39	**14,6**
	2	12	**19,4**	26	**9,7**
	3	18	**29,0**	79	**29,6**
	4	15	**24,2**	65	**24,3**
	5	3	**4,8**	58	**21,7**
spend my spare time more useful	1	2	**3,2**	20	**7,5**
	2	1	**1,6**	22	**8,2**
	3	9	**14,5**	50	**18,7**
	4	18	**29,0**	64	**24,0**
	5	32	**51,6**	111	**41,6**
my interest of the cyclist culture	1	5	**8,1**	17	**6,4**
	2	0	**0,0**	12	**4,5**
	3	3	**4,8**	37	**13,9**
	4	11	**17,7**	58	**21,7**
	5	43	**69,4**	143	**53,6**
my physics and state of health	1	1	**1,6**	9	**3,4**
	2	5	**8,1**	11	**4,1**
	3	8	**12,9**	29	**10,9**
	4	22	**35,5**	61	**22,8**
	5	26	**41,9**	157	**58,8**

Fixieing has positive effect to (1-5, 5=true, 1=don't true)		Hungarian		foreigner	
		n	**%**	n	%
my mood	1	2	**3,2**	10	**3,7**
	2	4	**6,5**	6	**2,2**
	3	3	**4,8**	28	**10,5**
	4	18	**29,0**	64	**24,0**
	5	35	**56,5**	159	**59,6**
the "atmosphere of home", the family harmony	1	24	**38,7**	46	**17,2**
	2	6	**9,7**	27	**10,1**
	3	15	**24,2**	89	**33,3**
	4	12	**19,4**	54	**20,2**
	5	5	**8,1**	51	**19,1**

(More than one possible answers - Hungarian n = 100, foreigner n = 513)

What do you use your fixie for?

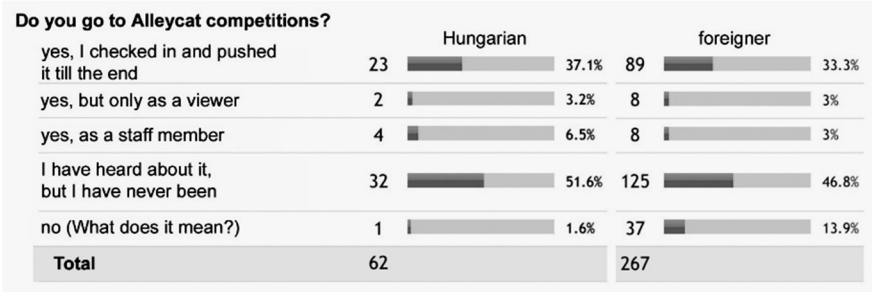
We tried to find out if there is a significant difference between the two groups considering the way they use a fixe. There is a similarity in the answers referring to *the use of fixies in transport*, *fixie as a tool of work*, *fixie as a way of physical activity*, *the use of fixie for tricks*.

Figure 16. Answers to What do you use your fixie for?
(Hungarian n = 100, foreigner n = 513)

Do you go to Alleycat competitions?

Alleycat competitions play a significant role in sub cultural aspect, as these events tend the culture formed around fixed gear bikes where people with similar interests can compete with each other.

We were curious whether fixie phenomenon has a bigger effect on competition habits abroad than in Hungary. Do foreigners attend more events due to an older history of fixies? The two samples showed similar results, there is no significant difference. Many have heard about the competitions but there is need for more regional events in Hungary and abroad as well.



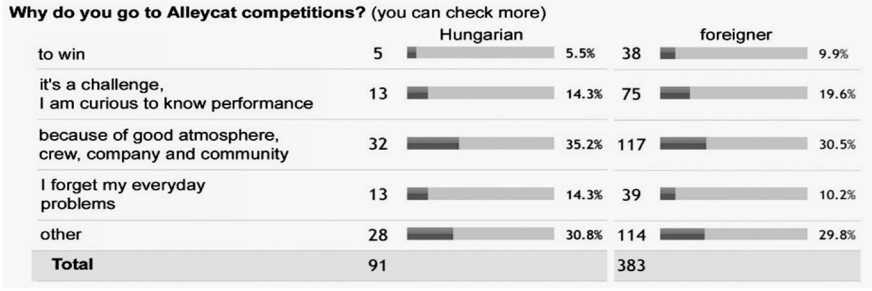
Do you go to Alleycat competitions?	Hungarian		foreigner	
yes, I checked in and pushed it till the end	23	37.1%	89	33.3%
yes, but only as a viewer	2	3.2%	8	3%
yes, as a staff member	4	6.5%	8	3%
I have heard about it, but I have never been	32	51.6%	125	46.8%
no (What does it mean?)	1	1.6%	37	13.9%
Total	62		267	

Figure 17. Answers to Do you go to Alleycat competitions?

According to the Chi-square test, the value of p shows a higher than 0.05 probability level, the result is not significant. Therefore we cannot find a significant difference between the answers of the groups. However, this statement has to be treated with reservations. Even if the results of two Chi-square tests (standard and Pearson) go over a 0.05 level, according to the Fischer-Exact test, the difference is significant. (χ^2 = 8.6393, df = 4), p = 0.07078. Pearson χ^2 = 8.6393 - p = 0.06847, Fischer Exact *p = 0.02516*).

Why do you go to Alleycat competitions?

The mostly preferred answers were in connection with the special and unique atmosphere, good company and community of the competitions. Naturally, the four options given by us did not satisfy 1/3 of the subjects. They chose the "other" option at the same rate and gave their reasons in writing. Unfortunately, as more than one answer was possible and acceptable in this matter, we could not perform a statistical comparison.



Why do you go to Alleycat competitions? (you can check more)	Hungarian		foreigner	
to win	5	5.5%	38	9.9%
it's a challenge, I am curious to know performance	13	14.3%	75	19.6%
because of good atmosphere, crew, company and community	32	35.2%	117	30.5%
I forget my everyday problems	13	14.3%	39	10.2%
other	28	30.8%	114	29.8%
Total	91		383	

Figure 18. Why do you go to Alleycat competitions?

Discussion

My first hypothesis was proved, as the subjects who filled the questionnaire did not differ significantly. However, the standard deviation value was higher in the foreigner group than in the Hungarian one.

My second assumption referring to sub cultural activities was also right. General use of fixies, the rate of participants in sub cultural competitions and activities did not show significant differences between the two groups. They exercise their fixie activities at the same rate.

My next hypothesis, namely that competitive habits built upon fixies would differ as fixie lifestyle is not as popular in Hungary as in a foreign country turned out to be false. Based on the answers received, although this kind of biking seemed to have an older history abroad, the flourishing of the fixed gear culture has the same starting period globally. Foreigners attend almost the same number of competitions as Hungarians. In the sub cultural sphere we are as up-to-date as others. However, there are many aspects we are behind the western line.

My hypothesis referring to traffic regulations, namely that there would be significant differences between the two groups in the aspect of the knowledge of the regulations, turned out to be partly true. More foreigners claimed that they were completely aware of the regulations than Hungarians did. In addition, they also marked the "for more or less I'm aware" answer at a higher rate. Among Hungarians, the higher rate of answers such as "I have an inadequate knowledge, but mostly I am aware of them" or "I think there is no regulation for that" show that fixed gear bikes are not obviously included in the Hungarian traffic regulations. They might be one step ahead of us abroad.

My fifth hypothesis was that foreigner riders take longer distances since they have to spend more time on the road to reach their destinations. The distance in towns might be longer than in Hungary, also the distance between towns. This was not proved by analysis, as the results were very similar to each other between the two samples. The average distance is from 5 to 30 kms per riding occasion in Hungary and abroad too.

My assumption that the answers related to the recreation activities of fixies would not differ significantly was proved to be right. Based on the answers rates are very similar in the two groups examined. Fixie is on the same level of importance in the lifestyle of both groups. There are many reasons why fixie subculture is so unified all over the world. Although it is a relatively new branch, our globalized world based on Internet follows this trend, in this cultural phase with special shades, leaking of unique characteristics into the above mentioned closed world can be seen.

I got a positive answer to one of my previous theories, whether using a fixed gear bicycle can be adopted into recreation as a beneficial free time activity. During the process of data analysis it came to the surface that both groups use their fixies on a regular basis, on long distances and on medium or high intensity. Therefore it has a beneficial physical effect. Both Hungarian and foreigner riders use their fixies for other sports and free time activities apart from using it as a means transport. According to the subjects, riding a fixie influences their everyday lives and their mood in a good way. It plays a significant role in handling every-day-life stress. Therefore it has a beneficial effect on their time spent at work. It has not only raised our interest in cycling culture and physical activities in general, but riding a fixed gear bike means an excellent way of mental relaxation too. On the whole, taking the results into account I can state that riding fixed gear bicycles can be entirely adopted into recreation as a beneficial free time activity.

Conclusion

Present bicycles are on a high level of technical improvement. My aim was to present a bike that reflects the Spartan characteristics of the first and simplest bicycles. A couple of years ago fixed gear bikes (popular with only track bikers for a long time) burst into the public eye. They set the fashion and became means of transport, also free time activity equipments. Although fixies are becoming more and more popular nowadays, most people are not aware of the values and the essence of a fixie (Edwards & Leonard, 2009). Fixies cannot be compared to other bikes. As it is direct-powered, the biker is in an ongoing contact with the bicycle, they move together. The biker gets an immediate reaction from the bike while using the brakes. There are no mechanisms that would help the rider directly. The person is in symbiotic relationship with the machine (Ryan, 2005).

To prove my hypothesis, I chose the questionnaire method. The questionnaire contained 17 questions. It was translated into English then was uploaded to a website on the internet. After that, the questionnaire was personally linked to Hungarian and foreigner groups and websites that specialize in fixed gear bicycles.

The questionnaire was filled by 62 Hungarian and 267 foreigner fixie rider subjects from Chile to South Korea. The age of the subjects varied in a wide spectrum, from a 13-year old teenager to a 69-year-old one. The Hungarian questionnaire was available to be filled in for 13 days, the English version for 17 days.

