THE INVESTIGATION OF RECREATION AREA PREFERENCES AGENTS THROUGH VARIOUS VARIABLES IN PHYSICAL EDUCATION AND SPORTS STUDENTS

Rifat Yagmur[1], Ismet Ozamay[1], Ersan Tolukan[2]

[1]School of Education and Sports, Afyon Kocatepe University, Afyonkarahisar, Turkey
[2]Faculty of Health Sciences, Department of Sport Sciences, Yıldırım Beyazıt University, Ankara, Turkey

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Abstract

The purpose of this study was to examine the recreation area preference agents (RAPA) of physical education and sports students through various variables. Afyon Kocatepe University, School of Physical Education and Sports (SPES) students (teaching; 68 coaching; 27 recreation; 76) participated in the research. RAPA scale by Gümüş (2017), consist of 5 factors (Sportive diversity, Staff, Location, Physical facility, Activity) and 24 items were used as a data collection form besides demographic information form. For data analysis, descriptive statistics and independent samples T-test and One-way ANOVA were used. According to the results of the research; it was found that there was no difference between recreation area usage frequency of male (n: 97) and female (n: 76) students. However, when it was found that female physical education and sports students give more importance to sub-scale activity in recreation areas than male physical education and sports students, whereas no difference in other sub-scales and total score. There was no difference between the RAPA total score and sub-scales of the students according to the departments. Weak physical education and sports students give more importance to activity sub-scale in recreation areas than obese physical education and sports students. Moderate-income physical education and sports students give more importance to sporting diversity in recreation areas than other-income physical education and sports students. As a result; SPES students' RAPA total score and sub-scales averages detected to be high. This result shows that sporting diversity is the most important recreation area preference agent for SPES students and activity sub-scale is the lowest importance for physical education and sport students.

Key words*: recreation area preference agents, physical education and sport, sportive diversity, physical activity*

Introduction

With the effects of advancement of modern technology and urbanization; natural movements of human beings have been constrained and thus intense work hours and health problems caused by these have rendered recreational sites important day by day. In addition to numerous reasons, basic cause to use recreational areas is that individuals would like to move away from cities and intense workload and to have rest in a different area. Those coming to recreational areas physically get strong and psychologically relax. Although reasons to use recreational areas differ from person to person, these areas play significant roles in helping individuals cope with many problems when people return to the workplace because they feel that they are relaxed, refreshed and renewed (Gümüş and Alay Özgül, 2017).

The concept of leisure time physical activity has recently appeared in the literature (Badrić, Krističević, and Krakan, 2016). It has also been reported that physical activity has a positive effect on performance in the workplace, activities within the house, capacity to assess leisure, and mental health (Sağlam and Yılmaz, 2017). Due to different reasons such as escaping from heavy burden caused by urban life, staying alone and listening to oneself and exploring nature, meeting new people and making friends with them, attaining and maintaining physical endurance and strength and being healthy and fit; people spend free time by joining outdoor activities. Outdoor activities take place in parks in cities and places outside cities such as mountains, plains, rivers, and forests (Hansen et al., 2002). In this sense, local governors and city planners should design functional places and buildings such as living quarters, workshops, residences, workplaces, work offices, places where there are educational facilities, downtowns that answer shopping needs of city residents and recreational areas that answer entertainment needs and provide sportive activities (Gümüş and Alay Özgül, 2017). Thus, local governors and city planners can answer needs of individuals.

Leisure refers to a period that one can free oneself from all his/her obligations and missions and those to the others and spends his time in activities chosen voluntarily for entertainment, recreation or self-improvement purposes (Bucher and Richard, 1974). "Leisure time" indirectly or directly relates to the sport (Gümüş, Alay Özgül, Karakılıç, 2017) and is generally defined as recreation concept. Recreation helps individuals get rid of monotonous life through cultural and sportive activities which are

suitable for their personality and one participate voluntarily and enjoy recreational activities (Öztürk, 2015). In this time period, the activities that the individuals participate in are expressed as "leisure time activities" or "recreational activities" (Ragheb and Tate, 1993).

