INTEREST FOR SPORT ACTIVITY AT STUDENTS OF THE 1ST ACADEMIC YEAR AT FCHPT STU

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ABSTRACT

Our work is focused on finding out motion activity interest and to determine body structure of the 1.st academic year students at FCHPT STU in Bratislava (175 men and 388 women). We gained the information by measurement and using questionnaire method that we consequently statistically processed. We created our own questionnaire which was filled in by students at the initial measurement, which was at the beginning of winter term 2012/2013.

Key words: motion activity, body structure, university students, active, recreational sportsmen and non-sportsmen

INTRODUCTION

Thanks to democratization and humanisation of social life is getting to the centre of attention actual task of health and physical efficiency of population. Not just the good health condition, declination of physical efficiency, increase of growing deformities, obesity and other consequences are mostly the reasons of incorrect hypokinetic way of life, slouch and ultimately also by ignored motion education. Body development, motion efficiency and interest of motion activity are genetically conditioned by heritable factors, but also by influence of external environment. Significant impact means mostly controlled motion activity.

Lack of motion activity is main factor which is manifested by reducing of motion efficiency and performance or also health disorder – increase of civilisation disease. Compulsory physical education fulfils principal and significant role therefore contributes to the optimal human development, to adopt knowledge, motion skills and abilities which are inevitable for basic vital and occupational tasks.

Characteristic feature of nowadays young people is sedentary way of life, low quotient of motion activities in their leisure activities in which unfortunately we gradually equalled trends of developed countries of EU (Vašíčková, Frömel 2011). These discoveries are confirmed also by home authors (Moravec, Kampmiller, Sedláček, 1996; 2002 a Zapletalová, 2002; 2011, Bobrík a kol., 2012), who point out to negative trends in some indicators of motion performance of young people.

The school as an educational institution is able, thanks to qualified pedagogues, to mediate to students not only useful information, but also provides suitable impulses and means for education realisation of active health. By responsible approaches of PE teachers, effective using of the lesson with implementation of exercise units of individual exercise dosing for individuals and health disabled students there was goal of reduction number of PE freed students at FCHPT STU in Bratislava in academic year 2010/2011 to the level 1,44% (Kolářiková, Ondrušová 2011).

Elimination of unsuitable risky factors in everyday human life has positive influence on overall health. In this regard as early as school environs, regime optimalization of children, youth and adults may contribute to prevention of whole population health support.

The aim of our work was to find out motion activity interest and to determine body structure of the 1.st academic year students at FCHPT STU in Bratislava, then processed and evaluated the gained results.

METHODOLOGY

Character of experimental collection

Our experimental collection was composed by the 1.st academic year students at FCHPT STU in number of 563 in the age of 18 – 25 years, 175 men and 388 women of it. Those students absolved initial measurement to determine their body structure and completed our questionnaire.

In the table (Tab. 1) we show basic somatometric characters of students, as are body weight, height and BMI index in average values of men and women.

Table 1 Basic somatometric characters of students in average values

	age	height (cm)	body weight (kg)	BMI
men	19,08	180,62	76,84	23,58
women	19,22	167,95	61,65	21,81

Organisation of research and used methods

We realised our research at the beginning of the winter term 2012/2013 (September 2012). We measured our students in the gym of FCHPT STU in Bratislava. We used empiric methods to gain data of required indicators. Measuring was done by scale with analysis of body structure OMRON BF511 and by questionnaire. Somatic development was judged by body height, body weight, and BMI index. Motion activity interest and defining the body structure was recognised by questionnaire methods and evaluated by the percentage quotient of body fat, amount of visceral fat, percentage quotient of body muscle and questions focused to physical activity of measured students.

The questionnaire created by us came out from standard questionnaire parameters, as well as, comparison of the ability of surveys. The questionnaire was structured by 10 questions of two types. Closed questions with simple choice (offer predetermined response alternatives with just 1 possible answer) and semi closed questions (with options to answer or writing down own opinion). For processing gained data we used basic statistical characteristics (x, s, min., max.). For a better comparison of the frequency response we used quantitative evaluation with help of tables and graphs and the results were interpreted by percentage evaluation.

