Sport Mont 14 (2016) 3: 31–35
Original scientific paper
UDC 796-057.875

Gender Differences in Popularity and Engagement in Sport Activities among Students

Matej Majeric
University of Ljubljana, Faculty of Sport, Ljubljana, Slovenia

A B S T R A C T

The main purpose of this research was to analyse the gender differences among students at the University of Ljubljana concerning the popularity of sports and participation in different types and modes of sport activities. The research was done in the 2013 academic year on a random sample of 3% of the students (N=1390). A questionnaire about students' lifestyles was used (Majerič, 2013). In this study, two variables were analysed: the popularity of different sport activities, and different types and modes of sport activities. The data of the variables were analysed with SPSS for Windows. The basic statistical parameters for both variables were calculated. To calculate the gender differences, a t-test for independent samples and a Mann-Whitney U test were run. An analysis of the popularity of different sport activities showed that gender differences were statistically significant in jogging (p=0.000), walking (p=0.000), football (p=0.000), basketball (p=0.000), fitness (p=0.001), aerobics (p=0.002), and dance activities (p=0.009). Analysis of the types and modes of sport activities among students showed that 63.90% of male students and 68.10% of female students were engaged in unorganized types of sport. Gender differences were found to be statistically significant in two types of sport activities: engaged organized in clubs–competitive out of faculty (p=0.000) and engaged in sport organized at the faculty–competitive (p=0.000). Our findings and conclusions provide useful guidance for the closer and wider professional public.

Key words: *sport activity, students, popularity of sports, types and modes, gender differences*

Introduction

Sport activities of students at Slovenian universities have a long tradition and represent an important ingredient in the quality of their lives (Berčič, 2010). Sport activity for students was formally introduced at the University of Ljubljana in 1960, and its development can be divided into different periods. The first lasted between 1960 and 1980 and was characterized by the introduction of regular physical education lessons to all twenty-six faculties. The second period lasted between 1980 and 1990 and saw the implementation of regular physical education lessons in the first and second year at all faculties. The third period, between 1990 and 2000, was marked by the introduction of new extracurricular programmes and the decrease as well as gradual termination of regular physical education programmes. The fourth period was from 2000 to 2010; its characteristics were the introduction of the Bologna reform, a complete termination of regular physical education lessons, and their transformation into extracurricular sports activities (Majerič, 2015). In 2015, the majority of sports programmes at the University of Ljubljana were carried out as a form of extracurricular activities. Only at a few faculties (with the exception of the Faculty of Sport) could students choose an optional ECTS subject related to sport. A comparison of sports programmes in which students could participate has revealed that between 2002 and 2008 their number decreased by 25% (Filipič-Jeras, 2010; Kolar et al., 2010).

Given the above, it was to be expected that the reduction (termination) of sport programmes would also lead to a decrease in the number of sport active students. Nevertheless, several studies (Majerič, 2002; Markelj, 2004; Majerič & Markelj, 2010; Majerič, 2015) have revealed that the proportion of regularly sport active students in 2013 amounted to 77.9% of the entire student population, which is higher than in the years when students had more opportunities for regularly organized sport activity (physical education lessons, extracurricular activities, competitions, etc.); the proportion of regularly sport active students at that time was 70.3%.

When planning the implementation of student sport programmes, it is important to recognize not only the proportion of sport active students but also the sports in which they participate most frequently. It can be concluded that the interest in various sports has changed over time among students. An older study (Petkovšek, 1980) revealed that the most popular sports among students were basketball, swimming, and football for men and volleyball, swimming, and walking for women. Similarly, Petrović, Ambrožič, Sila, and Doupona (1998) determined that the most popular sports in 1998 for male students were identical to those in the study by Petkovšek (1980), whereas among female students the most popular were walking, swimming and cycling. Majerič (2002) found that in 2002 among both male and female students the most popular sports were walking, cycling and outdoor running. Additionally, among male students, the sports that followed in popularity were team sports (basketball, football, and volleyball), whereas among female students these were aerobics, swimming, inline skating, and dance activities. Markelj (2004) determined the same sports to be the most popular among students of both genders in 2004; specifically, walking, fitness, outdoor running, cycling, table tennis, volleyball, badminton, and tennis. Some sports activities were characteristic only for female students, such as aerobics, inline skating, dance activities, and jogging. In contrast, male students participated more often in football, basketball, and alpine skiing. The differences between genders were noticeable mostly in the ranking of the most popular sport activities. Specifically, in ad-

