DETERMINATION OF SPORTS CONSUMER
PROFILE OF UNIVERSITY STUDENTS IN TURKEY[i]

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Abstract:

This research aims to identify the sports consumer profile of university students in Turkey. Sports Consumer Scale (SCS) was practiced. The Sports Consumer Scale consists of five sub-dimensions and 31 items. Parametric analyses were performed on the obtained data by using SPSS 22.0 package program. To identify the level and direction of the relationship between dependent variables, "Pearson correlation analysis" was conducted. There was a significant difference in the opinions of university students in Turkey in terms of gender and sports ($p<0.05$). In the correlation analysis, it was determined that the strongest relationship was positively and at a very high level between "Brand sub-dimension" ($r=0.824$; $p<0.001$), "Participation sub-dimension" ($r=0.828$; $p<0.001$) and "Media sub-dimension" ($r=0.750$; $p<0.001$); and there was a positive medium-level relationship in the sub-dimensions of socialization ($r=.59$; $p<.01$) and entertainment ($r=.52$; $p<.01$).

Keywords: sports, consumer profile, consumption, university students

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[i] This study was produced from the PhD thesis "Determination of Sports Consumer Profile of University Students in Turkey" conducted in May 2020 at Fırat University, Institute of Health Sciences, Department of Physical Education and Sports.

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1. Introduction

Along with the existence of humanity, being "consumer" and "consuming" is a state of humankind and continuity. The consumption of individuals in their daily lives has meaning for their physiological needs, such as eating and drinking at our age. Although consumption is considered as a personal event, it should be considered as a multi-faceted situation. Differentiation of the earnings that consumers can spend in products and services with intense competition and diversity makes understanding the current situation very complex (Velioğlu, 2013).

Sports is not only considered as a consumer product but also an industrial product. It attracts viewers, followers, and participants and becomes a critical consumption factor when it is produced for mass consumers (Or, 2009). Sports consumers show incredible values, attitudes, and behavior patterns (Shank, 1998). From a general point of view, sports consumers can be considered individuals who consume sports-related goods and services. In sports, consumers can be categorized as practitioners (active participants) and spectators (passive participants) under two main groups. Those participating in sports activities at an amateur, professional, or recreational level for sports are considered as practitioners and/or active participants. If the audience is and/or passive participant, it defines the individuals participating in sports activities as spectators or fans. In sports, the passive participant can consume a sports event at the place (stadium, hall, etc.) and through mass media (newspaper, TV, radio, etc.). Consumer behavior in sports examines the sports consumer's decisions in purchasing and using sports-related goods and services, the related activities, and the decision processes that determine these activities (Katırcı and Argan, 2012).

Sports consumption involves the sports event itself, sports-related by-products and services, information and news about sports, and many sports-related topics. Sports consumers are considered to be who play sports activities in the field of amateur sports, or those who watch sports events as elite, and those who follow sports from the media, those working in the sports industry, and those operating in the sports industry (Ekmekçi and Ekmekçi, 2010). Sports usually play an essential role in social life as a conventional form of entertainment in many countries. Recently, it has grown rapidly and has become a leading economic industry (Gratton, 2008).

Sports consumption involves many sports-related topics such as sports games, ancillary services in this field, sports news, and information. Those who participate in amateur sports activities to do sports, professional athletes who accept sports as a profession, those who watch sports activities, and purchase related products, those who work in the sports industry and those who do business with the sports industry are described as sports consumers (Ekmekçi and Ekmekçi, 2010). Sports consumers are loyal consumers who are increasingly willing to spend and endure all kinds of expenses for their team. Particularly in football, they participate in all matches on their teams or away. They purchase products such as shoes, tracksuits, t-shirts, hats, scarves, socks, and perfumes that bear the team's logo. In the same way, they purchase services such as restaurants, buffets, hotels, summer school, and winter school with team logo. Sports

consumers endure all kinds of difficulties and support their team regardless of success and failure without complaining (Serarslan, 2009). A primary sports product is produced and consumed at the same time. Sports product based on competition and activity has an abstract, flimsy, experience-dependent, and subjective feature. It focuses on the basis of sports activity. Sports equipment is tangible, but what is mentioned here is sports events and competitions. Since what sports consumers see in a sport is entirely subjective, it will be challenging to satisfy them (Basım and Argan, 2009).