My study has brought interesting results. I thought there would be significant differences between the two samples examined, but the results of the questionnaires show that fixie riders are similar to each other in the aspect of their age, cycling habits, cycling mentality. It has been proved that both groups cycle on a regular basis, the subjects ride on mostly medium or high intensity on longer routes. Riding a fixed gear bike has a good physical effect on the body, too. Both Hungarian and foreigner riders use their fixies for transport, games or simply for doing exercise. According to the subjects, riding a fixie influences their everyday lives and their mood in a good way. It plays a significant role in handling stress; therefore fixie riders are more relaxed and balanced at work. Their interest in cycling culture has also risen. Fixie is an excellent tool for physical and mental relaxation. There is no other bike type that provides so many ways of use. There is no other bike that manages to attract so many kinds of people.

All in all, proved with results and facts I can bravely state that riding fixed gear bicycles can be entirely adopted into recreation as a beneficial free time activity.

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THE ROLE OF SPORTIVE ACTIVITIES IN CHILDREN'S PERSONALITY DEVELOPMENT

SANTA CRISTIAN[1*], SANTA ONELA[2], BACIU ALIN[1], SZABO-ALEXI PAUL[3]

ABSTRACT. The athlete is the main subject of performance generator and is being defined by a large number of attributes, some of which are characteristic for achieving it. He can develop only if certain conditions are met both in terms of correlating interdependent attributes, qualities – skills and the environmental factors, social, material, teaching. The relationships between members of a community are subject to numerous factors such as: psychological peculiarities of the athletes, the general orientation, the reasons of the proposed activity, attitudes "built" in life and the society in which they live. There are a few things to note: first, the game strengthens a child physically, it embodies the taste of performance and the means to achieve it. Secondly, the game creates teamwork skills to synchronize their actions with those of others to achieve a common goal. A third, the game causes a good mood, cheerful, giving the people the ability to clear their heads and have fun giving more lust for life.

***Key words**:* athletes, sports games, the relationships, organization.

REZUMAT. ***Rolul jocurilor sportive in dezvoltarea personalitatii copiilor*.** Sportivul care este principalul subiect generator al performanţei este definit de un număr foarte mare de atribute dintre care unele sunt caracteristice pentru realizarea acesteia. El se poate dezvolta numai dacă sunt îndeplinite anumite condiţii atât în privinţa corelării interdependente a atributelor –însusiri, calităţi – aptitudini, cât şi a determinatelor ambientale, sociale, materiale, pedagogice. Relatiile care se stabilesc între membrii unei colectivităţi sunt condiţionate de numeroşi factori . Există câteva lucruri de remarcat: în primul rând, jocul fortifică un copil din punct de vedere fizic, îi imprimă gustul performanţelor precum şi mijloacele de a le realiza. În al doilea rând, jocul creează deprinderi pentru lucrul în echipă, pentru sincronizarea acţiunilor proprii cu ale altora, în vederea atingerii unui scop comun. Un al treilea rând, jocul provoacă o stare de bună dispoziţie, de voie bună, oferindu-i omului posibilitatea de a uita pentru un timp de toate celelalte şi de a se distra, dându-i parcă mai multă poftă de viaţă.

***Cuvinte cheie**: sportivi, jocuri sportive, relatiile de joc, organizare.*

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Introduction

Most definitions indicate that the game is a activity specific both for childhood period and a process training and a human development factor. Later it was found that, in fact, the human is playful (homo ludens) during his whole life. From childhood to elderness the human is continuously playing for various internal or external reasons that impel him to various activities.

„The game is a complex, predominantly motor but also emotional activity, developed spontaneously while having predetermined rules, on both recreational and sportive sides, and it also helps the players adapt to social reality purposes"(Colibaba, & Bota,1998).

„Sports games represent a complexity of phisical exercises practiced as a game with a certain object object (ball, puck, etc.) with specific dimensions, in which two teams or two players compete under the rules of organization and development"(Rusu, 2008).

To complete the definition of the game, it's necessary to consider its main features. Epuran (2001), believes that the most important features of the game are:

• ***natural activity*** – the natural function of entertaining the necessities

• ***free activity*** - voluntary participation, without coercion

• ***spontaneous activity*** - the human being is always ready to play

• ***total activity*** - engage all parts of the human being (physical, mental, social, etc.)

• ***activity attractive*** - causes positive affective states: sensory pleasure, tense, satisfaction, success etc.

• ***disinterested activity*** – not to be confused with work, aimed the joy of unpaid self-employment activity

• ***creative activity*** - Compensative - which extends to recreational activities - adult fun on leisure activities (leisure time enjoyable), by which the human seeks relaxation, fun, recovery, compensation of conditions created by the work process.

The athlete is the main subject of performance generator and is being defined by a large number of attributes, some of which are characteristic for achieving it. He can develop only if certain conditions are met both in terms of correlating interdependent attributes, qualities – skills and the environmental factors, social, material, teaching.

The relationships between members of a community are subject to numerous factors such as: psychological peculiarities of the athletes, the general orientation,the reasons of the proposed activity, attitudes "built" in life and the society in which they live.

Epuran (2001), mentioned some issues regarding the interpersonal relationships in sports. There are relationships that are based on only two individuals as often found in some samples such as: couples tennis, table tennis, canoeing. These examples clearly reveal that the common task requires a unity of feelings, thoughts, attitudes, will and mutual affection. Another type of relationship is of those athletes who form a team, but compete interdependent, success depends on the participation of each group (team relay). Another group represents the interpersonal relationships of the members of a team, consisted as a unit, that prepares and competes as a separate organization.

In general, the complementarity cohesion willingness and mutual sympathy is expressed. At the same time there are preferential attitudes. It is difficult to accept the situation as an athlete to be accepted and/or to accept all the components of the team. It is still possible for an athlete to be treated with sympathy and trust and gain authority while accepted as a leader. It is also natural for an athlete to be treated with indifference or aversion by others, independently of the preferential attitude towards them.

To prove that they are involved in the sports they practice, participants should adopt the "right attitude" to their colleagues and the expectations of the coach, and to make sacrifices to stay in the team. In this manner of acting proffessional, having "team spirit", implies that a person would do exactly what is necessary for the expectations of a team or a competition. This is the spirit that emphasizes that athletes have to make sacrifices, to pay any price in order to keep themselfes in the team and in the sports.

The conduct and team behavior is the result of psychosocial relationship, the athletes value, the needs and motivations, the role of leaders, the mentality of athletes, coaches and managers. The most important and determining factor influencing the behavior of each athlete in the group is social learning, considered as a process of acquiring experience (Craciun, 2012).

In general, motion games (symbolical, constructive, creative, individual or with a partner, dynamic or motion etc.) were systematized by two fundamental criteria, namely after the teaching functions and learning objectives they solve. Sports games may fall under these criteria, but they have developed other criteria with a higher degree of specificity.

Many experts agree on the following motion game features:

• *The formative - educational human personality*. Using the games we can easily influence all components of human personality formative (knowledge, motor skills, abilities, operational schemes etc.).

• *The knowledge* relates primarily to the ideea that through certain games, we allow children (and adults) to assimilate the qualities and characteristics of life and the world around us. The most effective games are those that arouse curiosity, imitating adult activities, observing certain rules, symbolic play, role

play etc. At the same time, the function of knowledge refers to the educator in the sense that through them has the possibility to know better subjects undergoing the training.

• *The motility stimulating* function is to meet the most important needs of homo ludens: need to move, need to compete, additional energy consumption. This function is performed at an early age (sensory games, handling toys, games whistle, bells, color), continued during adolescence and youth (games movement games as contests, sports games) and ends at the third age (maintenance games: bowling, billiards, golf).

• *Specific functions of play*: recreation, functional balance, fun, strengthening, compensation, rehabilitation, recreation therapy, purification, pleasure. In practice, we find pure gaming or strictly specialized exercise of certain functions. Typically, a single game carries more functions, so it has a multidirectional effect on the personality of the participants.

Has been written and said about the influence and the benefits of sports and movement on the human body, especially the children. Experts in the field say that sports works on several levels:

• Sports strengthen the skeleton, strengthen heart and lungs, help the child to coordinate body movements, prevents the risk of obesity.

• Sports are also a great tool for developing social and educational values: discipline, patience, concentration.

• Sports can influence the child's character: the shy ones will gain confidence in themselves and learn to externalize practicing a team sport, while children will learn focus and self-control nerves in sports which are more accurate.

• Sports develop a beautiful character and the spirit of competition.

• It was concluded that sports helps children to have better results at learning. During physical activity, the brain is better oxygenated and thus increase their understanding and memory.

• Sports emphasizes burnt in the body release energy, so children will be more attentive in class and will be able to focus more easily on the study.

Results

In this paper we aim to fiind aut whant children practice sports game Cluj Napoca, mass sports or performance sports.

Figure 1 - 52% of the respondants practice mass sports, 29% say that they practice performance sports while 19% do not practice any sports in their spare time. The number of those who do not practice any sports is quite large which means that they should be more stimulated and motivated during physical education classes for independent practice of various forms of movement.