RESULTS

The first four questions were answered after gaining information about their body structure. For estimating the body structure we used scale with analysis of body structure OMRON BF511. This equipment is using measured electrical impedance (Z) and information about height, weight, age and sex and determines final data based on OMRON about body structure. The results are interpreted according sex. We classified the data according to Omron Healthcare or according to WHO (World Health Organisation).

In the first question we were interested about student's body fat percentage quotient.

In the tables we arrange the data in four levels according Omron Healthcare (the table comes from research HD McCarthy and collective 2006 and Gallagher and collective 2000).

Table 2 Percentage of body fat

	low	normal	high	very high
	< 8,0%	8,0% - 19,9%	20,0% - 24,9%	≥ 25,0%
men in %	4,0	58,4	20,1	17,5
	low	normal	high	very high
	< 21,0%	21,0% - 32,9%	33,0% - 38,9%	≥ 39,0%
women in %	7,2	64,7	17,8	10,3

We found out that more than half of our measured group of men and women have normal quotient of body fat of their bodies. Interesting discovery was made by finding out that in category of high and very high body fat was represented mainly by men.

In the second question we asked about visceral fat.

Table 3 Percentage of visceral fat

	normal	high	very high
	1 - 9	10 - 14	15 - 30
men in %	90,6	8,1	1,3
women in %	99,2	0,8	0,0

We found out that the measured group of men and women have normal amount of visceral fat. In the categories of high and very high are dominating men, as well.

In the third question we were finding out percentage quotient of body muscles.

Table 4 The percentage of skeletal muscle in the body

	low	normal	high	very high
	< 33,3%	33,3% - 39,3%	39,4% - 44,0%	≥ 44,1%
men in %	6,1	24,8	43,6	25,5
	< 24,3%	24,3% - 30,3%	30,4% - 35,3%	≥ 35,4%
women in %	3,1	68,1	26,7	2,1

By measuring we found out that more than half of women have regular quotient of body muscles. Men are mainly represented in high and very high body muscle category.

In the fourth question we were finding out level of obesity according to BMI.

Table 5 Degree of obesity according to BMI in men and women

	underweigt	normal	overweight	obesity
	< 18,5	18,5 - 24,9	25 - 29,9	≥ 30
men in %	2,7	67,1	24,8	5,4
women in %	10,3	75,1	11,8	2,8

The results were interpreted according sex and classification of data displace evaluation of obesity level according to WHO (World Health Organisation). By measuring we discovered that up to 75.1% of women have normal values of BMI. Representation in the category of overweight and underweight has almost the same number of women. Obese women in the measured group was only 2.8%. More than half men have regular values of BMI, interesting is high representation in category of overweight up to 24.8%. We had also percentage obese men more than women 5.4%.

In the fifth question we were interested from which type of secondary school the most students of the 1.st year come from.

We found out that up to 84.6% of men and 83.2% of women come from secondary grammar school and only 15.4% of men and 16.8% of women come from secondary vocational school.

In the sixth question we verified the representation of the students according to Slovak region in which they attended their secondary school.

Table 6 The percentage of subjects from areas of Slovakia

Slovak territory	Bratislava	west	middle	east
men	20,0%	24,6%	34,3%	21,1%
women	17,5%	26,0%	35,8%	20,6%

The largest representation of students of the1.st year we have from the middle territory of Slovakia, for both men and women. Other Slovak territories are represented equally from 17.5% to 26.0%.

In the seventh question we were looking for the information about interest of students in any sport and if so, what are they.

We discovered that men are actively practising football 36.4%, basketball 18.2% and hockey 15.2%. Recreational our men students are practising mostly fitness (gym) 21.7%, football 19.6%, swimming 15.2% and volleyball 10.9%. Women are most active in dancing 29.0%, volleyball 19.4%, swimming and athletics 12.9%. Recreational our women students mostly prefer volleyball 21.0%, athletics (jogging) 14.9%, cycling 12.2%, ice-skating (in line) 11.5% and skiing 10.8%.