Sports consumption habits are a phenomenon that addresses and shapes the lives of individuals in today's civilization. When sports are viewed individually, it provides the development of individuals' physical and mental abilities. The analysis of sports consumer profiles of young university students in Turkey was carried out to investigate the characteristics of sports consumers and discover consumer behavior.

1) What is the consumption of university students according to the gender variable?
2) What is the sports consumption of university students according to the age variable?
3) What is the effect of students' income status on sports consumption?
4) What is the effect of university students doing sports on sports consumption?

2. Material and Method

This section includes the research model, population and sample, data collection tools, and data analysis.

2.1. Research Model
In this research, the screening model, one of the quantitative research models, was used. Quantitative research is the ability to express and measure the findings obtained based on positivism and realism paradigms with numerical values (Ekiz, 2015). Besides, the screening model is the description and explanation of what happened and what already existed (Sönmez and Alacapınar, 2014).

2.2. Population and Sample
The population of the research consists of students from Fırat University, Kocaeli University, Ondokuz Mayıs University, Dicle University, Gazi University, Hatay Mustafa Kemal University, and Ege University (387.902). The research sample consists of 654 university students studying in these universities.

2.3. Development of the Sports Consumer Scale (SCS)
In the research, the Sports Consumer Scale (SCS) was developed and applied. SCS consists of five sub-dimensions and 31 items in total. The five sub-dimensional models obtained explains 47.98% of the scale. In identifying the structure of the CSO, exploratory factor analysis, and confirmatory factor analysis were performed. The analyses were made with the data obtained from 405 undergraduate students determined by the appropriate sampling technique among the students studying at Fırat University.

Exploratory factor analysis was conducted to analyse the factor structure of the SCS. In the exploratory factor analysis, the item factor load value is at least 0.30, the eigenvalues of the items are close to 1, and the difference between the two load values of an item is at least 0.10 (Büyüköztürk et al., 2016; Martin and Newell, 2004). While conducting exploratory factor analysis Basic Components Analysis and Direct Oblimin Rotation method is used. When confirmatory factor analysis results were examined, it was seen that the value of χ^2 / sd (961.21 / 421) was 2.28. According to Karagöz (2016), this value should be below 3. Among the other fit indices, GFI= 0.86, CFI= 0.90, AGFI= 0.84, NFI= 0.83, and RMSEA= 0.05. RMSEA value below 0.08, GFI, CFI, AGFI, and NFI value close to 1 is considered acceptable (Karagöz, 2016). To determine the level of reliability of the SCS Cronbach Alpha coefficient was calculated. Cronbach Alpha was found to be 0.79 on the socialization factor; 0.85 on the brand factor; 0.72 on the entertainment factor; 0.90 on the participation factor; 0.91 on the media factor and 0.92 across the scale. It can be said that the results with the Cronbach Alpha coefficient of 0.60 and above are quite reliable (Kayış, 2014).

2.3.2 Implementation of the Sports Consumer Scale (SCS)

The Sports Consumer Scale developed for the research was employed to obtain the research data. In the research, firstly, the normality test was conducted to detect whether the data gathered in the scales and its sub-dimensions fulfil the normality assumption, and it was observed that the normality was realized. Then, "Independent Sample t-Test" and "One-Way Analysis of Variance (ANOVA)" were used to evaluate the level of differentiation depending on the independent variables to reveal the distribution of the research group according to their variables. The statistical significance level (alpha (α) error level) was accepted as $p < 0.05$. While determining the level and direction of the relationship between dependent variables, "Pearson correlation analysis" was conducted. Correlation relationships between dependent variables were evaluated according to the following criteria (Kalaycı, 2006): 0.00-0.25: Very Weak; 0.26-0.49: Weak; 0.50 to 0.69; Middle; 0.70-0.89: High; 0.90-1.00: Very High.

3. Findings

In this section, the analysis of the data obtained in the form of SCS developed for the research is given. Average, standard deviation, significance level, correlation for analysis, etc. values are used.