When local authorities or city planners design recreational areas, we are of the opinion that it is the most important factor that influences one's participation in recreative activities to build areas that comply with regional preferences and answer needs of locals. Thus, they can eliminate transportation problem and spare more time to recreative activities. So, the current study aimed at assessing preference for recreational areas of students who studied at SPES in Afyonkarahisar Province in terms of some variables.

Methods

Participants

The research population consisted students of SPES Afyon Kocatepe University-Turkey. The sample of the study consisted of 180 participants selected by easy sampling. When the obtained data were examined, it was determined that "9 scales" were invalid and the sample of the study consisted of 171 (men: 97, women; 74) participants.

Data Collection Tool

The purpose and importance of the research before the research was explained to the participants by the researcher. It was emphasized by researchers that scales should not be named, the results should be kept confidential and each question should be responded sincerely. Demographic information (gender, height, weight, academic departments, and monthly income) and "Recreation area preference agents" scale developed by Gümüş and Alay Özgül (2017) were used as data collection tools in the study. The scale consisting of 24 items and 5 subscales and five-point Likert types (1: not important at all, 2: not important, 3: not noticed, 4: important, 5: very important). The sub-scales are as follows: Sportive diversity (3 items: 1.-3.; α = .54), staff (4 items: 4.-7.; α = .75), location (3 items: 9.-11.; α= .68), physical facilities (9 items: 8., 12.-19.; α = .91) and activity (5 items: 20.-24.; α = .82). The general internal consistency of the scale of Recreation area preference agents was calculated as α =0.88. For this study, general internal consistency of the scale of Recreation area preference agents was calculated as α =0.78. Body mass index (BMI) was calculated Weight (kg) / Height (m^2) formula and classified according to World Health Organization.

Statistical Analysis

Data was tested for normality with the Kolmogorov-Smirnov test. The independent samples t-test was used for comparing pairwise group variables that followed a normal distribution and One-Way ANOVA was used for more than two groups. Following variance analyses; Bonferroni multiple comparison test was employed in order to detect which measurement results caused the differences. Significance was set $p<0.05$.

Results

Table 1. Percentage and frequency distributions of the participants in terms of demographic variables

Variables		Frequency	%
Gender	Male	97	56,7
	Female	74	43,3
BMI	Underweight	12	7
	Overweight	129	75,4
	Obese	30	17,5
Academic Departments	Teaching	68	39,8
	Coaching	27	15,8
	Recreation	76	44,4
Monthly Income	≤1000	44	25,7
	1001-2000	49	28,7
	≥2000	78	45,6

As seen Table 1, it was found that 97 participants were male (56.7%) while 74 participants were female (43.3%); 12 participants were underweight (7%), 129 participants were overweight (75.4%) and 30 participants were (17.5%) obese in terms of BMI; as for academic departments 68 participants studied teaching (39.8%), 27 participants studied coaching (15.8%) and 75 participants studied (44.4%) recreation; 44 participants (25.7%) had a monthly income lower than 1000 TL, 49 participants (28.7%) had a monthly income between 1001 and 2000 TL and 78 participants (45.6%) had a monthly income higher than 2000 TL.

Table 2. Comparison of participants' scores obtained from recreation area preference agents scale (RAPA) in terms of gender variable

Variables	Gender	n	$\overline{X}$ ± SD	p
Park and recreation areas usage frequency (weekly)	Male	97	2,51±1,88	0,939
	Female	74	2,53±1,83	
Sportive diversity	Male	97	4,35±0,61	0,720
	Female	74	4,32±0,62	
Staff	Male	97	4,13±0,68	0,301
	Female	74	4,24±0,62	
Location	Male	97	4,02±0,59	0,083
	Female	74	4,19±0,71	
Physical Facilities	Male	97	4,23±0,47	0,735
	Female	74	4,26±0,52	
Activity	Male	97	3,95±0,66	**0,033***
	Female	74	4,17±0,63	
Total Score	Male	97	4,14±0,43	0,162
	Female	74	4,24±0,47	

$\overline{X}$: Mean, SD: Standard Deviation

It was seen that there was no statistically significant difference in frequency of using parks and recreational areas between male participants and female participants. Additionally; when scores of RAPA subscales were compared in terms of gender variable; it was identified that only in activity subscale there was a statistically significant difference ($p<0.05$) but there were no differences in scores of other subscales and total RAPA score ($p>0.05$).