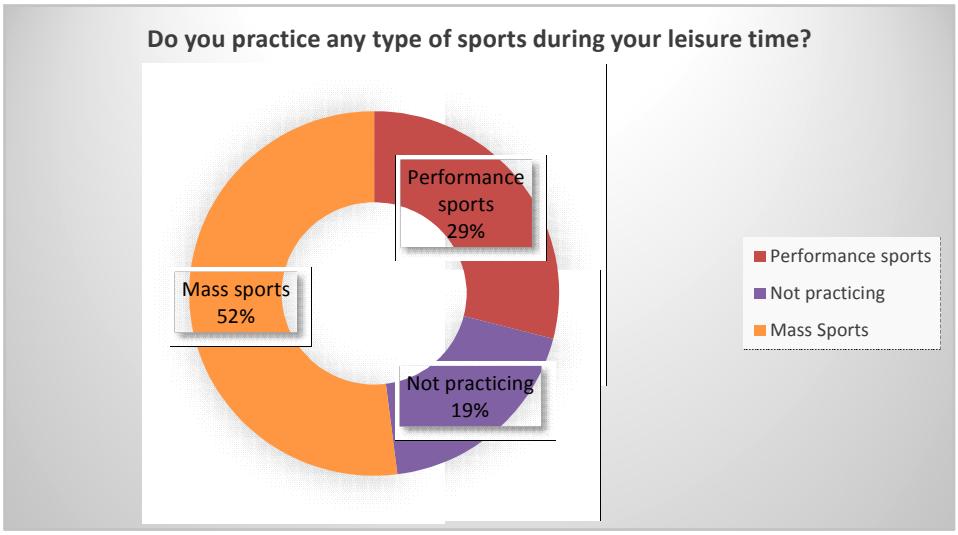

Figure 1. Practice sportive activities

Char Many of the children surveyed are practicing team sports, but some are practicing individual sports. The favourite sports practiced are represented as follows:

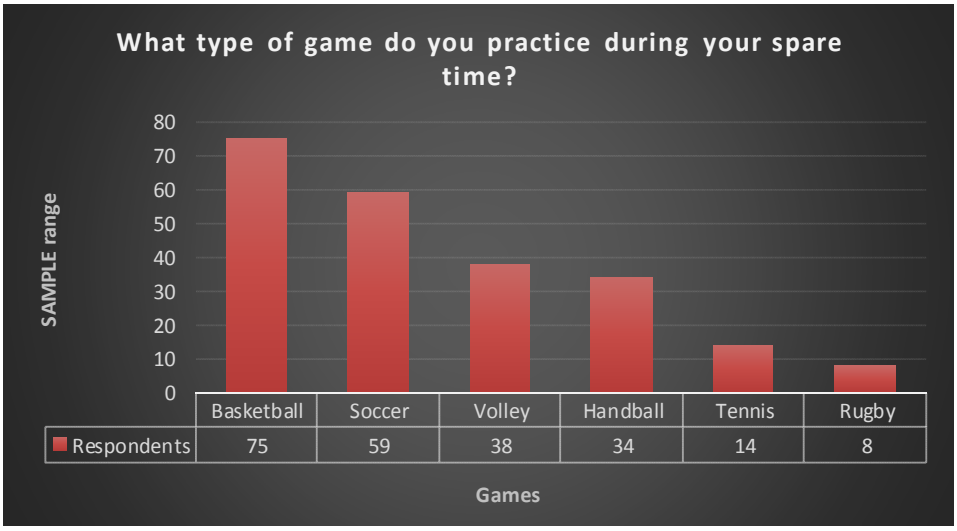

Figure 2. Type sportive activities practice

Figure 2 - 75 respondants replied they practice basketball , 34 are practicing handball, 38 are practicing volley ,14 are practicing tennis, 59 are practicing soccer and 8 are practicing rugby.

Once accustomed to the basic principles of a sport, according to the skills they have developed, between 4 and 12 years, children can practice soccer, volleyball, tennis, hockey (roller or ice) skating, basketball and baseball.

So they learn to dribble, pass the ball, throw to the basket or to shoot on goal, imagining a real game situation. In addition, psychologists say, they learn how to apply various strategies of play, and how important teamwork is.

But a child doesn't have to do sports. Sports can also mean cycling, running around the block or running to school or kindergarden or simply to participate in physical education classes. All forms of outdoor exercise are beneficial for the child.

Sports are also indicated for children with all forms of disabilities: attention deficit, autism in infancy, but is mostly recommended for those who have learning difficulties.

In their case, the game improves their motor skills, interact easier with other children and increases self-esteem. Recommended sports are among football, baseball, basketball and athletics.

It is crucial that the children perceives the sports and physical activity in general, positively. If the child perceives the sports as another school subject, surely it will not show interest in it. Physical activity should be to please the child.

Conclusions

Games and entertainment are more intense at the age of childhood and youth. This flexibility gives them their behaviors and especially develops imagination and creativity. Also, by playing the game, the degree of mental development is expressed.

The game requires a plan, setting a goal and setting some rules, to finally be able to perform a particular action that produces satisfaction.

The child ego states game, his personality. Adult states through the activities they carry out, but the child has no other option than the assertion of the game. Later, he can stand out through the school activities.

School activity is recovered by notes, they summ up the average outcome of the learning process while it ends in terms of the evaluation. On the other hand, the game is consumed as an activity creating joy and satisfaction. Children who are deprived of the opportunity to play with other children of similar age either because they are not used, either because they do not have with who, remain undeveloped in terms of personality.

Play gives children a sum of impressions which contributes to knowledge about the world and life and also increases the understanding of complex situations, creates stimulating memory, retention skills, concentration, obedience to rules, ability to make quick decisions , to resolve the situation - the problem, - a word develops creativity. Every game has rules.

When a child wants to play with another group of children, he accepts the rules deliberately, willingly. In other words, he will accept the standards, adopted and respected by the group before it can come into play.

For adults, the game causes pleasure, fun, funny, contributing especially to energyse the grown-up. It also contribute decisively to cancel fatigue, being in this case an element of psychotherapy.

For children, play often involves exercise, besides the nervous consumption even for the simplest games, unlike adults where it is lacking.

We often see children playing football, cycling or walking, not playing backgammon or chess on a bench in a quiet place as adults usually do.

There are a few things to note: first, the game strengthens a child physically, it embodies the taste of performance and the means to achieve it.

Secondly, the game creates teamwork skills to synchronize their actions with those of others to achieve a common goal.

A third, the game causes a good mood, cheerful, giving the people the ability to clear their heads and have fun giving more lust for life.

In other words, the features of games can be summarized as follows:

• allow complex expression and favors the simultaneous development of basic motor skills or specific driving qualities and skills and/or moral-volitional qualities;

• specific to these games is the collective playing - it requires cooperation, collaboration with playing partners, harmonization of interests, motives, actions and personal with the collective efforts of each player, compliance with collective acceptance and recognition of the leader, taking on responsibilities, all of great importance in terms of socialization;

• have attractive and spontaneous character; well designed and organized, mobilizing resources and maintains the interest of the participants to achieve maximum efficiency:

• can be used as a means of mental disconnect, the best form of recreation;

• contribute to the development of various personality traits;

• allow the manifestation of initiative and independence in actions;

• do not allow precise dosing and no strict regulation of technical execution.

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STUDY RELATED TO THE EVOLUTION OF TABLE TENNIS IN OLYMPIC GAMES FROM THE PERSPECTIVE OF SPORT HISTORY AND GEOGRAPHY

MAROTI ŞTEFAN[1*], APOSTU PAULA[2], DOBOŞI ŞERBAN[2], GRAMA VASILE[1]

ABSTRACT. Our intention is to study the evolution of Olympic tournaments of table tennis, both from the perspective of the history of Olympic Games and geography. In the introductory part, the authors attempt to place this article into the present works written on this subject, addressing several research essays related to sport and particularly to the Olympic sport as a result of joint study made by specialists in sport and geography. Then, we describe the main events that led to the inclusion of table tennis in the Olympic Games competitions. The evolution in time of table tennis Olympic tournament, the athlete's attendance and medals obtained by them are described and analyzed by linking maps to tables and by using various graph representations.

Key words: *table tennis, Olympic Games, sport history, geography.*

REZUMAT. ***Studiu privind evoluția tenisului de masă la Jocurile Olimpice din perspectiva istoriei sportului și geografiei.*** Autorii lucrării şi-au propus să studieze evoluția turneelor olimpice de tenis de masă, atât din perspectiva istoriei mișcării olimpice, cât şi al geografiei. În partea introductivă, se încercă încadrarea articolului în sfera de preocupări de până acum în această direcţie, făcându-se referiri la o seamă de lucrări care abordează cercetarea sportul, în general, şi cel olimpic, în mod deosebit, ca rezultat al studiului comun al specialiştilor din domeniul sportului şi al geografiei. În continuare sunt prezentate principalele evenimente care au condus la includerea tenisului de masă în programul Jocurilor Olimpice. Evoluția în timp a turneelor olimpice de tenis de masă, participarea sportivilor, medaliile obținute de către aceştia sunt prezentate şi analizate prin asocierea hărţii cu tabele şi diferite modalităţi de reprezentare grafică.

Cuvinte cheie: *tenis de masă, Jocurile Olimpice, istoria sportului, geografie.*

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Introduction

For over one hundred years, the Olympic Games have represented one of the major events, attracting a large audience consisting of billions of spectators and billiards of viewers. Their importance and role for the contemporary society made the Olympic Games an event studied by specialists of several domains: sport history, management, Olympism, Olympic education, etc. Taking into consideration the phenomenon complexity, in addition to the particular studies made in a particular scientific field, many research approached the phenomenon from interdisciplinary perspective. Thus, among others, from the very first edition of the Olympic Games, specialists in geography and sport collaborated in the study of sport phenomenon in general, focusing especially on the Olympic phenomenon (Bale, 1993). The collaborations between the specialists in the two science domains varies on a global scale: cartography (Bánhidi, 2004), life quality (Ahlfeld & Maenning, 2010), territory amenity (Augustin, 1995), educational field (DeChano & Shelley, 2006) etc. First scientific paper in Romania approaching sport from the perspective of geography dates back in 1938. (Mihăilă & Ulmeanu, 1938). More recently, under the coordination of the University Professor Vasile Surd, at Babeş-Bolyai University of Cluj-Napoca, Faculty of Geography, certain doctoral thesis related to sport from the perspective of geography were elaborated (Sandor, 2005). Specialty literature includes books researching the relationship between sport and geographical environment (Bogdan, 2009). Likewise, works written by specialists in sports and geography were published (Maroti & Ilieş, 1995; Staşac, Maroti & Ilieş, 2005; Sandor, 2003).

Using this joint approach to different sport aspects, one can identify amongst others, the relationships occurred between the spatial variations of distribution, structure, dynamics of Olympic phenomenon and its geographical site. Linking the map to the column diagram, frequency polygon, statistical landscape features, etc. offers the opportunity to present, analyze and understand the phenomenon researched from a different point of view than the ordinary one, for those approaching it only from the point of view of the specialist in physical education and sport.

In over 100 years of existence, the table tennis has developed and become one of the most popular sport, currently being played in approximately two hundred countries in the world, by billions of youth and elderly women and men. Although, the procedures for recognition of table tennis as Olympic sport, its inclusion on Olympic Games agenda, the attendance and the results obtained at Olympic tournaments, which represent important steps in the history of this sport, all these were poorly studied. In the specialty literature of Romania, only few works related to the presence of table tennis in the Olympic Games were written. Therefore, we decided to master information and prepare this essay.