T-test was employed to discover whether the factors affecting sports consumption show statistically significant differences according to gender. According to the T-test results, the brand (t=-2.451; p=.015), entertainment (t=-4.093; p=.000), participation (t=-3.071; p=.002) and media (t=-3.334; p=.001) factors differ significantly by gender. For the factors with significant differences, the average of men is higher than women. The socialization factor (t=.779; p=436) does not differ statistically in terms of gender.

Table 1: Differentiation status of sports consumer scale (SCS) factors by gender variable

Dimensions	Gender	n	x̄	Ss	t	p
Socialization	Woman	276	17,054	2,928	-,779	,436
	Man	378	17,232	2,865		
Brand	Woman	276	35,257	6,100	-2,451	,015*
	Man	378	36,375	5,503		
Entertainment	Woman	276	9,739	2,807	-4,093	,000*
	Man	378	10,912	4,114		
Participation	Woman	276	37,155	6,562	-3,071	,002*
	Man	378	38,706	6,236		
Media	Woman	276	17,206	3,717	-3,334	,001*
	Man	378	18,177	3,647		

*p<.05

Table 2: Differentiation status of sports consumer scale (SCS) factors by gender variable

Dimensions	Age	n	x̄	Ss	F	P
Socialization	18-20	220	17,318	2,904	,842	,471
	21-23	330	17,000	2,868		
	24-26	86	17,220	2,928		
	27+	18	17,777	3,001		
Brand	18-20	220	36,181	5,525	,802	,493
	21-23	330	35,621	5,929		
	24-26	86	35,976	5,763		
	27+	18	37,333	6,398		
Entertainment	18-20	220	10,331	4,149	,166	,920
	21-23	330	10,406	3,570		
	24-26	86	10,651	2,844		
	27+	18	10,555	2,548		
Participation	18-20	220	37,731	6,736	1,049	,370
	21-23	330	38,054	6,248		
	24-26	86	39,069	6,318		
	27+	18	37,055	5,845		
Media	18-20	220	17,622	3,795	,411	,745
	21-23	330	17,875	3,752		
	24-26	86	17,860	3,392		
	27+	18	17,111	3,287		

ANOVA test was conducted to reveal the statistical differentiation status of the factors concerning sports consumption by their age. Considering whether the factors affecting sports consumption differ according to age groups, socialization (F= .842 /.471), brand (F= .802 /.493), entertainment (F= .166 /.920), participation (F= 1.049 /.370) and media (F= .411 /.745) factors do not differ significantly.

Table 1: Differentiation status of SCS factors by student income variable

Dimensions	Income	n	x̄	Ss	F	p	Difference
Socialization	(a)1000 -	451	17,199	2,885	1,740	,123	----
	(b) 1000-1999	131	16,702	3,057			
	(c) 2000-2999	46	17,500	2,419			
	(d) 3000-3999	14	17,428	3,056			
	(e) 4000+	12	19,500	,707			
Brand	(a)1000 -	451	35,541	5,858	2,851	,015*	a-b
	(b) 1000-1999	131	35,916	5,526			a-e
	(c) 2000-2999	46	37,804	5,166			b-e
	(d) 3000-3999	14	37,785	6,600			
	(e) 4000+	12	40,100	3,784			
Entertainment	(a)1000 -	451	10,352	3,995	1,079	,371	----
	(b) 1000-1999	131	10,473	2,823			
	(c) 2000-2999	46	10,826	2,627			
	(d) 3000-3999	14	9,214	2,547			
	(e) 4000+	12	14,000	1,414			
Participation	(a)1000 -	51	37,654	6,274	2,354	,039*	a-e
	(b) 1000-1999	31	38,259	6,401			b-e
	(c) 2000-2999	6	39,478	7,982			
	(d) 3000-3999	4	40,571	5,064			
	(e) 4000+	2	42,000	4,242			
Media	(a)1000 -	51	17,490	3,684	2,636	,023*	a-b
	(b) 1000-1999	31	18,267	3,763			a-e
	(c) 2000-2999	6	18,369	3,542			
	(d) 3000-3999	4	17,785	3,866			
	(e) 4000+	2	22,500	,707			

ANOVA test was conducted to reveal the statistical differentiation status of the factors concerning sports consumption by their age. Considering whether factors affecting sports consumption differ according to income status groups, there is a significant difference in participation-based consumer feature participation (F= 2.354 /.039), brand (F= 2.851 /.015), and media consumer feature (F= 2.636 /.023) factors. While there is no significant difference in socialization (F= 1.740 /.123) and entertainment (F= 1.079 /.371) factors.