Received for publication August 19, 2016

dition to individual sports, team sports were popular among male students (basketball, football, volleyball), whereas they did not rank among the popular sports among female students. Analyses by Majerič and Markelj (2010) for the year 2006 as well as for the year 2002 by Majerič (2002) were in concordance, revealing the same ranking of the most popular sports in female and male students.

The development of sport at the University of Ljubljana allowed students in various periods different possibilities for participation in sport. Petkovšek (1980) has found that the majority of students in 1979 (56%) participated in organized physical education lessons. Majerič (2002) revealed that this trend started to change in 2002, when the majority of students (54.31%) practiced sport in a non-organized manner. At the time, 16.58% of interviewed students participated in regular physical education lessons, 18.9% of students practiced sport in sport clubs, and an additional 10.3% practiced sport in commercial organizations. The biggest difference between the genders was observed in non-organized sport participation, as 56.9% of female and 51% of male students were sport active in such a manner. It is interesting to note that the study by Markelj (2004) for the year 2004 has revealed an equal proportion (i.e. 50%) of male and female students participating in organized (physical education, extracurricular activities, clubs and commercial organisations) and non-organized (on their own, with friends, family or one-on-one lessons) sport activities. A comparison of genders showed that male students more frequently participated in organized sport activities (55.7%) than female students did (51.5%); the proportion of students who participated in non-organized sports activities was larger in women (46%) than in men (41.6%). Similarly, the study by Filipič-Jeras (2010) revealed that in 2003 50% of all students at 26 faculties at the University of Ljubljana participated in organized regular physical education programmes. Majerič and Markelj (2010) determined that the majority of interviewed students (64.7%) participated in non-organized sports activities (i.e. on their own, with friends or family) in 2006. The authors also found that female students participated in competitive sport considerably less frequently than the male students did.

The cited research that determined that individual sports were particularly popular among students in the most recent decade and that they were increasingly engaged in unorganized types of sports activities can also be linked with the findings of Beck and Beck Gernsheim (2002) and Bauman (2008). These authors pointed out the growing social individualization of the individual. This phenomenon was especially strong among young females.

In line with the theoretical introduction, the main purpose of the empirical research presented in this paper was to analyse the gender differences among students at the University of Ljubljana, concerning the popularity and participation in different types and modes of sports activities. With the empirical study, the authors wished to provide some useful guidance for the closer and wider professional public.

Methods

The research was conducted in March and April in the 2013 academic year on a random sample of 3% of the students of the University of Ljubljana (N=1390). A questionnaire about students' lifestyles was used (Majerič, 2013). The survey took into consideration the ethical aspects of research involving human studies, in accordance and with the principles of the Helsinki-Tokyo Declaration; before the start of the implementation of the survey, participants gave written consent to participate in it. Participation was voluntary. In accordance with the relevant legislation, the protection of personal data and the anonymity of participants were considered. In this study, two variables were analysed: 1) the popularity of different sport activities, and 2) types and modes of sport activities. To indicate the popularity of different sport activities, the respondents had to choose the one to three sport activities (from a total of 63) that they were doing most often. Regarding the variable 'types and modes of sport activities', the respondents had to choose one answer on a six-item Likert scale for each (eight) different types and modes of sports activities. The data of the variables were analysed with SPSS for Windows. For the variable 'the popularity of different sport activities', a t-test was run for independent samples to calculate the gender differences. To calculate the gender differences for the variable 'types and modes of sport activities', a Mann-Whitney U test was run.