We strongly consider that an essay approaching table tennis tournaments from the perspective of the two domains: sport and geography is topical, interesting and contributes to a better familiarization with the studied phenomenon. The cartographic representation and geographical analysis come to complete with additional information the vision of the sport specialist.

Events that led to the inclusion of table tennis into the family of Olympic sports

In the first years after the World War I, when the table tennis quickly gained momentum, the organizational procedures for establishing governing bodies for this sport became the subject of debates both at the national and international level. Thus in 1926, shortly after the beginning of the month of December at Dr. Lehmann's initiative, representatives of six countries gathered together in Berlin to discuss the establishment of a table tennis international governing body. As a result, in London was founded the International Federation of Table Tennis (Antal, 1974).

In the first years after its establishment, part of the leaders of Table Tennis International Federation understood that inclusion of this sport into the family of Olympic sports might have a positive influence upon its development and evolution and took steps to make it happen. In February 1926, in Budapest, the table tennis governing body made the decision at the General Meeting to confer powers to some of their members for exploring the chances to include this sport on the agenda of Olympic Games (11). This first step was followed by actions for informing the affiliated national federations about the attitude to be adopted by them in order to offer the tennis table the opportunity to become an Olympic sport (6).

The General Meeting held in 1937 on the occasion of World Championship in Baden, Austria, granted powers to the members of Consulting Committee of Table Tennis International Federation for contacting the Committee for Organizing the 1940 Olympic Games in Tokyo with the proposition to include the table tennis into the Olympic agenda (1).

An important event of the table tennis pre-Olympic history happened at the 40th Session of International Olympic Committee, when the twenty six members attending the session rejected the request of the International Federation for recognition of the tennis table as an Olympic sport (3).

In the first years after the Word War II, in addition to the considerable number of members rejecting the idea of including the tennis table on the Olympic Games agenda, several hostile opinions expressed by some members of the Table Tennis International Federation contributed to the postponement

of its inclusion into the Olympic sports with almost four decades (8). Furthermore, the position of the Table Tennis International Federation towards the amateurism, as well as the divergences related to the difference between an amateur and a professional player, were long time an impediment for recognition of the governing body for table tennis by the International Olympic Committee (9).

In 1967, after the retirement of Ivor Montagu, the new president H. Roy Evans de Wales, initiated several actions that led to the modifications of the By-law of Table Tennis International Federation with the purpose of complying with the requirements of Olympic Charter. As a result, in November 1977, the International Olympic Committee has recognized the Tennis Table International federation as an Olympic Federation (7).

At the 84th Session of International Olympic Committee, held in 1981 in Baden Baden, the inclusion of table tennis into the Olympic Games agenda beginning with the edition held in 1988 in Seul was approved (4).

Attendance to the table tennis competitions in the Olympic Games

The inclusion of table tennis in the Olympic Games agenda has a decisive influence on the direction and development of this sport. In the following years the number of athletes practicing table tennis has grown, the table tennis has strengthen its position within the Olympic family and has benefited from increased support of the national and international governing bodies. As an Olympic sport, the promotion of international and national official competitions, as well as other activities related to this sport in newspapers, radio and television has increased. All these resulted in an increased attention to table tennis from the part of audience and viewers interested in this sport.

From 1988 to 2004 the format of table tennis competitions included the singles and the doubles matches both for men and women. Starting from 2008 Edition of Beijing, the doubles match was replaced by the team competition (4). A number of 1145 athletes representing 91 countries attended in the seven editions of the Olympic Games that host table tennis competitions. The participants in the table tennis Olympic tournaments and their origin was influenced by the decisions made within the session of the International Olympic Committee, who decided on the number of athletes admitted to a single edition, the qualification conditions by taking into consideration the changes occurred on the world map (*** 2007).

Players from 21 countries competed in the seven editions where table tennis was included in the Olympic Games agenda. Seven countries sent their competitors to 6 Olympic tournaments, 11 countries to 5 editions, 5 countries to 4 editions, 12 countries to 3 editions, 12 countries to 2 editions and 19

countries to one edition (10). By widening the participation area of national committee to Olympic tournaments, the tennis table contributed along with other Olympic sports to the universality of Olympic movement.

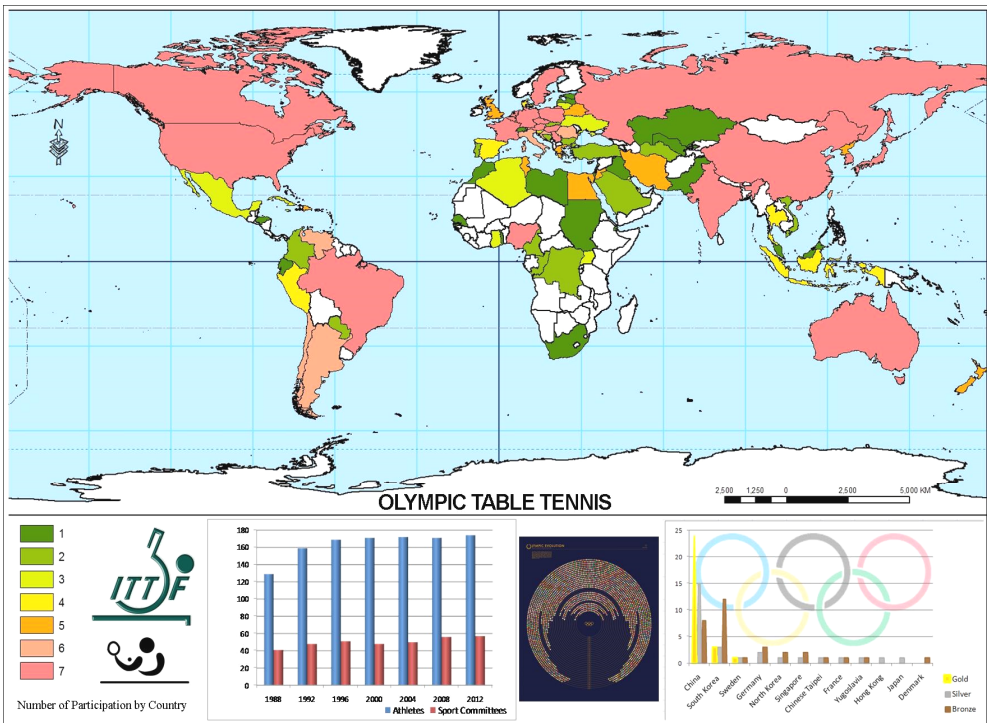

Figure 1. Olympic national committees participating in table tennis Olympic tournaments; number of participating athletes; countries whose athletes won medals (made based on 10, 2 and 5)

Time evolution of the number of athletes and national committees participating in table tennis Olympic tournaments is shown in table 1.

Table 1. Evolution of the participation of national committees and of the number of athletes (2)

Country	Olympic Games Edition						
	1988	1992	1996	2000	2004	2008	2012
Athletes	129	159	169	171	172	171	174
Number of national committees	41	48	51	48	50	56	57

The study of the participation of Olympic national committees in function of the geographical area of their origin reveals that Europe has the largest number 34.44 %, followed by Asia 26.66 %, Africa 17.77%, North America 8.88%, South America 8.88%, and Australia/Oceania 3.33 %.

Table 2. Participation of Olympic national committees in function of the geographical area (2)

Europe	North America	South America	Asia	Africa	Australia/Oceania
31	8	8	24	17	3
34.06 %	8.91 %	8.91%	26.37 %	18.68%	3.29 %

Although the decisions of International Olympic Committee based on the proposals made by the Olympic Programme Commission and Table Tennis International Federation for facilitating to a great extent the access of athletes from all geographical areas, Europe and Asia hold the largest number of athletes.

In any sport, the most important criterion taken into consideration for establishing the value of the athlete's participation to the Olympic Games is the number of won medals. In the table tennis Olympic tournaments, the 88 available medals were distributed between the participants of merely 12 countries, representing 13.18% of the total number of participants. From the total number of medals the athletes of China won 47, 53.41%. In the ranking of Olympic medal winners we also found athletes from South Korea, Sweden, Germany, Democratic People's Republic of Korea, Singapore, Chinese Taiwan, France, Serbia, Hong Kong and Denmark (5).

The study of distribution of medals on continents reveals that only athletes from two continents, Asia and Europe ranked the required positions to win Olympic medals. The table tennis tournaments were dominated by athletes from Asia, who won 75, 85.33%, of the total number of medals – 27 gold, 23 silver and 25 bronze – followed by athletes from Europe with 13, 14.78%, – 1 gold, 5 silver and 7 bronze. The athletes from North America, South America, Africa and Australia/Oceania have never won any medals at the seven Olympic table tennis tournaments.

Table 3. Ranking by medals of geographical areas

Place	Continent	Medals			
		Gold	Silver	Bronze	Total
1	Asia	27	23	25	75
2	Europa	1	5	7	13
Total		28	28	32	88

Conclusions

Although, the table tennis is one of the most popular sport at international level and the attempts of its inclusion into the Olympic Games agenda dates back in 1920, the first Olympic tournament of table tennis was held only in 1988 at the Seul Olympic Games.

1145 athletes from 91 countries participated at the seven editions in which the table tennis was present on the Olympic Games agenda. Only 21 National Olympic Committees succeeded in sending athletes to all Olympic tournaments.

Distribution of participants by continents reveals the dominant role of Europe with 34.06% and Asia, with 26.37%. Other continents have the percentage between 3.29%, Australia/Oceania and 18.68%, Africa.

From the participating countries only 12 succeeded in ranking positions allowing their athletes to won medals. Most medals have been won by athletes form People's Republic of China 47, 53.41%.

Distribution of medals in function of the geographic area reveals that only the athletes from Asia, 75, 85.33%, and Europe 13, 14.78%, have won medals in table tennis Olympic tournaments.

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PHYSICAL EXERCISES, GAMES AND SPORT CONTESTS ON THE TERRITORY OF DACIAN PROVINCES

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ABSTRACT. The aim of this paper is to bring the history of sport and physical education in the province of Dacia in the current knowledge on the subject of the Roman Empire, respectively from more developed provinces of the Empire. The work completes the basic dates regarding the integration of the Province of Dacia in the Empire structures and assuming the Roman models, contributing in this way to complete the idea of the romanization of the province. The number of evidence about "sports branch" is smaller, and its representation is modest compared with those of the oldest and most developed provinces than Dacia and, in fact, better and more researched, but more important to us it the fact that it can be shown that it exist a part of every branch of sport life. The fact that certain representations and local daco-roman artifacts produced present a great resemble to products from other provinces (eg. representation on bricks of gladiators) shows that there were general knowledge about these games that crossed border.

