

# Research on sportswear buying behavior of university students

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**Abstract.** Sport is a necessary element for maintaining life in a healthier and more balanced way. There has been a rising trend of wearing sportswear in daily life besides sports. Developments in technology have raised expectations from sportswear. Individuals expect not only durability, design and being fashionable, but also demand performance and clothing comfort. This study aims to investigate university students' awareness while buying sportswear. Professional sportsmen from Physical Education and Sports School students and Textile Engineering students having technical knowledge about clothes are included in this study. 100 students from each group were interviewed face to face. Results showed that Textile Engineering students pay more attention to technical characteristics due to their knowledge, however, aesthetic properties are revealed to be another important factor affecting buying decision. Buying decision of Physical Education and Sports School students is expected to be positively affected if they are given a seminar about raw material properties.

**Keywords.** Sports; sportswear; clothing comfort; buying behaviour.

## 1 Introduction

Individuals' need to be covered has been easily fulfilled for several years as ready-to-wear has become widespread, however, due to the developments in technology various benefits besides covering function is expected from clothes and different wardrobes for different parts of life such as work, sports and daily wear are required.

People living in cities have been drawn to exercise to handle stress but without getting away from the city. It is known that lately, exercising provides status and contributes to one's public image which is an important element in social life. There has been a rising

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trend of wearing sportswear in daily life besides sports. Thus, target group of sportswear companies has expanded from people working out to an additional group who are young and following trends.

Nowadays, sports are a necessary element for maintaining life in a healthier and more balanced way. It is accepted that sports prepare individuals psychologically for daily life together with cultural activities [2].

Developments in technology and escalating standards of life have raised expectations from sportswear. Individuals expect not only durability, design and being fashionable, but also demand performance and clothing comfort [1].

In textile industry, active sportswear's market has grown globally. Competition in this sector compels manufacturers to fulfill consumers' demands of clothing comfort besides aesthetics, therefore, clothing comfort of sportswear researches have become more important [3].

Clothing comfort is related to raising standards of life, thus researches on this subject has drawn attention of both researchers and manufacturers [5]. Clothing comfort is defined by Slater (1985) as "a pleasant state of physiological, psychological and physical harmony between a human being and the environment" [4].

Characteristics that are expected from sportswear are stated on below according to the researches on clothing comfort:

- Efficiently moving away sweat from the skin,
- Quick drying,
- Breathability,
- Balancing body heat by moving away moisture and ventilating body's critical heat areas,
- Not charging electrostatically,
- Having high strength and abrasion resistance,
- Not limiting body movements,
- Being soft and durable,
- Stitches not causing discomfort,
- Having a good handle,
- Having an aesthetic appearance,
- Improving mental motivation,
- Providing easy care,
- Occupying a small place and being light, for both wearing while working out and carrying around.

In this study, it was aimed to assess university students' awareness while making buying decisions for casual and active sportswear. In literature, sportswear is divided into three subgroups as casual sportswear, professional sportswear and sportswear for hobby and health purposes [3]. These groups were taken into consideration while determining the sample group.

## **2 Material and method**

This research was conducted in Ege University which is considered to have a homogeneous structure in terms of students. Professional sportsmen from Physical Education and Sports School students and Textile Engineering students having technical knowledge about clothes are included in this study. 100 students from each group were interviewed face to face on university campus. A preliminary examination showed that 183 surveys are viable.

The survey used in the study consists of 13 questions and 2 parts. First part includes 7 questions of demographics and the second part includes 6 questions about students' buying

behaviors of daily and active sportswear. Likert type scale was used in the survey to ease expressing different opinions.

Results were evaluated by using PASW Statistics 18. Mean value, frequency, percentage, chi2 test, analysis of variance (ANOVA) and t-test were used in evaluation.

### 3 Results and discussion

Regarding to the obtained data, 51,4% of participants are studying in Textile Engineering, while 48,6% of them studying in Physical Education and Sports School at University (Table 1).