Results

The analysis of the popularity of different sport activities showed that some sports were more popular among male students, and others were more popular among female students. As shown in Table 1, of the top ten most popular sport activities in which male students participated, 52.99% of them were engaged in jogging, 34.33% in fitness, 30.46% in football, 25.18% in biking and 24,82% in basketball, 12.50% in walking,

Table 1. Popularity of first fifteen sport activities for male and female students – basic statistics

	Male students			Female students		
Rank	Sport	N	%	Sport	N	%
1	Jogging	301	52.99	Jogging	534	66.09
2	Fitness	195	34.33	Walking	273	33.79
3	Football	173	30.46	Biking	221	27.35
4	Biking	143	25.18	Fitness	155	19.18
5	Basketball	141	24.82	Aerobics	147	18,19
6	Walking	71	12.50	Dance activities	129	15.97
7	Volleyball	54	9.51	Inline Skating	101	12.50
8	Martial arts	52	9.15	Volleyball	89	11.01
9	Swimming	46	8.10	Mountaineering	74	9.16
10	Mountaineering	38	6.69	Swimming	70	8.66
11	Alpine skiing	34	5.99	Pilates	57	7.05
12	Tennis	31	5.46	Alpine skiing	55	6.81
13	Climbing	24	4.23	Yoga	38	4.70
14	Table tennis	19	3.35	Basketball	32	3.96
15	Badminton	17	2.99	Badminton	28	3.47

Legend: N – number of respondents; % – percentage of respondents

9.51% in volleyball, 9.15% in martial arts, 8.10% swimming, and 6.69% in mountaineering. Of the top ten most popular sport activities in which female students participated, 66.09% of them were engaged in jogging, 33.79% in walking, 27.35% in biking, 19.18% in fitness, 18.19% in aerobics, 15.97% in dance activities, 12.50% in inline skating, 11.01% in volleyball, 9.16% in mountaineering and 8.66% in swimming.

As shown in Table 2, the t-test showed that gender differences were statistically significant in jogging (p=0.000), walking (p=0.000), football (p=0.000), basketball (p=0.000), fitness (p=0.001), aerobics (p=0.002) and dance activities (p=0.009).

Table 2. Engaging in different sports activities among students – gender differences

	Male students		Female students					
	N	%	N	%	T	Df	SE	p
Jogging	301	52.99	534	66.09	-3.70819	833	0.035317	0.000
Football	173	30.46	11	1.36	5.884227	182	0.049448	0.000
Fitness	195	34.33	155	19.18	3.262046	348	0.046437	0.001
Basketball	141	24.82	32	3.96	4.162622	171	0.050121	0.000
Walking	71	12.50	273	33.79	-4.38192	342	0.048579	0.000
Dance activities	12	2.11	129	15.97	-2.63519	139	0.052568	0.009
Aerobics	9	1.58	147	18.19	-3.16994	154	0.052394	0.002

Legend: N – number of respondents, M – mean; % – percentage of respondents; T – values for p calculation; df – values for p calculation; SE – Standard Error; p – value for statistically significant differences; *p≤0.05.

The analysis (Table 3) of types and modes of sport activities among students showed that students of both genders practice sport activities more or less (5 and 6 on the Likert scale) in an unorganized way; 63.69% of male students and 68.10% of female students were engaged in sport in unorganized types and modes.

Table 3. Types and modes of sport activities for male and female students – basic statistics