Key words: *palestres, box, pentathlon, wrestling, amphitheater, Porolissum.*

REZUMAT. ***Exerciţiile fizice, întrecerile cu caracter sportiv şi jocurile publice pe teritoriul provinciilor dacice***. Scopul lucrării este acela de a aduce istoria sportului, a educaţiei fizice din provincia Dacia la nivelul cunoştinţelor actuale despre acest subiect din Imperiul Roman, respectiv din provinciile mai dezvoltate ale Imperiului. Lucrarea va completa datele fundamentale în legătură cu integrarea provinciei Dacia în structurile Imperiului şi cu preluarea modelelor romane, contribuind astfel la întregirea ideii de romanizare a provinciei. Desigur, numărul de dovezi pe „ramura de sport" este mai mic, iar modul de reprezentare mai modest, în comparaţie cu cele din provinciile mai vechi şi mai dezvoltate decât Daciile şi, de fapt, mai bine şi mai intens cercetate, dar important ni se pare faptul că se poate demonstra că din fiecare compartiment al vieţii sportive există câte ceva. Faptul că unele reprezentări şi artefacte produse locale daco-romane se aseamănă izbitor cu produse din alte provincii (e.g. reprezentarea pe cărămizi a gladiatorilor) arată că existau cunoştinţe generale despre aceste jocuri care treceau peste graniţe.

Cuvinte cheie*: Palestre, pugilat, pancraţiu, pentatlon, amfiteatrum, Porolissum.*

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Introduction

Based on the existing references, we can say that it does not exist a systematical and conducted research in this area of Roman Dacia history. As a result, also the knowledges regarding the physical exercises, sport contests and games from Dacian provinces of Romania are far behind in comparison with those of developed countries in Western Europe.

The current status of researches

There are only two paper works that, in theory, addresses to this topic. This paper works belong to Ghibu E.- Todan I. (Ghibu-Todan, 1970) and to Postolache N. (Postolache, 1979). Both of them present only vague references. The first paper refers to modern and contemporary epoch, so the title does not match the content.

The second paper presents vague references about the amphitheatres from Ulpia Traiana and Porolissum, where "are attested fights with gladiators and animals" (the baths of Drobeta and Romula). The good and probably true observation is that "they enter in Dacia, under the influence of Roman culture, entertaining manifestations, bloody fights and games organized in amphitheatres". He mentions also about the travels on Roman roads, from which, one has a touristic travel character.

There are several paper works that are reduced as content and incomplete regarding the topics that deal with various branches of sports: amphitheaters and gladiatures (Alicu-Opreanu, 2000), with brain games and gambling (Paki-Cociș, 1993) and a lot of small articles and studies that are publishing statues of athletes (athletes, dancers, gladiators, fighters), graphical representation on different objects or monuments (dancers, gladiators) and also many pieces from brain games and gambling, most of them found in Roman camps (monographic published).

The existing data are few and vague and the information refers especially to amphitheatres and to the stories related to them.There is no connection yet with the inscriptions and the dacian-roman archeology. Both books (Ghibu-Todan, 1970; Postolache, 1979) have no adjacent illustration. Macrea M. (Macrea 1969, p 349) gives a plan of amphitheatre from Ulpia Traiana.

Sources of the paper

We must mention that in comparison with the written sources, monuments and representations that can be found in the western provinces of the Roman Empire, our patrimony (from the dacian teritory) is quite poor.

We do not have have literary sources. Epigraphic sources reminds only the existence of some athletics,without giving any explanatory notes. . IDR III/6, p. 163, nr. 311: Herculanus – gladiator – Apulum; p. 227, nr. 423 (Longinus – armoured car leader – Apulum). In volume III/2, p. 51-63 presents architectural elements belonging to Ulpia Traiana amphitheatre,especially owner chairs,some of them with inscriptions fragments. We have several large stone monuments with representations of people who do "sport"; one of this kind is the monument with two women dancers from Ulpia Traiana. There are more sportive basis and we refer here only to amphitheatres. Today, there are known amphitheatres at Ulpia Traiana, Micia, Porolissum; there are suppositions regarding this kind of constructions, based on the discovery of some pieces related to amphitheatre at Apulum, Potaissa, Drobeta Napoca. It has not been identified any circus, or a stadium.

Many representations made of bronze (statues, chandeliers) present gladiators, gymnasts, acrobats, athletes, fighters, dancers.

There are a few representations (graphitized drawings) on the bricks with gladiators.

There are more pieces connected with brain games and gambling; bricks with the game drawn (backgammon), dice and discs made of bone,clay or glass for the movement on the board.The number of these pieces is very large in settlements like Ulpia Traiana Sarmizegetusa (Paki-Cociş, 1993), Porolissum (Gudea 1989,1996), Buciumi (Chirilă et al., 1972).

Research and presentation methods

Regarding the research of this area and publication of the rezulted data there were and still are limitations in:

- fixing the terminology that meet both the ancient and the romanian current (which is international);
- establishing a comprehensive and complete list of sport exercises from antiquity in order to be able to select, based on the repertory, which sports activities were practiced in Dacia;
- the presentation way of each monument chosen as the subject of the repertory elaborating a bibliography that contain papers about all aspects of antique sportive life from Dacia, starting with analogies of the Empire and continuing with sources and works about artifacts from different localities. Data about the ancient sport and the history of physical education of the Empire,will serve,of course,as models and guides.

The bibliography created untill now includes about 80% of Romanian historical literature on the subject. We chose Corpus Signorum Imperii Romani system because it corespondes to archaeological and scientific exigencies.

To identify and determine activities of physical education in Dacia, it was necessary to review on one hand, literary and epigraphic sources of Empire relating to sports activities, on the other hand, the entire historical-sportive literature that gives valuable archaeological discoveries confirming the literary and epigraphic sources. Therefore, we made a list of sports activities, clasified in six categories:

a. Physical exercises (throwing the javelin, riding, marching, swimming, etc.) that occures in the circus or the baths palestres (where existed runnings and sport fields) or even outside (Rome Field of Mars) (Lascu 1965, p. 394-395, Etienne 1970, p. 351; Aries-Duby 1994, p. 200; Iordanescu 2003, p. 25);

b. Proper games

- ball games, which were practiced in baths and outdoor (Lascu 1965, p. 395, 388-390; Iordanescu 2003, p. 116; Aries-Duby 1994, p. 200);
- games of intelligence and luck that were practiced in the for, in private houses ,on stadiums and camps (especially in the soldiers barracks, where were found most of such artifacts); the extent to which intelligent games are also games of luck, was underlined by N. Lascu (Lascu 1965, p 390-393).

c. Sports competitions:

- **professional sports** (pancraţiu-pentathlon, wrestling pugilat). In this sense a big help is an inscription from Pompei (CIL X 1074 = ILS 5053, 4) enhanced by the Etienne 1970, pp. 351, 371-377.

In this text, Aulus Claudius Flaccus, duumvir quinquenalis, chosen for the third time, tells the "facts" that he did for the city:

- first duumvirat: he organized in for shows with clowns, fights with bulls, pugilat;
- the second duumvirat: he organized in for fights with bulls, pugilat;in the amphitheater - athletes, gladiators, fights with animals, fighters;
- third duumvirat: buffoons.

Unfortunately we have no data about pancraţiu and pentathlon complex competitions.

- **public games**

  - in circus - horse racings, cart racings (Lascu 1965, p 405-410; Iordanescu 2003, pp. 126-128);

- in amphitheatre:fights with animals (venatio), gladiators fights (Lascu 1965, p. 410-420; Aries-Duby 1994, p. 202; Iordanescu 2003, pp. 124-126, Etienne 1970, p. 377; Tudor 1976, p. 84-92);
- naval battles (in the amphitheater and on lakes) (Iordanescu 2003, p. 126).

d. Dance, as a way to public show
- in the amphitheater (especially in pompous procession of entry and at the circus) (Lascu 1965, p. 397-398).

e. Tourism (travels with economical interest, scientific interest, pleasure, etc) .
- on the roads between different cities, at different distances; on the sea (Casson 1974, p. 115-329, Roman epoch).

The extention of the Roman Empire

For the period we are interested in sports movement in Roman antiquity, we are talking about the Roman Empire which had its beginnings in the late first century BC. and it touched its apogee at the end of the fourth century (after that it was dismembered).

In the early first century AD. Empire held in an organized way, only Italy, Hispania, Gaul, Greece, Cilicia, Crete and North Africa. In the first century were conquered Noricum, Dalmatia, Raetian, Germany, Britannia, Moesia and Thracia. In the second century were conquered Dacia, Mesopotamia, Armenia. Roman Empire reached the apogee of its extent. At the end of the third century began territorial losses which were never recovered (Dacia, Germany Higher partial = Agri Decumates, Armenia (Bechert 1999, passim). However, in these first four centuries the Roman Empire was extent on three continents: Europe (western, central and south-east,from Britannia to the Black Sea and Aegean Sea), North Africa, from Gibraltar to the mouth of the Nile, Asia Minor and the Arrabian territories (Syria, Liban, Palestine). This territory was divided into provinces which were called after the people who lived there.In I-III centuries, there were 50 provinces, in the fourth century (after 285) were reorganized 101 and then 117 provinces (ECR, p. 630-631, Bechert 1999, p. 5-13). During this period, the Roman state was led in a centralized way, in two forms: in I-III centuries principality (Cizek 2002, p. 237-250) and IV-VI centuries domination (Cizek 2002, p. 524-642). Octavianus, nephew of Julius Caesar called himself princeps, and the first three centuries have been known since antiquity "principality". Year 27 BC. is widely and traditionally considered the beginning of the Roman Empire.

Province remained the main territorial unit. It was an administrative unit established on the ethnic basis of the territory. Under the principality, the border provinces were led by Emperor legates; inside provinces without troops were led by legates elected from senators, appointed by the emperor. Under domination the provinces were led by a financial administrative praeses and the troops, by a dux; these were independent functions. There were outlined several socio-economic processes: moving centers of economic, military and political influence to the border provinces, Italy was then lowered to the provinces level; later, Rome was abandoned as the capital; structures and pagan religious organization eroded during the time and it was abandoned in the favour of Christianity.

