

## THE LEVEL OF SPORT ACTIVITY OF STUDENTS FROM THREE INSTITUTIONS OF HIGHER EDUCATION

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### Abstract

The purpose of this study was to establish difference in the level of sport activity of students before and after enrolment to the Faculty, and their attitude to participate in their teams. The research was conducted on a sample of 1358 students (encompassing both male and female gender) from three Zagreb's institutions of higher education with majors in humanities and social sciences, and natural sciences and engineering. The results show that about one fourth of students never participated in any type of sport activity before the Faculty. On the other hand those who have, where either active in team sports (typically male students) or in sport-recreational activities (typically female students). After enrolment to the Faculty this level of sport activity changes significantly. With less than 10 % of initially inactive male students, this number grew up to 41,53 %, meanwhile in female students this percentage grew from 15,52 % up to 66,45%. The difference among female students is not the reflection of institution they attend or their major, however this is not the case with male students. Participation in recreational sports in three examined institutions of higher education is essentially the same, but differences are noticeable by gender in favor of male students. The percentage of both female and male students that want to compete in team sports and participate in sports union of higher education differs by gender in favor of male students, with no relevant differences among different institutions of higher education.

**Key words:** level of sport activity, students, gender difference, higher education institution

### Introduction

Sedentary lifestyle has become, in essence, a global public health problem, especially in developed countries. Many jobs are performed by sitting or with very limited accompanying physical activity and the little free time we have many tend to spend passively in front of the television, computer or in the car. Students, in order to meet their requirements, typically spend more time sitting or being still than the most of working people. Hypokinesia (abnormally decreased muscular movement) has become one of the ten leading causes of disease, invalidity and death (World Health Organization, 2006). Regular, continuous and moderate physical activity is crucial for contemporary men, and it significantly prevents diseases, improves health and positively affects all other aspects of everyday life.

The level of physical activity changes during our lifetime. It significantly drops while studying, especially in urbane areas. Young people spend less and less time participating in activities that require muscle work meanwhile the activities associated with sitting and spending free time passively increases (Caspersen et al., 2000). Reduced physical activity along with inadequate and unbalanced nutrition may often lead to overweight and obesity in puberty and adolescence (WHO Europe, 2004). The fact that among Croatian juniors and seniors every fourth female is physically active less than once a week, while overweight and obesity is getting more common among male students, is very worrying (Jureša et al., 2005). The problems of locomotory system, and others health issues, which were once only the problems of adults, are more and more manifested in puberty and adolescence (Andrijašević et al., 2005).

The institutions of higher education are the best place for promoting the significance of regular physical activity and accepting healthy lifestyle.

### Methods

#### Purpose of the research

The goal of this study was to establish whether there is a significant difference in the level of sport activity among students of three selected institutions of higher education with different majors before enrolment and during their first year of the Faculty, and their aspiration to participate in sport competitions.

## The sample of subjects

The research was conducted during winter semester 2007-08 on a sample of first year male and female students of three institutions of higher education in Zagreb. Participants were students from Faculty of Humanities and Social Sciences (FF) with majors in humanities and social sciences, students from Faculty of Science (PMF) with majors in mathematics and natural sciences, and students from The Polytechnic of Zagreb (TVZ) with majors in technical sciences and engineering.

Table 1. Number of male and female students that participated in research differentiated by gender and institution of higher education

	FF	PMF	TVZ	TOTAL
	frequency	frequency	frequency	frequency
male students	220	73	150	443
female students	674	199	42	915
TOTAL	894	272	192	1358

## The sample of variables

The data was obtained from student volunteers through an anonymous questionnaire (Prot et al., 2001.) that contained several question groups; general information, past and present sport activities, competing motivations and membership in sport unions of institutions of higher education.

## Data processing methods

In processing of data we used standard methods of descriptive and inferential statistics. All obtained data were processed with academically and professionally designated statistical software package, today very well established the Statistical Package for the Social Sciences (SPSS).

## Results and discussions

Table 1 and Table 2 show the levels of sport activities of male and female students of three selected institutions of higher education before and after enrolment.

Table 2. The past sport activities of male and female students of three different higher education institutions

What is your current sport activity?	HIGHER EDUCATION INSTITUTION- male (M) & female (F) students								
		FF		PMF		TVZ		TOTAL	
		N	%	N	%	N	%	N	%
Never practiced sports	M	28	12,7	5	6,8	8	5,3	41	9,25
	F	114	16,9	26	13,1	2	4,8	142	15,52
Periodical recreational active in sports	M	119	54,1	31	42,5	51	34	201	45,37
	F	410	60,8	107	53,8	20	47,6	537	58,68
Actively practiced sports in school	M	22	10	10	13,7	23	15,3	55	12,42
	F	67	9,9	27	13,6	8	19	102	11,15
Actively practiced sports on regional l.	M	36	16,4	19	26	44	29,3	99	22,35
	F	51	7,6	25	12,6	6	14,3	82	8,96
Actively practiced sports on state level	M	10	4,5	5	6,8	18	12	33	7,45
	F	28	4,2	10	5	4	9,5	42	4,59
Actively practiced sports on international level	M	5	2,3	3	4,1	6	4	14	3,16
	F	4	0,6	4	2	2	4,8	10	1,1

In Table 2 we can see that about 25% of male and female students never practiced in sports throughout their prior education. Altogether, it is noticeable that male students were much more active in competitive sports than their female colleagues, but female students participated more in sport-recreational activities.