			Frequency on six-item Likert scale						
	Students		1	2	3	4	5	6	Total
Organized in clubs – competitive programmes out of faculty	Male	N	349	28	25	27	22	70	521
		%	66.99	5.37	4.80	5.18	4.22	13.44	100.00
	Female	N	588	46	27	13	21	68	763
		%	77.06	6.03	3.54	1.70	2.75	8.91	100.00
Organized in clubs – sport recreation programmes	Male	N	327	39	49	43	30	39	527
		%	62.05	7.40	9.30	8.16	5.69	7.40	100.00
	Female	N	442	63	75	46	55	80	761
		%	58.08	8.28	9.86	6.04	7.23	10.51	100.00
Organized sports programmes in curricular – ECTS subject	Male	N	378	63	35	21	12	18	527
		%	71.73	11.95	6.64	3.98	2.28	3.42	100.00
	Female	N	553	41	55	44	26	47	766
		%	72.19	5.35	7.18	5.74	3.39	6.14	100.00
Organized sports programmes – extracurricular activities	Male	N	444	36	15	11	4	10	520
		%	85.38	6.92	2.88	2.12	0.77	1.92	100.00
	Female	N	648	28	30	16	16	18	756
		%	85.71	3.70	3.97	2.12	2.12	2.38	100.00
Organized at the faculty – competitive programmes	Male	N	463	22	15	9	5	5	519
		%	89.21	4.24	2.89	1.73	0.96	0.96	100.00
	Female	N	711	13	15	4	2	9	754
		%	94.30	1.72	1.99	0.53	0.27	1.19	100.00
Organized in student organization	Male	N	461	30	13	10	2	5	521
		%	88.48	5.76	2.50	1.92	0.38	0.96	100.00
	Female	N	662	29	28	15	10	13	757
		%	87.45	3.83	3.70	1.98	1.32	1.72	100.00
Organized in private sector	Male	N	366	35	38	25	22	28	514
		%	71.21	6.81	7.39	4.86	4.28	5.25	100.00
	Female	N	566	42	52	25	30	41	756
		%	74.87	5.56	6.88	3.31	3.97	5.42	100.00
Unorganized	Male	N	31	30	58	75	90	253	537
		%	5.77	5.59	10.80	13.97	16.76	46.93	100.00
	Female	N	35	19	73	117	146	375	765
		%	4.58	2.48	9.54	15.29	19.08	49.02	100.00

Legend: N – number of respondents, M – mean; % – percentage of respondents; Six-Likert scale –'1' means that students are not engaged and '6' that they are fully engaged

The analysis of median values (Table 4) showed that most male and female students were practicing sport in an unorganized manner (alone, with friends or with family) (median values for male=5.17; median values for female=5.25).

Fewer male and female students were engaged in other organized sports programmes: 1.) organized in clubs–competitive programmes out of faculty (median values for male=1.46; median values for female=1.28), 2.) organized in clubs–sport rec-

reation programmes (median values for male=1.46; median values for female=1.28), 3.) organized sports programmes in curricular–ECTS subject (median values for male=1.55; median values for female=1.63), 4.) organized sports programmes–extracurricular activities (median values for male=1.16; median values for female=1.16), 5.) organized at the faculty–competitive programmes (median values for male=1.12; median values for female=1.06), 6.) organized in student organization (median values for male=1.12; median values for female=1.14), 7.) organized in private sector (median values for male=1.37; median values for female=1.31).

Table 4. The frequency of participation in physical activity – gender differences

		Me	MR	SR	U	Z	p
Organized in clubs – competitive programmes out of faculty	Male	1.46	683.3	355994.0	177510.000	-4.171	.000
	Female	1.28	614.6	468976.0			
Organized in clubs – sport recreation programmes	Male	1.55	626.4	330097.0	190969.000	-1.644	.100
	Female	1.63	657.1	500019.0			
Organized sports programmes in curricular – ECTS subject	Male	1.34	640.3	337456.0	198328.000	-.673	.501
	Female	1.36	651.6	499115.0			
Organized sports programmes – extracurricular activities	Male	1.16	638.0	331757.0	196297.000	-.067	.947
	Female	1.16	638.8	482969.0			
Organized at the faculty – competitive programmes	Male	1.12	655.9	340430.5	185835.500	-3.284	.001
	Female	1.06	624.0	470470.5			
Organized in student organization	Male	1.12	634.4	330527.5	194546.500	-.722	.471
	Female	1.14	643.0	486753.5			
Organized in private sector	Male	1.37	648.6	333397.0	187542.000	-1.354	.176
	Female	1.31	626.6	473688.0			
Unorganized	Male	5.17	633.7	340317.0	195864.000	-1.524	.127
	Female	5.25	664.0	507936.0			

Legend: Me – median; MR – mean rank; SR – sum of ranks; U – value for the calculation of statistically significant differences; Z – value for approximation of U for large samples; p – value for statistically significant differences; *p≤0.05.