Short history of dacian provinces

This chapter was elaborated only to show that in the Dacian provinces (Porolissensis, Apulensis and Malvensis) have worked the same state institutions, there was the same military and administrative organization,were identical social, social classes which were identical those from other provinces of the Roman Empire.

The extension and the organization

The territories of the dacian kingdom led by the king Decebalus were conquered after great wars between 101-106 by roman army led by emperor Traianus (96-117). It was the last conquered european province of the empire.

The territory of the dacian state had a much greater extent than that which was turned into a roman province. The extra Carpathians territories situated in the north-west and north-east (Crisana,Maramures and northern Moldova) remained outside the roman province. Without its part of south-east (Country of Fagaras, Country of Barsa, Harghita and Covasna) Transylvania (historical) and Banat belonged to the province territory. Banat and Transylvania, together with the West Oltenia, have formed the province of Dacia. East Oltenia and Wallachia, together with the South of Moldova were annexed to Moesia Inferior province. This situation lasted until the death of the Emperor Trajan around 117/118.

Hadrianus emperor has reorganized this territory as follows:

- The northern part of Transylvania, to the north of the Mures and Aries rivers, was formed the province of Dacia Porolissensis, with the capital in Porolissum / Moigrad;

- The central part of Transylvania (without Covasna, Country of Barsa, and Country of Fagaras) with west Oltenia and Banat formed Dacia Superior / Apulensis, with the capital in Apulum / Alba Iulia;

- The eastern part of Oltenia, with south-eastern Transylvania (Covasna, Country of Barsa, and Country of Fagaras) and Wallachia until Milcov have formed a new province, Dacia Inferior Malvensis, with the capital in Romula.

Eastern territories of Wallachia and southern Moldavia were abandoned.

This territorial organization lasted until the end of Roman domination in Dacia (275). It is belived that around 250 the eastern parts of Dacia Inferior, Wallachia and East Oltenia have been lost.

Roman administration was slightly different in those three dacian provinces. At first (106 – 118), the province was ruled by a governor legatus Augusti propraetore, having a consular rank. This rank existed because in the province had stationed three legions (15.000 soldiers): legio I Adiutrix, legio IIII Flavia, legio XIII Gemina. The governor had military and legal responsibilities. After the reorganization of the territory under Hadrianus, situation has changed radically.

Dacia Superior-Apulensis, which was the largest and richest of the dacian provinces, had as a leader a legatus augusti propraetore with praetorian rank;the diminution of governor rank is owed to the fact that only one legion had stationed in the province (XIII Gemina),at Apulum / Alba Iulia .

Dacia Porolissensis was ruled by a procurator Augusti, having military and administrative duties.

Dacia Inferior Malvensis was led by a procurator Augusti.

Physical exercises, sport contests, public games, dance and tourism in dacian provinces

Historical comment

The basic feature of images that are found in Dacia and, of course, of the artifacts related to sports, is that the sport representations appear on the same types of artifacts: luxury pottery, decorated pots, tiles, bricks and tiles with sports designs, glass vessels, stone monuments and inscriptions, bronze statues, bronze vessels.

Sometimes, images and representations are parts of the series that are found throughout the Roman Empire, eg terra sigillata vessels, bronze statuettes. Sometimes, some local creations (such as drawings of gladiators on bricks) show an admirable unity in representation to the ones of the Empire.

The pieces used as evidence of sports activities in Dacia were found, especially in large cities (Porolissum, Napoca, Potaissa, Apulum, Ulpia Traiana, Drobeta, Romula) and in the camps which were better researched and published (Porolissum-Pomet, Buciumi, Veţel, Feldioara, Râşnov).

a. there are representation of athletes in action, bronze statuettes (Ulpia Traiana), gymnasts (Potaissa), scenes of demonstrative battles (Arcalia near camp of Ilişua);

b. of the actual games, we have many evidence only of intelligent games (places where they could play on money!) there are many representations mill games scheme drawn on bricks (Potaissa; Drobeta; Bistreţu);

There are many fragments of bricks that represents rests of drawings of the game ludus militum or ludus latrunculorum (Ulpia Traiana, Porolissum; from the same game we have many parts = chips, milites, latrunculi), made of clay (several of them unfinished) or of bone (Ulpia Traiana; Veţel, Porolissum; Porolissum, Buciumi). The frequency of this game is very high. We gave some examples but pieces of the game and fragments of the table board are found in all camps and even in the houses from civil settlements (eg Porolissum - vicus). Even the fact that the pieces of the game were not finished anymore, having some rough on their surface, simply made of walls or vessels, could be an evidence.From the intelligent game we have many typical dice made of bones (Ulpia Traiana Apulum, but there are also at Porolissum, Bucium).

c. sport contests, especially pugilism and pancratium are less represented. We only have representations of fighters. Pancratuim and pugilism were not atested. But, on a bronze vessel from Gilau camp we have an almost complete fight scene; it is almost complete because it does not have elements of contest opening; we have instead fight scenes, table with cash prizes and laurel leaves. Scenes of this kind are wellknown in the Empire. Perhaps the vessel is imported and is part of a series of promotion.

A bronze statue representing a warrior standing, leaning on a piece that can not be determined, comes from Porolissum. Another piece of bronze representing a fighter comes from Ocnita (Dacia Inferior); curious representation of a dressed character. A side wall of the funeral aedicule near Sângătin (Sibiu county) presents, among other images, two fighters face to face trying to "catch" themselves in battle.

Much interesting is the representation on a glass bottom from the camp of Bologa of two fighters that are staying face to face. The piece was found in a a backup products storage and it is dating from the third century AD.

As part of sports contests we have some representation carts raceings, which probably took place in Dacia also,in the circus (although this is not yet archaeological identified).

On a pattern of clay found in Apulum is represented an auriga (car driver with whip in his hand, driving a cart with four horses;in the field representation inscription NIKA = victory); on another pattern of clay of Porolissum is a rider in the race to the left, the piece was discovered in Porolissum / Moigrad. From a tomb in the cemetery at Locusteni (Dacia Malvensis) appears it appears a medalion with a racing cart, drawn by four horses, auriga having the whip in his left hand.

On a funerar stele from Zegaia (Hunedoara county, near Ulpia Traiana) appears the text of the inscription that wast put by the revengers of a robber attack, a scene with bears hunting scene. It is difficult to explain the context.

On a side wall of terra sigillata from Romula appears a bestiarius with a whip in his hand, rushing after a lion. Also on a side wall of a vessel from Apulum appears (several times) a spear fighter that attacks or is being attacked by a boar, a lion.

The representations about the fights of gladiators, are numerous, suggesting that they were most enjoyed by the public. It can be seen that they are more diversly widespreaded.

First we have the amphitheatres,the most eastern amphitheares of the Roman Empire (as in the greek world of the Orient amphitheares are rare). There have been identified and investigated three amphitheares: two of them with two phases of construction (wood and stone), at Ulpia Traiana and Porolissum, one with simple wooden enclosure, at Veţel / Micia.

An amphitheater could be identified on the column in Drobeta. That was then certified and archaeological research is ongoing. Two amphitheatres are only assumed ,on the based of some findings of artifacts related to the activity of the amphitheater - Apulum and Napoca (gladiator designs on brick).

The two amphitheatres, studied systematically (the one from Ulpia Traiana benefiting from an archaeological and architectural extended study) are, so to speak, classical: : ellipsoidal plan, several rows of stands, high garden towards the arena, ellipsoidal arena, four gates.Both amphitheatres had, as I said above, a phase of wood and were built with stone walls in the middle of the second century AD. For the amphitheatre of Porolissum there is even a building inscription dated to 157, under emperor Antoninus Pius.

A number of artifacts sustain the work of a gladiators from amphitheatres:

- from Orsova / Dierna (a roman city vanished in the lake from Portile de Fier) comes a pattern of clay for casting votive disks on which appear two gladiators in battle;it seems to be one retiarius;
- from Cluj / Napoca is known a fragment of a pattern on which appears a gladiator armed with sword and shield;
- from Moigrad / Porolissum is known a clay fragment of a pattern with two gladiators in combat.

Such patterns were used to multiply similar parts or to prepare cakes with sports representations.

Even more interesting are the bricks that had incised drawns representing gladiators:

- from Chinteni/Cluj-Napoca comes a piece of brick which stores a part of a drawing representing a gladiator;

- from Ulpia Traiana comes a brick that has scratched into the smooth paste a gladiator with shield and sword in attack;

- from Apulum, from old discoveries, comes a brick that has painted in soft paste a gladiator (retiarius) with net and hook, nude; the inscription Herculanus indicates his name; the brick belongs to the ceramic workshop and also to the guard of the governor numerus singulariorum Governor.

By comparing with similar parts of the Empire,we can see how unitary is the representation of the gladiators.

A group of artifacts related to fighters in the amphitheatre,is formed by the bronze statues representing the gladiators. Their number is large:

- from Turda / Potaissa comes a bronze statuette representing two gladiators clenched in battle;

- from Zeicani (near Ulpia Traiana) comes a head banner on which is a gladiator with the helmet, huge shield and short sword;

- from Moigrad / Porolissum comes a bronze statuette representing a gladiator attacking forwards; the shield is broken and the right hand fractured, the weapon it can not be seen, it probably was a short sword.

Many representations of gladiators appear on rushlights. Unfortunately, in Dacia we have only one rushlight with such representation:

- rushlight made of clay; the disc shows a gladiator in attack to the left;it comes from Porolissum / Moigrad.

Representations of gladiators on luxury vessels are few. It is true that I have not inspected all the vessels TS published in Dacia:

- from Moigrad / Porolissum comes a fragment of a pattern with two gladiators;

- on a clay fragment of a vessel from Micasasa is part of a gladiator;

- on a clay fragment of a vessel from Turda TS / Potaissa is a gladiator in the attack to the left and another (represented below) in the attack to the right;

- on a fragment of a bowl from Romula appears in a medalion a gladiator with sword attacking to the right.

Gladiators appear even on tiles (statuettes) of clay:

a fragment of clay statuette from Apulum is the top of a piece of clay, representing a gladiator with with helmet.