According to LSD, one of the Post Hoc tests conducted to reveal which subgroups emerge differentiation, there was a significant difference in the brand-consumer factor, the students whose income is below 1000 TL and the students whose income is 4000 TL and above; between the students whose income is below 2000 TL in the consumer factor and students whose income is 4000 TL and above; in the media consumer factor between students with income below 1000 TL and students with an income of 4000 TL and above.

Table 4: Differentiation status of SCS factors by the variable of doing sports

Dimensions	Doing sports	n	x̄	Ss	t	p
Socialization	Yes	342	17,450	2,910	2,725	,007
	No	312	16,836	2,840		
Brand	Yes	342	37,149	5,442	5,912	,000**
	No	312	34,538	5,849		
Entertainment	Yes	342	10,611	3,700	1,416	,157
	No	312	10,205	3,618		
Participation	Yes	342	39,394	6,163	5,738	,000**
	No	312	36,580	6,375		
Media	Yes	342	18,432	3,642	4,890	,000**
	No	312	17,038	3,642		

A T-test was employed to reveal whether the factors affecting sports consumption show statistically significant differences compared to regular weekly sports. According to the T-test results, the factors of brand (t=5.912; p=0.000), mode of participation (t=5.738; p=0.000) and media (t=4.890; p=0.000) differ significantly from regular sports. The average of those who do sports in factors with a significant difference is higher than those who do not. In socialization (t=2.725; p=.007) and entertainment (t=1.416; p=.157) factors, there is no statistically significant difference in regular sports.

Table 5: Correlation direction and level between SCS factors

	Identifiers	1	2	3	4	5	6
Socializing (1)	r	1					
	p	-					
	N	654					
Brand (2)	r	,529**	1				
	p	,000	-				
	N	654	654				
Entertainment (3)	r	,115**	,295**	1			
	p	,003	,000	-			
	N	654	654	654			
Participation (4)	r	,398**	,534**	,235**	1		
	p	,000	,000	,000	-		
	N	654	654	654	654		
Media (5)	r	,243**	,480**	,398**	,398**81**	1	
	p	,000	,000	,000	,000	-	
	N	654	654	654	654	654	
SCS (6)	r	,595**	,824**	,526**	,828**	,750**	1
	p	,000	,000	,000	,000	,000	-
	N	654	654	654	654	654	654

According to the correlation analysis results in Table 5, SCS factors are positively and significantly related to each other. When the relationship between the factors is analysed, it was determined that there is a high positive correlation between SCS and brand (r=.82; p<.01), participation (r=.82; p<.01) and media (r=.75; p<.01) factors; and a positive

moderate relationship between socialization (r=. 59; p<.01) and entertainment (r=.52; p<.01) factors.

4. Discussion and Conclusion

There is a significant difference according to the brand, entertainment, participation, and media dimensions in Table 1, where the analysis results of the students' opinions concerning the sports consumer scale sub-dimensions according to the gender variable (p<.05). Besides, male students being tough, aggressive, cruel, enjoying masculine sports and activities more and consuming more branded products; in traditional men's type, tobacco and tobacco products and alcoholic beverages, sports equipment, hardware products, repair and construction materials are consumed more (Tekvar, 2016). In the research, it is observed that male students follow sports media more than female students. Similar to Özsoy's (2008) research findings, another area in which men dominate, as in sports, is the media. It can be assumed that the presence of more branded sports product advertisements for men in sports programs creates more brand loyalty in men than in women. Still, there is always unique and special attention for women in marketing since the social and economic role of women is evolving, and their visibility in the public sphere is gradually growing. Nowadays, women can buy and consume many products or services that are commonly purchased by men (Tekvar, 2016). However, religious beliefs can affect participation in sports, doing sports, and sports consumption. Among conservative female students in Turkey, sports consumption can remain low due to both religious factors and therefore traditions and customs. In their study Mullin et al. (2007), Mucuk (1999), Tek (1999), Üzüm, et al., (2014) stated that gender is one of the factors directing purchasing behavior and affects sports consumption. In our research, it can be said that the sports consumption of male and female students is different and that male students achieve their sports consumption more.