**Table 1.** Distributions of university students participating in the survey by their departments

Department	Frequency	Percent	Valid Percent
Textile Engineering	94	51,4	51,4
Physical Education and Sports School	89	48,6	48,6

The women participants' average age was 22, height 168,6 cm and weight 57,7 kg. The men participants' average age was 23, height 179,2 cm and weight 77,8 kg (Table 2).

**Table 2.** The averages of age, weight and height of participant female and male university students

Gender	Age/ Height/ Weight	N	Average	Standard Deviation
Woman	Age	88	22	1,347
	Height (cm)	86	167,57	6,44
	Weight (kg)	86	57,69	8,182
Man	Age	95	23	2,167
	Height (cm)	95	179,18	6,793
	Weight (kg)	93	77,81	11,893

When the distribution of university students participating in the survey by their demographics were analyzed, it was obtained that, 48,1% of participants are women and 51,9% of participants are men. 58,5% of university students had been lived in Metropolitan before their university life. When the monthly average spending for wear was evaluated, it was obtained that, 27,3% of participants spend 251-500 Turkish Liras, 24% of participants spend 501 to 750 Turkish Liras and 16,4% of participants spend 751 to 1000 Turkish Liras (Table 3).

**Table 3.** Distribution of university students participating in the survey by their demographics

		Frequency	Percent	Valid Percent
Gender	Woman	88	48,1	48,1
	Man	95	51,9	51,9
	Missing	0	0	-
Habitat Before University	Village	2	1,1	1,1
	Town	3	1,6	1,6
	County	34	18,6	18,6
	City	37	20,2	20,2
	Metropolitan	107	58,5	58,5
	Abroad	0	0	0
	Missing	0	0	-
Monthly Average Spending for Wear	0-250 TL	18	9,8	9,8
	251-500 TL	50	27,3	27,3
	501-750 TL	44	24	24
	751-1000TL	30	16,4	16,4
	1001-1250 TL	15	8,2	8,2
	1251-1500TL	10	5,5	5,5
	1501-1750TL	7	3,8	3,8
	1751-2000 TL	4	2,2	2,2
	2001 TL and more	5	2,7	2,7
	Missing	0	0	-

The distribution of monthly average spending for casual (Table 4) and active (Table 5) sportswear of participant female and male students were analyzed, it can be said that in casual sportswear, men spend less money than women. It is opposite in active sportswear; men spend more money than women in active sportswear.

**Table 4.** Distribution of monthly average spending for casual sportswear of participant female and male students

		Monthly Average Spending for Casual Sports Wear						Total
		100 TL and less	101-200 TL	201-300 TL	301-400 TL	401-500 TL	501 TL and more	
Gender	Woman	52	22	11	1	1	0	87
	Man	60	16	12	3	3	1	95
Total		112	38	23	4	4	1	182

**Table 5.** Distribution of monthly average spending for active sportswear of participant female and male students

		Monthly Average Spending for Active Sports Wear					Total	
		100-200 TL and less	101-200 TL	201-300 TL	301-400 TL	401-500 TL	501 TL and more	
Gender	Woman	62	15	7	2	0	0	86
	Man	57	25	6	5	1	1	95
Total		119	40	13	7	1	1	181

A significant correlation was not detected between monthly spending average for casual sportswear and the gender of the participating students ( $\chi=4,219$ ;  $df=5$ ;  $p=0,518$ ). Also a significant correlation was not detected between monthly spending average for active sportswear and the gender of the participating students ( $\chi=5,639$ ;  $df=5$ ;  $p=0,343$ ). A significant correlation was not detected between monthly spending average for casual sportswear and the study departments of the participating students ( $\chi=10,115$ ;  $df=5$ ;  $p=0,072$ ). However, A significant correlation was detected between monthly spending average for active sportswear and the study departments of the participating students ( $\chi=26,432$ ;  $df=5$ ;  $p=0,00$ ).

