



GAZİANTEP UNIVERSITY

DEPARTMENT OF INDUSTRIAL ENGINEERING

IE360 EXPERIMENTAL DESIGN

FINAL PROJECT



PROJECT SUBJECT : Determination of Online Clothes Shopping Criteria

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SPSS



EXPERIMENTAL DESIGN IE360

THE ENGINEERING PROJECT



Theme: Determination of Online Clothes
Shopping Criteria

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Statistical analysis and interpretation of the criteria by which people act while shopping for clothes, taking into account the risks in today's world.

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1. BACKGROUND

The situation of the world is not going well at all during the pandemic period we have been in for a long time. The fact that billions of people have to stay in their homes not only in a few countries but all over the world due to the pandemic raises the interest in digital environments to a higher level. During the pandemic process, it is recommended that everyone follow proper hygiene and social distance. Most places have strict quarantines that do not allow people to go out unless absolutely necessary. While such preventive measures may seem adequate, some challenges come with substantial needs. Companies that ensure that the public is minimally exposed to this epidemic have taken the risk of working from home. It is very difficult for people to buy clothes during the pandemic process. At the same time, physical shopping in stores has become quite difficult if you are trying to avoid public exposure to keep yourself and your family healthy and free of viruses. As the world responds to the coronavirus pandemic, we are seeing a dramatic shift from in-person shopping to online shopping. As consumers rely on the digital world more than ever before, businesses are forced to adapt their strategies and transition to digital transformation more urgently than ever before. We also conducted a survey and analyzed it to determine what people prefer and how they do online shopping in daily life.

2. PROBLEM STATEMENT DESCRIPTION

Undoubtedly, online shopping has experienced an unprecedented boom in this era. Shopping this way has proven to be a great option for many who are reluctant to do things the 'old way'. Some stores have even adapted to this business model to maintain their services and help keep their businesses afloat. Therefore, many things can now be purchased online. So, we launched a survey to analyze the age, gender, weight, size of people who shop for clothes on websites, and which shipping companies they find popular. With this survey, we want to be in a position where we can find solutions to the missing places by learning what they focus on when shopping for clothes on their website.

3. CONDUCTION OF THE EXPERIMENT

We would like to share the data that we are very satisfied with in our survey, which we have created via Google Form and which has 40 data entries, and which we consider sufficient for solutions.

3.1 SURVEY

After considering people's choices in online clothes shopping, we created a list of factors. These factors are:

1) Gender

Both men and women can be active in online clothes shopping. That's why we decided to detect these 2 levels in this factor.

- a. Female
- b. Male

2) Age

We wanted to see which age range has a greater impact on online clothes shopping. Therefore, we decided to test this level on this factor.

- a. 0 - 18
- b. 18 - 36
- c. 36 - 54
- d. over 54

3) Weight

It is a factor chosen to show how people's weight ratios are distributed in online clothes shopping.

- a. 0 - 20 kg
- b. 20 kg - 40 kg
- c. 40 kg - 60 kg
- d. 60 kg - 80 kg
- e. over 80 kg

4) Category

We have determined the most common categories that people use while online clothes shopping. We wanted to include how much shopping was done from each category in our research. So, the levels in this factor can be:

- a. Tshirt
- b. Dress
- c. Trousers
- d. Blouse

5) Price

We wanted to determine the price that people want to pay for the product they want in online clothes shopping. Levels in this factor:

- a. 0 TL - 30 TL
- b. 30 TL - 60 TL
- c. 60 TL - 90 TL
- d. 90 TL - 120 TL
- e. over 120 TL

6) Size

A factor chosen to show how people's body measurements are distributed in online clothes shopping.