The Mann-Whitney U test showed that gender differences were statistically significant in two variables that represent competitive types of sport activities: organized in clubs–competitive out of faculty (p=0.000) and organized at the faculty–competitive (p=0.000).

Discussion

The current findings support the previous researchers (Majerič, 2002; Markelj & Majerič, 2010) who determined that individual sports were especially popular in the previous decade. The comparision of our findings with available research (Petkovšek, 1980; Petrović et al., 1998; Majerič, 2002; Markelj, 2004; Markelj & Majerič, 2010) has demonstrated that the popularity of sports activities among male and female students has changed over time. Among male students jogging and fitness were especially popular in 2013, and less popular were walking, biking and mountain biking. The other top ten most popular sport activities were more or less the same. Among female students, fitness and dance, activities were especially popular in 2013, and team sports activities were less popular. Nevertheless, our research has shown that female students preferred individual sports, but male students still preferred to be engaged in team sports such as football, basketball and volleyball.

In this study, we have determined that both male and female students prefer unorganized types and modes of sport activities. Compared with previous research (Petkovšek, 1980; Majerič, 2002; Filipič-Jeras; Markelj & Majerič, 2010), this was the logical result of the abolition of physical education and the reduction of organized sports programmes for students. We have also found that the only main differences between male and female students were that some of the male students preferred doing sport in competitive types and modes.

The changes that we have found can be related to the development of society and various social factors (such as family, tradition, education, culture, etc.) that cause gender differences; reduced possibilities to practice sport in organized types and modes (due to the Bologna reform); lifestyle changes that occur due to the time of study; changes and trends dictated by the media and sports industry and also with the growing social individualization of the individual (Beck & Beck Gernsheim, 2002; Bauman, 2008).

REFERENCES

Bauman, Z. (2008). *The Individualized Society*. Cambridge: Polity press.

Beck, U., & Beck Gernsheim, E. (2002). *Individualization. Institutionalized individualism and its social and political consequences*. London: Sage.

Berčič, H. (2010). Šport na univerzi kot sestavina kakovosti akademskega življenja. *Šport*, *57*(3-4), 3-9.

Filipič–Jeras, K. (2010). Univerzitetni šport včeraj in danes. *Šport*, *57*(3-4), 10-13.

Kolar, E., Cerar, K., Piletič, S., Svetlik, I., & Kugovnik, O. (2010). Analiza nekaterih vidikov športne dejavnosti študentov na Univerzi v Ljubljani. *Šport*, *57*(3-4), 20-27.

Majerič, M. (2013). Življenjski slog študentov Univerze v Ljubljani. *Raziskovalno poročilo*. Ljubljana: Fakulteta za šport.

Majerič, M., & Markelj, N. (2010) Analiza nekaterih dejavnikov ukvarjanja s športom pri študentih. *Šport, 57*(3-4), 14-17.

Majerič, M. (2002). *Struktura motivov za športno dejavnost pri študentih Univerze v Ljubljani*. Magistrsko delo. Ljubljana: Fakulteta za šport.

Majerič, M. (2015). Analiza razvoja in pogostost ukvarjanja s športom pri študentih Univerze v Ljubljani. *Šport, 63*(3-4), 109-112.

Markelj, N. (2004). *Analiza in usmeritve študentskega športa na Univerzi v Mariboru*. Diplomsko delo. Ljubljana: Fakulteta za šport.

Petkovšek, M. (1980). *Motiviranost slovenskih visokošolcev za športno dejavnost. Ocena odnosa do telesne kulture, motivov za športno dejavnost in dejanskega ukvarjanja s športom.* Raziskovalno poročilo. Ljubljana. Fakulteta za telesno kulturo.

M. Majeric
University of Ljubljana, Faculty of Sport, Gortanova 22, 1000 Ljubljana, Slovenia
e-mail: matej.majeric@fsp.uni-lj.si