In Table 2, there was no significant difference according to the dimensions of sports consumer scale, socialization, brand, entertainment, participation, and media, where the age variable is involved. It can be assumed that university students have similar sports consumption habits since their age is close to each other, and they are individuals of the same generation. Women consumers aged 25-34 in Turkey attach importance to doing sports. Sports, aimed to look good, feel good, and be healthy, fashion the desires of consumers for both active sportswear and sportswear (Uzkesici, 2019).

In Table 3, there are significant differences according to the brand, participation, and media dimensions, where the analysis results of the students' views on the sub-dimensions of the consumer scale according to the income variable (p<.05). It is observed that students with high incomes prefer branded sports products compared to students with low incomes. Thus, in their research, Onurlubaş and Şener (2016), Akçi and Göv (2015) stated that as the income level of consumers increases, their dependence on branded products increases, as well. Since people with high incomes have high purchasing power, they can buy expensive branded products. Accordingly, they discovered that the dependency of consumers with high-income levels on branded

products is higher than those with low incomes. It is noticed that students with high-income participate in sports in the related environment and benefit more from physical and health advantages. In similarity with our research, they asserted that as the socioeconomic level increases, from the lower layer to the upper layer, doing sports' rate increases and the sports enhance into a lifestyle (Kaplan and Akkaya, 2013). It can be stated that students with high-income possess the chance to purchase sports products and watch sports games through the media. In his research, Chen (2019) stated that 57.89% of students are more prone to physical consumption of sportswear, shoes, hats, and sports equipment; still, the rate of sports audience consumption is relatively low. While 49.47% of students realize their sports consumption, it is discovered that their sports consumption was limited due to their financial and economic status.

In Table 4, where the students' views about the sports consumer scale sub-dimensions according to the variable of doing sports are examined, it is observed that they differ significantly according to the brand, participation, and media dimensions (p <.05). Students who do sports purchase materials for sports branches, for example, they will consume sports equipment such as boxing gloves, tennis racket, and light shoes in athletics. Commonly, those who do sports will consume more than those who do not; if non-sports students have one sports product, those who do sports can have more than one product. Thus, one of the reasons for the increasing importance of the sports industry is the consumption of products and services for sports consumption. Individuals actively or passively participate in sports activities to spend their free time, buy sports equipment, and watch sports news and events via digital and traditional media (Li et al., 2001).

When the sports consumer scale is examined, it is discovered in Table 5 that there is a high positive correlation concerning the sports consumption of students in brand, participation, and media factors. It was discovered that there was a positive and moderate relationship in socialization and entertainment factors. It can be interpreted that students have positive behavior towards sports consumption.

5. Suggestions

According to the results obtained in the study, it was observed that female students consumed less on sports products and materials. By including women more in sports, their health and losing weight will be ensured, and they will be provided to consume more sports products and sports-related health and slimming products.

Nowadays, whether they play sports or not, most individuals show a positive approach to sportswear products. While features such as sweat proof and performance increase are essential for those who do sports, mainly those who do not do sports, providing comfort, fashion, and sportive image, and the sense of acceptance in social settings can be important. Accordingly, while designing, companies producing sports products should offer different product designs and options for individuals who do sports and who do not.

Conflict of Interest Statement
The authors declare no conflicts of interests.

About the Authors
Zeki Coşkuner was born in 1976 in Akasaray. He is working as an associate professor in the department of physical education and sports at Fırat University. He coached football teams in elite teams. He has also served as an athletic performance (fitness) analyst in multiple elite teams. The author has more than 100 scientific researches on recreation, camp leadership, youth camps, soccer and training planning in football.
İsmail Polatcan was born in 1986 in Pertek. He became a master's graduate by doing his work titled marketing of sports products on the Internet and the investigation of the purchasing behavior of university students. Determination of the sports consumer profile of university students in Turkey are doing is working for his PhD. He conducts research in the fields of sports marketing, sports economy and sports education as his fields of study.

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