Table 3. The present sport activity of male and female students

Do you practice any sport now?		HIGHER EDUCATION INSTITUTION - male (M) & female (F) students							
		FF		PMF		TVZ		TOTAL	
		N	%	N	%	N	%	N	%
No	M	115	52,3	28	38,4	41	27,3	184	41,53
	F	454	67,4	129	64,8	25	59,5	608	66,45
Yes - recreational	M	98	44,5	38	52,1	85	56,7	221	49,89
	F	196	29,1	65	32,7	14	33,3	275	30,05
Yes - active	M	7	3,2	7	9,6	24	16,0	38	8,58
	F	24	3,6	5	2,5	3	7,1	32	3,5

The level of sport activity has changed significantly after enrolment to the Faculty. This can be explained with the change of lifestyle that comes naturally when coming to a new environment and the changes that study at a university brings. With less than 10% of inactive students the number went up to 41,53%, meanwhile that percentage among female students went up from 15,52% to 66,45%. The differences among female students did not represent emphasize given at a different institution of higher education or a major, but on the other hand the differences among male students was significant. Recreational participating in sport at all of selected institutions of high education is essentially the same, but the differences are noticeable by gender in favor of male students. Active practicing of sports differs significantly based both on gender and institution of higher education in favor of students of The Polytechnic of Zagreb.

Table 4. The aspiration to participate in the work of the university's sport union

Do you want to be a member of a sport union at your faculty?		HIGHER EDUCATION INSTITUTION - male (M) & female (F) students							
		FF		PMF		TVZ		TOTAL	
		N	%	N	%	N	%	N	%
No answer	M	10	4,5	5	6,8	2	1,3	17	3,84
	F	40	5,9	4	2	1	2,4	45	4,92
No	M	151	68,6	50	68,5	101	67,3	302	68,17
	F	493	73,1	175	87,9	36	85,7	704	76,93
Yes	M	59	26,8	18	24,7	47	31,3	124	17,99
	F	141	20,9	20	10,1	5	11,9	166	18,15

Table 5. The aspiration to compete in the sports team of an institution of higher education

Do you want to compete for your institution's sports team?		HIGHER EDUCATION INSTITUTION - male (M) & female (F) students							
		FF		PMF		TVZ		TOTAL	
		N	%	N	%	N	%	N	%
No answer	M	5	2,3	7	9,6	1	0,7	13	2,93
	F	41	6,1	11	5,5	1	2,4	53	5,79
No	M	160	72,7	47	64,4	99	66,0	306	69,07
	F	545	80,9	171	85,9	36	85,7	752	82,19
Yes	M	55	25,0	19	26,0	50	33,3	124	28,0
	F	88	13,1	17	8,5	5	11,9	110	12,02

Table 4 and Table 5 show a great aspiration to participate in the work of the institution's sports union and to compete in a sport team of an institution of higher education. In accordance with Sports Act (Official Gazette no.71/06) many sports union of institutions of higher education were founded in order to promote sport and recreational activities. Student sports competition is well organized in all Zagreb's higher education institutions. A number of students engaged in the University's sport competition is increasing over the past few years (Bagarić, Špehar & Zvonarek, 2005.). Organization

of the student University sports competition is managed by the Union of the University Sports Zagreb, Physical education professors and students, Student Core of the University of Zagreb, leaders of the sports, leaders of the Faculty teams and other necessary staff.

The percentage of male and female students who want to compete in team sports and participate in the work of their institution's sports union differed by gender in favor of male students, with little differences between different institutions of higher education.

## Conclusions

This study shows the level of sport activity in female and male students of three different Zagreb's institutions of higher education before and after enrolment. By examining their sports history until their college enrolment it can be inferred that male students participated in sports activities in grater numbers than their female colleagues. Sport activity nowadays is increasingly low especially among female students and differences among high education institutions are also noticeable. Participation in higher education institution's sports team is a challenge for almost one third of male students and only one tenth of female students. It should be taken under consideration that this research involved only first year male and female students and that appertaining to their college will likely increase in the following years along with their desire to participate in competing for their team.

A similar research on a large sample of subjects involving a greater number of colleges would likely further confirm and improve study results that could be used to show with higher certainty that there is a statistically significant difference between genders and students of different institutions of higher education.

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