**Table 6.** Distribution of factors affecting sportswear buying decision of university students

	N	Average	Standard Deviation
Fitting	178	1,24	0,442
Comfort	179	1,32	0,577
Color	179	1,38	0,531
Design/ Model	180	1,38	0,562
Quality	180	1,45	0,628
Fabric Properties	181	1,67	0,692
Figure	178	1,69	0,795
Price	180	1,69	0,777
Raw Material (Fiber) Properties	178	2,15	0,977
Brand	180	2,27	1,369
Sewing properties	179	2,35	1,072
Accessory properties	179	2,4	1,052
Fashion	179	2,83	1,28
Advertisement/ Promotion	176	3,07	1,193

14 different statements, regarding the factors affecting the sportswear buying decision, are given to the participant university students and they were asked to mark the significance of these statements (Table 6). In the five-point Likert scale, "Very important" 1, "Important" 2, "Moderately important" 3, "Somewhat important" 4 and "Does not matter" were coded as 5. When the factors, which affect the sportswear buying decision of university students, were analyzed, it's observed that fitting and comfort factors take first

places. Also the color, design and model factors are significant for buying decision. The review also showed that advertising and promotional efforts are less important factors affecting the sportswear buying decision of students.

When the casual sportswear usage of participant students was evaluated; 82% of students wear T-shirts very often casually. 29% of students prefer to wear shorts very often and 43% prefer often. 41% of students use sport trousers very often and 32% use sport trousers often casually.

When the active sportswear usage of participant students was evaluated; 74% of students prefer to wear t-shirts very often, 23% of students prefer to wear t-shirts often during active sport life. 44% of students use shorts very often, 36% of student use shorts often during active sport life. The sport trousers which are preferred casually are used 18%very often, 22% often and 40% rarely by university students during active sport.

**Table 7.** The differences between the garment buying decision of university students and their monthly average spending for casual sportswear

	Monthly Average Spending for Wear	N	Average	Std. Deviation	F	df1	df2	p
Comfort	100 TL and less	109	1,32	0,525	5,271	5	172	0.00
	101 - 200 TL	37	1,35	0,588				
	201 - 300 TL	23	1,17	0,491				
	301 - 400 TL	4	1,25	0,5				
	401 - 500 TL	4	1,5	1				
	501 TL and more	1	4	-				
Price	100 TL and less	111	1,69	0,818	2,293	5	173	0,04
	101 - 200 TL	37	1,73	0,652				
	201 - 300 TL	22	1,5	0,673				
	301 - 400 TL	4	1,5	0,577				
	401 - 500 TL	4	2	0,816				
	501 TL and more	1	4	-				
Advertisement/ Promotion	100 TL and less	108	3,03	1,131	2,538	5	169	0,03
	101 - 200 TL	37	3,24	1,164				
	201 - 300 TL	21	2,52	1,401				
	301 - 400 TL	4	3,5	1,291				
	401 - 500 TL	4	4,5	0,577				
	501 TL and more	1	4	-				

When the differences between the garment buying decision of university students and their monthly average spending for casual (Table 7) and active (Table 8) sportswear were evaluated. It was determined that, there is a statistical significant relationship between their monthly average spending for wear and comfort, price and advertisement/ promotion factors for casual sportswear. It has also obtained that, there is a statistical significant relationship between their monthly average spending for wear and comfort and brand factors.

**Table 8.** The differences between the garment buying decision of university students and their monthly average spending for active sportswear.

	Monthly Average Spending for Wear	N	Average	Std. Deviation	F	df1	df2	p
Comfort	100 TL and less	117	1,37	0,551	6,461	5	171	0.00
	101 - 200 TL	38	1,16	0,437				
	201 - 300 TL	13	1,38	0,768				
	301 - 400 TL	7	1	0				
	401 - 500 TL	1	1	-				
	501 TL and more	1	4	-				
Brand	100 TL and less	118	2,52	1,495	2,664	5	172	0,04
	101 - 200 TL	38	1,89	0,953				
	201 - 300 TL	13	1,92	1,115				
	301 - 400 TL	7	1,29	0,488				
	401 - 500 TL	1	1	-				
	501 TL and more	1	1	-				

**Table 9.** The differences between the factors affecting garment buying decision of university students and their study departments