An inscription from Ulpia Traiana dedicated to the goddess Nemesis (patroness of gladiators), a fragmentary piece, has a trident on one of its end who suggests by his presence of that we deal with a retiarius.

On a funeral aedicula without known the place of the discovery located in the National History Museum of Transylvania in Cluj-Napoca, are represented two gladiators standing and armed with daggers. On another aedicula funeral wall, without known the place of the discovery, located in Sibiu museum,are

represented two gladiators in battle, shields are face to face,in their hands were wearing short daggers.

Dance, treated by us as physical, artistic and public activity, appears less in Dacia.

- from Ulpia Traiana comes a bronze statuette representing a dancer in motion; his raised left hand and right foot are a proves of a dance figure;
- also from Ulpia Traiana, we have a bronze statuette representing a man lying in an artistic dance figure;
- from Potaissa comes a bronze statuette of a dancing figure;
- from Moigrad / Porolissum comes a bronze statuette representing a man in dance motion;
- from Gherla camp area, comes a statue representing a man in dance motion.
- from Medias, from a rural settlement comes a bronze statuette representing a dancer.

As we can see, unlike the Empire (the other provinces), where representations of the dance are painted, are on stone monuments,in Dacia we have more bronze artifacts representing dancers.

Tourism is represented in Dacia only by the presence of some vehicles and by an inscription that certifies the journey of some characters from Ulpia Traiana in Rome:

-votive altar dedicated by several citizens to water goddesses of Baile Herculane, who had travelled to Rome for a political event and, at their return, they stopped in Herculane to treat;

-wall of funeral aedicule on which is represented a chariot pulled by horses; the place of the discovery is not known and this piece is in Brukenthal Museum in Sibiu.

Dacian provinces, conquered at the beggining of the second century and lost at the end of third century III AD. failed to assimilate all forms of physical activity, sports competitions, public games, dance and tourism, so that the repertory of images is poorer than the one from the eldest imperial provinces. We have the following sections of sport activity:

I. Physical exercises: athletics; gymnastics; fight with weapons;

II. Proper games: brain games and games of luck

III. Sports competitions - professional sports: wrestlings (grek-roman)

IV. Sports competitions - public games: carts racings; hunting in the amphitheatre; gladiators fights

V. Dance

VI. Tourism: journeys for pleasure

Basic feature of images that are found in Dacia is that they appear on the same types of artifacts (pottery, glass vessels, bricks and tiles, stone monuments); images are the same because they have the same sources (vessels of terra sigillata).

Conclusions

1. Province of Dacia (106-118 AD.) and then the three dacian provinces - Porolissensis, Apulensis and Malvensis / Inferior (118-275 AD.), came later in the composition of the Roman Empire and were parts of it a short time (about 165 years). And yet, it integrated very well from political, military and economic point of view, as population and territory has suffered the effects of romanization, it was necessary to identify elements of physical education and public sports competitions here.

- there is no literary source related to Dacia on this regard;
- there are inscriptions and monuments that show that were built also in Dacia "sport bases" and especially amphitheatres. Traian's Column shows an amphitheatre near Drobeta (which has been archaeological identified), at Ulpia Traiana was investigated an amphitheatre, at Micia / Veţel was investigated a small amphitheatre, at Porolissum we have an inscription and an amphitheatre largely investigated. In Porolissum case we know that the stone amphitheatre was made by the governor of the province on behalf of the emperor, at 157. Many artifacts found in localities (gladiator statues, representations of gladiators, etc..) had made throughout the roman cities (Apulum, Potaissa, Napoca), where had been found such representations, to assume the existence of some amphitheatres;
- There have been found numerous artifacts of bronze, clay, bone,that present athletes, wrestlers, gymnasts and pugilism scenes;
- There are sculptured images and artifacts showing that it have been practiced also higher forms of physical movement, as was the dance.

2. Our paper work approached in a general way this field of spiritual life of the mass culture from those three dacian provinces, for the first time, sistematically, from archaeological point of view and, especially, from physical education and sport games point of view.

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THE DIDACTIC CARD GAME "PEDAGOGY IN PHYSICAL EDUCATION - CAREFULLY AND QUICKLY"

VĂIDĂHĂZAN REMUS-CRISTIAN[1*], PRODEA COSMIN[1]

ABSTRACT. Teaching methods are continuously developed. New methods may appear periodically through the combination of existing ones, adjusted by the experience of teachers. The most effective, in our opinion, are those that help us achieve educational objectives without neglecting students' motivation for proposed tasks. After the success we had with the didactic card game "Didactireka" (Văidăhăzan & Prodea, 2012) we continued to experience such changes in our collection of teaching methods. The idea for this didactic card game came from the card game "Jungle Speed" that we found on the internet. In this article we describe how we transformed the card game "Jungle Speed" into educational card game "Pedagogical concepts in Physical Education - carefully and quickly". The game we created has 168 cards, of which 144 are playing cards and 24 are action cards, plus a "treasure". The best dynamic of the game we had with five teams (with 3 or 4 players on the team) or six teams (2 or 3 players on the team). The game can take place on two levels of difficulty. The first difficulty level is to not take into account pedagogical concepts related to words on the playing cards. The second difficulty level requires players that win a duel to define the concept typed on the playing cards included in a duel. If he/she fails to do so then the game continues without winning that duel.

Key words: *teaching game, educational game, pedagogy, card game, speed, assessment.*

Introduction

Teaching methods are continuously developed. New methods may appear periodically through the combination of existing ones, adjusted by the experience of teachers. The most effective, in our opinion, are those that help us achieve educational objectives without neglecting students' motivation for proposed tasks.

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The proposed game

After the success we had with the didactic card game "Didactireka" (Văidăhăzan & Prodea, 2012) we continued to experience such changes in our collection of teaching methods. In this article we describe how we transformed the card game “Jungle Speed” into educational card game "Pedagogical concepts in Physical Education - carefully and quickly".

The idea came from the card game "Jungle Speed” that we found on the internet (Jungle Speed, 2012). You can find the complete presentation of "Jungle Speed” on the website, that’s why in this article we will focus on the game applied by us.

Figure 1. – The process of cutting the game cards

The game we created has 168 cards, of which 144 are playing cards and 24 are action cards, plus a "treasure". In the game "Jungle Speed” the treasure is a totem made by wood. We used an empty box of vitamins.

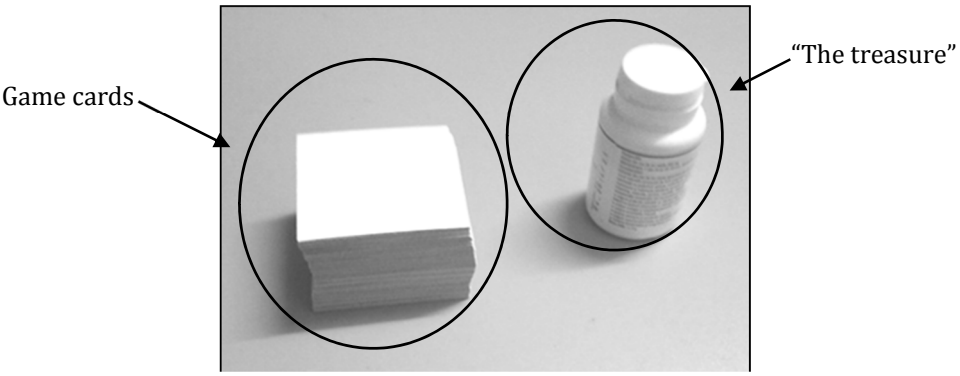

Figure 2. – Game pack

Description of the game and its rules

Players

- Teams of 2 or 3 players;
- Number of teams: 5 (remove 3 cards from the pack), 6, 7, 8;
- Optimum number is 6 teams.

Cards

- On each has these elements: a word (written in lowercase, except one letter which is written in upper case) plus a capitalized letter placed in corner (upper case letter) (fig. 3 & 5);
- Each word appears in two different forms, with different uppercase letter within it (fig. 4);
- Cards are dealt face down, in equal number to all teams.