Table 3. Comparison of participants' scores obtained from recreation area preference agents scale (RAPA) in terms of BMI variable

Variables	BMI	n	$\overline{X}$ ± SD	p
Park and recreation areas usage frequency (weekly)	Underweight	12	3,42±2,64	0,193
	Overweight	129	2,48±1,71	
	Obese	30	2,30±2,05	
Sportive diversity	Underweight	12	4,22±0,56	0,653
	Overweight	129	4,33±0,64	
	Obese	30	4,41±0,52	
Staff	Underweight	12	4,21±0,50	0,464
	Overweight	129	4,21±0,63	
	Obese	30	4,04±0,80	
Location	Underweight	12	4,11±0,74	0,995
	Overweight	129	4,10±0,62	
	Obese	30	4,09±0,73	
Physical Facilities	Underweight	12	4,32±0,33	0,526
	Overweight	129	4,26±0,50	
	Obese	30	4,16±0,50	
Activity	Underweight	12	4,42±0,38[a]	**0,044***
	Overweight	129	4,05±0,63[b]	
	Obese	30	3,89±0,81[b]	
Total Score	Underweight	12	4,26±0,37	0,627
	Overweight	129	4,19±0,44	
	Obese	30	4,12±0,51	

$\overline{X}$: Mean, SD: Standard Deviation, ab: represent the differences between the groups

It was identified that there was no statistically significant difference in frequency of using parks and recreational areas in terms of BMI classification. Additionally; when scores of RAPA subscales were compared in terms of BMI; it was identified that only in activity subscale there was a statistically significant difference ($p<0.05$). However, there were no differences in scores of other subscales and total RAPA score ($p>0.05$), so it was found that underweight participants cared more about activity subscale as compared to overweight and obese participants.

Table 4. Comparison of participants' scores obtained from recreation area preference agents scale (RAPA) in terms of academic departments

Variables	Academic Departments	n	$\overline{X}$ ± SD	p
Park and recreation areas usage frequency (weekly)	Teaching	68	2,47±1,62	0,932
	Coaching	27	2,63±2,40	
	Recreation	76	2,51±1,85	
Sportive diversity	Teaching	68	4,38±0,63	0,667
	Coaching	27	4,26±0,50	
	Recreation	76	4,33±0,64	
Staff	Teaching	68	4,07±0,67	0,089
	Coaching	27	4,10±0,69	
	Recreation	76	4,30±0,62	
Location	Teaching	68	4,02±0,62	0,416
	Coaching	27	4,07±0,65	
	Recreation	76	4,17±0,67	
Physical Facilities	Teaching	68	4,25±0,48	0,703
	Coaching	27	4,17±0,47	
	Recreation	76	4,26±0,51	
Activity	Teaching	68	4,02±0,61	0,563
	Coaching	27	3,96±0,57	
	Recreation	76	4,10±0,72	
Total Score	Teaching	68	4,15±0,40	0,380
	Coaching	27	4,11±0,42	
	Recreation	76	4,23±0,50	

$\overline{X}$: Mean, SD: Standard Deviation

In terms of participants' academic departments (teaching department, coaching department, and recreation departments); no statistically significant difference existed in the frequency of using parks and recreational areas. Also, there were no statistically significant differences between RAPA subscale scores and RAPA total score ($p>0.05$).

Table 5. Comparison of participants' scores obtained from recreation area preference agents scale (RAPA) in terms of monthly income level