	Department	N	Average	Std. Deviation	t	df	p
Colour	Textile Eng.	93	1,37	0,484	-0,37	177	0,709
	Physical Edu. and Sports Sch.	86	1,4	0,58			
Design/Model	Textile Eng.	94	1,34	0,476	-1,07	178	0,286
	Physical Edu. and Sports Sch.	86	1,43	0,642			
Figure	Textile Eng.	93	1,6	0,662	-1,57	176	0,119
	Physical Edu. and Sports Sch.	85	1,79	0,914			
Fabric Properties	Textile Eng.	94	1,69	0,656	0,464	179	0,643
	Physical Edu. and Sports Sch.	87	1,64	0,731			
Accessory Properties	Textile Eng.	94	2,47	0,991	0,88	177	0,38
	Physical Edu. and Sports Sch.	85	2,33	1,117			
Sewing Properties	Textile Eng.	94	2,45	1,033	1,321	177	0,188
	Physical Edu. and Sports Sch.	85	2,24	1,109			
Raw Material	Textile Eng.	93	2,15	0,999	-0,02	176	0,987

(Fiber) Properties	Physical Edu. and Sports Sch.	85	2,15	0,958			
Comfort	Textile Eng.	93	1,29	0,523	-0,02	177	0,418
	Physical Edu. and Sports Sch.	86	1,36	0,631			
Fitting	Textile Eng.	93	1,22	0,413	-0,81	176	0,404
	Physical Edu. and Sports Sch.	85	1,27	0,473			
Quality	Textile Eng.	94	1,45	0,58	-0,84	178	0,943
	Physical Edu. and Sports Sch.	86	1,45	0,68			
Brand	Textile Eng.	94	2,66	1,583	-0,07	178	0
	Physical Edu. and Sports Sch.	86	1,85	0,927			
Price	Textile Eng.	94	1,74	0,775	4,143	178	0,366
	Physical Edu. and Sports Sch.	86	1,64	0,781			
Fashion	Textile Eng.	94	2,93	1,211	0,906	177	0,279
	Physical Edu. and Sports Sch.	85	2,72	1,351			
Advertisement/ Promotion	Textile Eng.	92	3,15	1,068	1,086	174	0,33
	Physical Edu. and Sports Sch.	84	2,98	1,317			

When the differences were analyzed between the factors affecting garment buying decision of university students and their study departments; it's observed that, there is only one significant difference in terms of brand factor between the departments (Table 9). The students of Physical Education and Sports School care more about the garment brand according to the Textile Engineering students.

**Table 10.** The factors affecting garment buying decision of university students.

	N	Average	Standart Deviation
When new fashionable garments offered for sale	75	2,24	0,803
When the used garments are worn or unable to wear again	120	1,79	0,819W
When the used garments are boring	133	2,05	0,791
When I encounter with a product that I like randomly	124	1,95	0,805
Other reasons	3	1,67	1,155

When the factors, which affect garment buying decision of university students, were investigated, it is notable as the most important factor "Decide to buy a new garment when the used garments are worn or unable to wear" (Table 10). Additionally the second important factor is "" to decide buying a new garment. Fashion is the least affective factor for Textile Engineering students as well as Physical Education and Sports School students to decide buying a new sportswear.

## 4 Conclusions and recommendations

The results of study show that the university students behave conscious when buying new garments. When the study data evaluated it's seen that the university students care about comfort of casual wear and T-shirt has become inevitable for casual sportswear and active sportswear of university students. When the factors, which affect the sportswear buying decision of university students, were analyzed, it is observed that fitting and comfort factors take first places. Also the color, design and model factors are significant for buying decision.

Results showed that Textile Engineering students pay more attention to technical characteristics due to their knowledge, however, aesthetic properties are revealed to be another important factor affecting buying decision. Buying decision of Physical Education and Sports School students are expected to be positively affected if they were given a seminar about raw material properties.

When the data, obtained from the study results were analyzed; fashion was found the least affective factor for university students to decide buying a new sportswear. This situation occurs owing to functionality of sportswear being predominant according to its aesthetics.

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