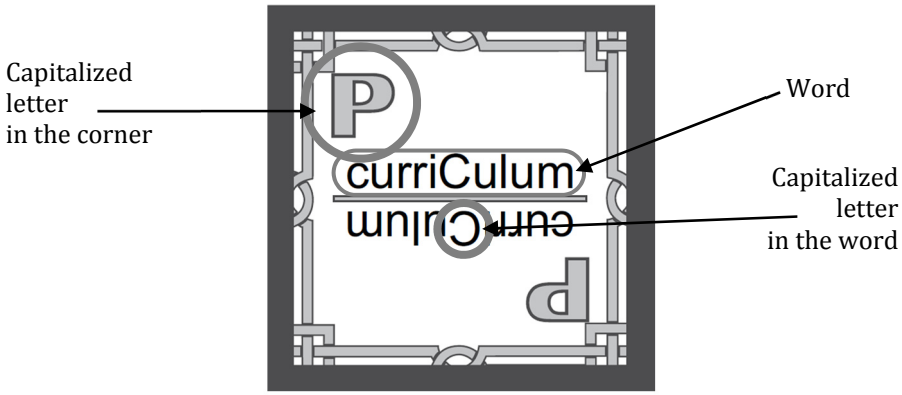

Figure 3. – Game card

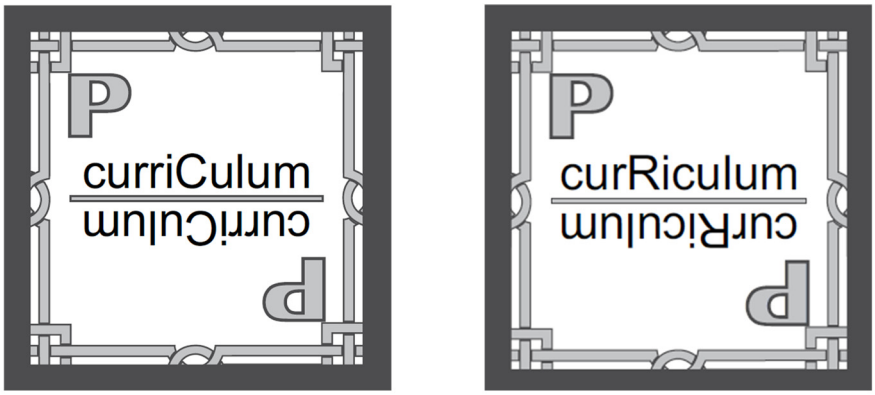

Figure 4. - The two alternatives of the playing cards

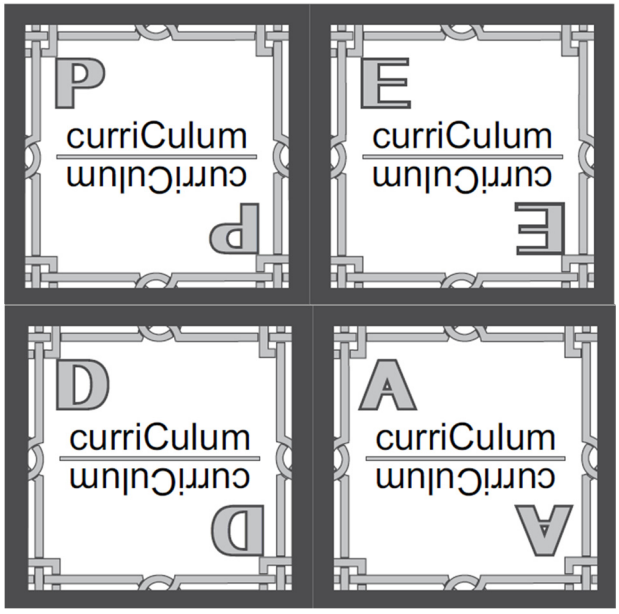

Figure 5. - The four letters from corners of game cards

Rules

- The main objective of this game is to first get rid of all the cards;
- The game starts with the first team to flip a card and place it on the table;
- Cards are flipped toward the center of the table;
- Cards that are considered in the game (active cards) are only those whose face is visible (the card that is covered during the game is no longer valid, being replaced by the card that was placed over it);
- During the game, at one time, two or more players will have the same cards (these players will battle for the treasure placed in the middle of the table);
- The main rule of the game can be changed by action cards (action cards will be described below);
- During the game no player is allowed to rest his hand between his package of cards and treasure; the hand can be in that area of the table only when is participating in a duel.

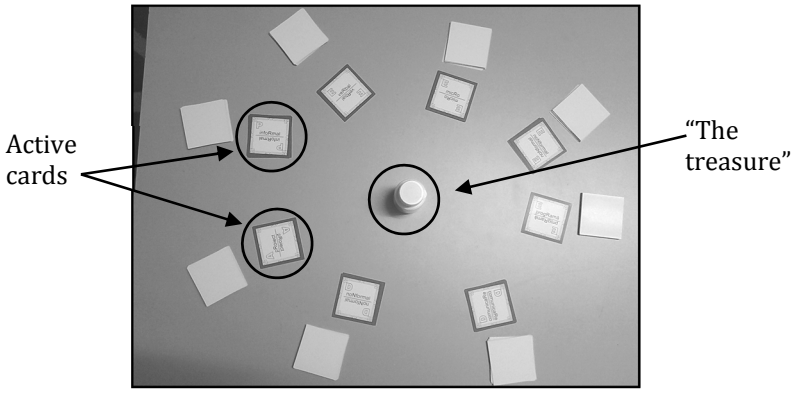

Figure 6. – "Cards settlement"

The Duel

- A Duel can take place between two or more players who have cards of the same, according to the rule of that specific moment.

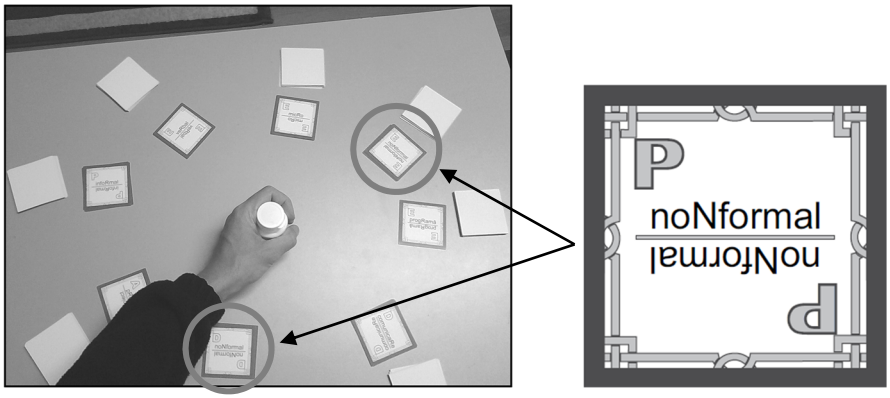

Figure 7. – A Duel

The Duel between two players

- If the duel is between two players, they have to steal the treasure from the middle of the table as quickly as they can;
- The player who steals the treasure first gives his playing cards (those that are faced-up) to player that has lost the duel;

- Other players (those who were not forced to attend the duel) will place their cards (those that are faced-up) under the cards from their hands (if you want the game to end quickly than these players will leave their cards on the table);
- The game is continued by the player who lost the duel.

The Duel between several players

- The player who steals the treasure will give his playing cards (only those that are faced-up) to players who have lost that duel (she wants);
- Other players (those who were not forced to attend the duel) will place their cards (those that are faced-up) under the cards from their hands (if you want the game to end quickly than these players will leave their cards on the table);
- The game is continued by the player designated by the winner of the duel.

Breaking down the treasure without reason

- The player that touches the treasure with no reason at all or the player that steals the treasure with no reason at all (he/she thought that there was a duel but it was a mistake) receives the playing cards (those that are faced-up) from all players;
- If the treasure falls and it cannot be determined who's guilty is then the players gather all the cards that are faced-up (from all players) and place them under the treasury (or near treasure, if the stack is too high);
- The next duel the player (or the players) who lose will take the treasure stack.

The Action cards

- They do not trigger a duel;
- They change the rules of the game as long as they are faced-up on the table and the players can see them.

Action cards - arrows outwards (fig. 8)

- The player who revealed this action card counts to three and then all the players place a playing card with the face-up;
- If there are two or more identical cards then between those players a duel starts (all players participating in a duel should try to steal the treasure as fast as they can);
- After the duel, the game continues with the player that counted to three.

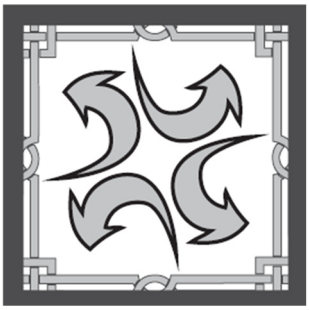

Figure 8. - Action card - arrows outwards

Action cards - arrows inwards (fig. 9)

- When this action card is revealed all players must try to steal the treasure;
- The player who stole the treasure will place his playing cards (the ones faced-up) under the treasure;
- The game is continued by the player who managed to steal the treasure.

Figure 9. - Action card - arrows inwards

Action cards - arrows inwards under the acronym "PEDA" (fig. 10)

- When this action card is revealed it means that the duel no longer launches then the word from the middle is the same on several cards but when there are cards that have the same letter in the corner (when this card is reveal there may be an immediate duel);
- After this card is covered with another card, the duel will be caused only by the cards that have identical word in the middle (this is the first rule of the game).

Figure 10. – Action card - arrows inwards under the acronym "PEDA"

Exceptional circumstances

- If, in some moments, more than one duel triggers at the same time than it is valid the duel linked with the player who stole the treasure, the other duels being canceled;

- If, after consuming a duel, on the table remain more than one action card (all of them being faced-up), then all the players take their cards from the table (those faced-up) and place them in their stack, under the other cards that they have faced-down (it is called "clean the table").

To conceive the playing cards we used the following words (chosen from the concepts of pedagogy): curriculum (this concept includes more elements in our country than in other countries), educaţie (English form: education), ereditate (English form: heredity), mediu (English form: environment), evaluare (English form: evaluation), formal (English form: formal), informal (English form: informal), instruire (English form: training), învăţare (English form: learning), macro (from macro pedagogy – we used only a part of this concept not to spoil the game dynamic), micro (from micro pedagogy), comunicare (English form: communications), nonformal (English form: non formal), nonverbal (English form: non verbal), predare (English form: teaching), programă (from 'programă şcolară', English form: curriculum), proiect (English form: project), verbal (English form: oral communication).

To have a better dynamic for our game we made two forms for every word that we chose, typing an uppercase within.

The best dynamic of the game we had with five teams (with 3 or 4 players on the team) or six teams (2 or 3 players on the team).

The game can take place on two levels of difficulty. The first difficulty level is to not take into account pedagogical concepts related to words on the playing cards. The second difficulty level requires players that win a duel to

define the concept typed on the playing cards included in a duel. If he/she fails to do so then the game continues without winning that duel.

In the figure no. 11 it can be seen a playing snapshot with first year students (Faculty of Physical Education and Sports from Cluj-Napoca).

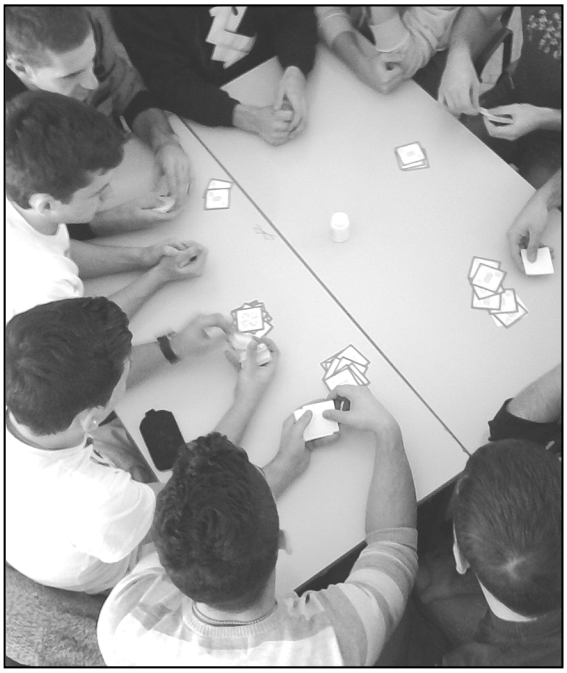

Figure 11. - Playing snapshot

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