Variables	Monthly Income	n	$\overline{X}$ ± SD	p
Park and recreation areas usage frequency (weekly)	≤1000	44	2,48±1,85	0,883
	1001-2000	49	2,43±1,53	
	≥2000	78	2,59±2,05	
Sportive diversity	≤1000	44	4,27±0,70[b]	**0,043***
	1001-2000	49	4,52±0,53[a]	
	≥2000	78	4,26±0,59[b]	
Staff	≤1000	44	4,09±0,83	0,084
	1001-2000	49	4,35±0,42	
	≥2000	78	4,12±0,65	
Location	≤1000	44	4,03±0,69	0,725
	1001-2000	49	4,10±0,57	
	≥2000	78	4,13±0,67	
Physical Facilities	≤1000	44	4,25±0,60	0,487
	1001-2000	49	4,31±0,42	
	≥2000	78	4,20±0,46	
Activity	≤1000	44	4,04±0,65	0,080
	1001-2000	49	4,22±0,53	
	≥2000	78	3,95±0,71	
Total Score	≤1000	44	4,14±0,51	0,088
	1001-2000	49	4,30±0,34	
	≥2000	78	4,13±0,47	

$\overline{X}$: Mean, SD: Standard Deviation, ab: represent the differences between the groups

In terms of participants' income level; it was found that there was no statistically significant difference in frequency of using parks and recreational areas. Additionally; when scores of RAPA subscales were compared in terms of income level; it was identified that only in sporting diversity subscale there was a statistically significant difference ($p<0.05$) but there were no differences in scores of other subscales and total RAPA score ($p>0.05$). So those participants with an income between 1001 and 2000 TL cared more about sporting diversity subscale as compared to those with an income lower than 1000 TL and higher than 2000 TL.

Discussion

Studies, which have investigated recreational areas and number of which has been increasing both over the world and in our country, are important so that more and more individual can use these areas to the purpose. Thanks to the findings to be obtained in the current study and others, it will be possible to motivate people to use these areas more frequently, actively and usefully (Gümüş, 2017). Therefore; the current study aimed at assessing preference for recreational areas of students who studied at SPES in Afyonkarahisar Province in terms of some variables.

Considering the effect of gender variable upon participants' preferences for recreational areas; findings proposed that female participants had higher scores in activity subscale than male participants. This result indicates that activity subscale was more important to female participants than male participants. In light of this finding; it may be suggested that men did not care about scientific and artistic organizations to be held in recreational areas as much as women while choosing these areas where they will go to. The study of Ardahan and Lapa Yerlisu (2011) argues that men are more active and comfortable in recreation preferences thanks to being supported by such social institutions as profession, family, social responsibilities while women have quite limited recreational opportunities due to roles they play. Therefore; the fact that women, who have quite limited recreational opportunities, are more selective than men in deciding parks and recreational areas where they will go to and pay more attention to scientific and artistic organizations to be held in recreational areas may have produced this finding. In the study of Gürbüz and Henderson (2014); it was reported that gender and socio-economic level affected preference for recreational areas. Considering women's domestic responsibilities and duties such as being a mother, spouse, cooking and cleaning to which they are supposed to spare time, diversity of activities in recreational areas becomes more and more important for female participants (Gümüş, 2017).

Another finding obtained from the study is that the participants' preference for recreational areas differed in terms of BMI variable. As far as this result was concerned, it may be concluded that BMI affected participants' choosing recreational areas. We are of the opinion that this finding was correlated with the fact that women were more concerned about their physical appearance. Actually, the study done by James (1995) indicated that women who were somehow worried about their physical appearance may be limiting their activities that they would do at public facilities. [As a result; it may be argued that BMI was effective upon individuals' choosing recreation areas.

On the other hand, according to the comparison made among the academic departments, no significant difference was found. In other words, factors that influenced participants' preference for recreational areas did not differ in terms of the academic departments. Although there are not any studies that investigate factors that influence participants' preference for recreational areas in relation to academic departments, our finding may have resulted from the courses taught at SPES. As a part of projects such as ECTS (European Credit Transfer System) of Bologna Process and AEHESIS (Aligning a European Higher Education Structure in Sport-Science); the number of common courses in teaching, coaching, and recreation departments has been increased and similar teaching processes have been initiated thanks to a curriculum change that facilitated transfers to other academic departments; which may have led to the result that factors that influenced participants' preference for recreational areas did not differ in terms of the academic departments.