In the eight question we were looking for the information how many students are practising their sport actively (registered in sports club), recreational, or not practising any sport at all.

Table 7 The percentage of active, recreational sportsmen and non-sportsmen

sportsmen	active	recreational	non-sportsmen
men	24,0%	56,0%	20,0%
women	10,8%	50,0%	39,2%

Half percentage of our measured students (50.0%) are recreational sportsmen (both men and women). But we recorded quite high percentage level of non-sportsmen women up to 39.2%.

In the ninth question we were interested how often a week, both men and women, practice their sport.

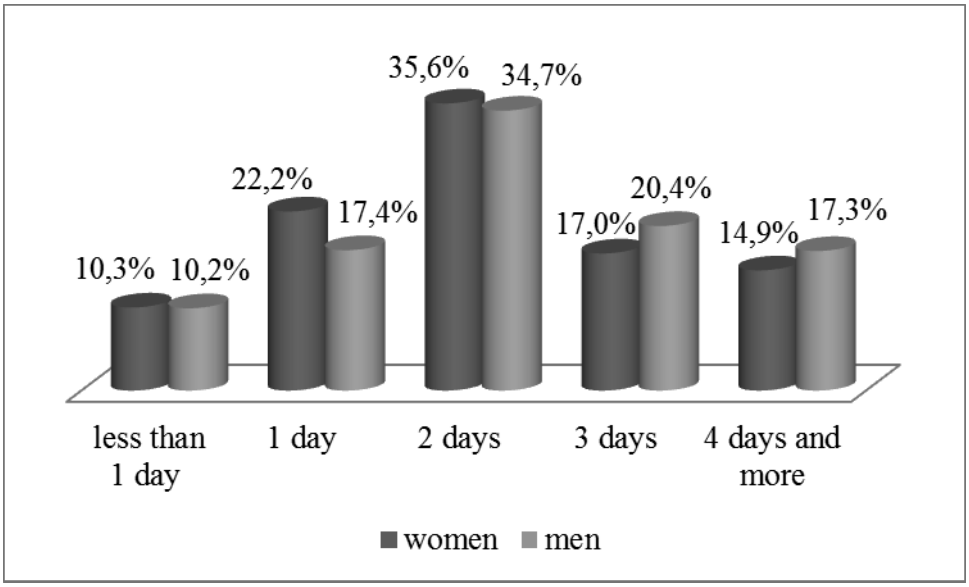

Figure 1
Frequency of practising sport activity per week (men and women)

Men as well as women practice their sport in average 2 days a week.

In the tenth question we were finding out the information if the students are interested in practising any sport as a PE subject at their faculty.

In our experimental collection most of the male students are interested in fitness up to 26.7%, football and floorball 16.7%, volleyball 13.3% and women are mostly interested in volleyball 23.8%, swimming 23.1% and aerobic (zumba, fit ball) 20.9%.

CONCLUSION

Our measurement results of body fat percentage quotient and visceral fat proved that there is mainly men representation in the categories of high and very high quotient. This evidence was also proved by BMI (Body Mass Index) showing that in the categories of overweight and obesity was men prevailing percentage representation than women. In the last 21 years there has been increased about 6 kg body weight in men population (Bobrík a kol. 2012). This growth can happen by increasing of percentage body muscle quotient or also by increasing of percentage body fat quotient. Our experimental collection of men and women came mostly from secondary grammar school 84.6% and almost 35% from the middle territory of Slovakia. An interesting investigation was to reveal that half of the observed collection is recreational practising some sport activity, men prevailing in active sport practising than women. Critical group is consisted by women – non sportsmen, almost 39.2%. That means that the frequency of practising sport in both men and women population is almost at the same level, while the most percentage of sporting students is doing that just 2 days a week.

An interesting investigation for our information is that young population is mostly interested in „classical – collective" sports (ball, hockey, swimming) in both men and women population in both active and recreational meaning, although there are still developing many new modern sports.

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