When factors that influenced participants' preference for recreational areas were examined in terms of income level, it was identified that there was a significant difference only in sporting diversity subscale; as a result of which we can argue that income differences played an effective role in choosing recreational areas. When items of sporting diversity subscale were investigated, it was an expected result that the highest average scores should come from those with an income between 1001 and 2000 TL. We are of the opinion that due to the fact that there are numerous five-star hotels in the province (Afyonkarahisar) where the study was undertaken, student groups whose monthly income exceeded 2000 TL. Preferred indoor recreational activities held at these hotels by subscribing to their spa centers and therefore they did not care about sporting diversity. In the study of Gürbüz and Henderson (2014); it was suggested that socio-economic level influenced preference for recreational activities and those with satisfactory socio-economic level participated in indoor sporting activities more than other students. Besides, the study of Chick et al. (2015) emphasized that people's preference for recreational activities changed depending on their income status. There are many studies in literature concluding that satisfaction or dissatisfaction with recreational areas differed depending on income status (Çetinkaya et al., 2015) and that socio-economic status was an important factor to participation in recreational activities (Howard and Crompton, 1984; Jackson

and Henderson 1995; Frisby and Fenton, 1998; Johnson, Bowker and Cordell, 2001; Mowen, Payne and Scott, 2005; Shores, Scott and Floyd, 2007; Öztürk et al., 2017).

Conclusion

It was identified that total RAPA score and average scores of RAPA subscales of SPES students were generally above average. From this finding, it may be interpreted that SPES students paid attention to different factors such as sporting diversity, location, staff and activities held in the recreation area when they chose the recreation area. It was identified that the most important factor that affected SPES students' participation in recreative activities was sporting diversity while the least important factor that affected SPES students' participation in recreative activities was activity. Therefore; in planning new recreational areas to be built or in modernizing the old ones it should be kept in mind that the recreation areas should include different sportive branches (Athleticism, Cycling, Water Sports, Skating, Skateboarding, Street Basketball etc.); as a result of which SPES students' participation in these areas may augment.

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Dates of any Congress

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UTVRĐIVANJE PREFERENCIJA PREMA REKREACIJSKIM PODRUČJIMA KORISTEĆI RAZLIČITE VARIJABLE KOD UČENIKA SPORTSKE ŠKOLE I SPORTSKIH STUDENATA

Sažetak

Svrha ove studije bila je ispitati razlike u rekreacijskim željama (RAPA) tjelesnog odgoja i sportskih studenata kroz različite varijable. U istraživanju je sudjelovalo sveučilište Afyon Kocatepe, Škola tjelesnog odgoja i športa (SPES) (podučavanje, 68 treninga, 27 rekreacija, 76). RAPA ljestvica Gümüş (2017), sastoji se od 5 čimbenika (sportska raznolikost, osoblje, mjesto, fizički objekt, aktivnost), a 24 varijable korištene su kao obrazac za prikupljanje demografskih podataka. Za analizu podataka korištene su deskriptivne statistike i neovisni uzorci T-test i jednosmjerna ANOVA. Prema rezultatima istraživanja; utvrđeno je da nema razlike između učestalosti korištenja rekreacijskih površina muškaraca (n: 97) i žena (n: 76). Međutim, utvđeno je da učenice i studentice daju veću važnost za dio aktivnosti u rekreacijskim područjima od učenika i studenata, dok nema razlike u drugim podskupinama i ukupnom broju bodova. Nije bilo razlike između ukupnog rezultata RAPA i podskupina učenika prema odjelima. Umjereno priznato tjelesno obrazovanje i sportski učenici daju veću važnost sportskoj raznolikosti u rekreacijskim područjima od tjelesnog odgoja s drugim dohotkom i sportskih studenata. Kao rezultat; Ukupni rezultat RAPA učenika SPES-a i prosječne podskupine otkriveni su kao visoki. Ovaj rezultat pokazuje da je sportska raznolikost najvažnija prednost u rekreacijskom području za SPES studente, a podskup aktivnosti je najniža važnost za tjelesni odgoj i sportske studente.

Ključne riječi: *rekreativne prednosti, tjelesni odgoj i sport, sportska raznolikost, tjelesna aktivnost*

Corresponding information:

Received: 28 July 2017
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Correspondence to: Dr. Rifat Yagmur
University: Afyon Kocatepe University
Faculty: School of Physical Education and Sports
Phone: +905322526160
E-mail: r.yagmur@hotmail.com