- a. Small
- b. Middle
- c. Large

7) Color tone

There are people who wear light tones and feel more beautiful, there are also people who prefer to wear dark tones instead of light ones. So, the levels in this factor are:

- a. Light tones
- b. Dark tones
- c. Both of them

8) Cargo

Today, people experience many grievances due to the cargo company. In fact, some people do not even shop at certain stores because of the cargo company. We have determined the most commonly chosen cargo companies by people. As a result, the levels in this factor are:

- a. Aras
- b. Ptt
- c. Yurtiçi
- d. Mng

3.2 VARIABLE VIEW

rapor.sav [DataSet1] - IBM SPSS Statistics Data Editor

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	Gender	Numeric	8	0	Gender	{1, Female}...	None	11	Left	Nominal	Input
2	Age	Numeric	8	0	Age	{1, 0 - 18}...	None	9	Center	Ordinal	Input
3	Weight	Numeric	8	0	Weight	{1, 0 - 20 kg...	None	12	Center	Ordinal	Input
4	Category	Numeric	8	0	Category	{1, Tshirt}...	None	18	Center	Scale	Input
5	Price	Numeric	8	0	Price	{1, 0 - 30 TL...	None	13	Center	Scale	Input
6	Size	Numeric	8	0	Size	{1, Small}...	None	12	Center	Nominal	Input
7	ColorTone	Numeric	8	0	ColorTone	{1, Light To...	None	13	Center	Nominal	Input
8	Cargo	Numeric	8	0	Cargo	{1, Aras}...	None	14	Center	Nominal	Input
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											

1

Data View Variable View

3.3 DATA VIEWS

rapor.sav [DataSet1] - IBM SPSS Statistics Data Editor

	Gender	Age	Weight	Category	Price	Size	ColorTone	Cargo
22	1	3	4	2	4	1	1	1
23	2	2	4	2	2	2	2	3
24	1	2	3	2	3	3	2	2
25	2	2	3	10	4	3	2	2
26	2	2	3	16	5	3	1	3
27	2	2	3	1	3	2	1	3
28	1	2	4	15	3	2	1	3
29	1	2	3	2	2	1	1	3
30	1	2	3	3	2	1	1	3
31	2	4	5	3	3	2	1	3
32	1	2	3	5	4	3	1	4
33	2	3	3	7	5	2	1	3
34	1	3	3	5	4	1	1	4
35	2	2	4	5	3	2	3	3
36	1	2	3	4	4	3	3	3
37	1	2	3	3	4	2	3	3
38	1	3	3	7	5	2	3	4
39	1	3	4	2	4	2	2	3
40	1	3	4	2	3	2	3	2
41	-	-	-	-	-	-	-	-
42								
43								
44								
45								
46								
47								
48								

1

Data View Variable View

	Gender	Age	Weight	Category	Price	Size	ColorTone	Cargo
1	Female	36 - 54	40 kg - 60 kg	Tshirt, Dress,Trousers	30 TL - 60 TL	Small	Dark Tones	Yurtiçi
2	Female	36 - 54	40 kg - 60 kg	Tshirt	60 TL - 90 TL	Medium	Dark Tones	MNG
3	Female	18 - 36	40 kg - 60 kg	Tshirt	30 TL - 60 TL	Large	Light Tones	Yurtiçi
4	Male	18 - 36	40 kg - 60 kg	Dress	60 TL - 90 TL	Large	Dark Tones	Yurtiçi
5	Female	18 - 36	60 kg - 80 kg	Trousers	90 TL - 120 TL	Medium	Both of them	Yurtiçi
6	Female	18 - 36	60 kg - 80 kg	Trousers	90 TL - 120 TL	Medium	Both of them	Yurtiçi
7	Male	18 - 36	over 80 kg	Underwear	over 120 TL	Large	Both of them	Yurtiçi
8	Male	18 - 36	60 kg - 80 kg	Tshirt, Dress	over 120 TL	Medium	Dark Tones	MNG
9	Female	18 - 36	40 kg - 60 kg	Tshirt, Dress	90 TL - 120 TL	Large	Dark Tones	MNG
10	Female	18 - 36	40 kg - 60 kg	Tshirt, Dress	60 TL - 90 TL	Medium	Both of them	Yurtiçi
11	Male	18 - 36	40 kg - 60 kg	Tshirt, Dress	60 TL - 90 TL	Medium	Light Tones	Yurtiçi
12	Female	18 - 36	40 kg - 60 kg	Tshirt, Underwear	90 TL - 120 TL	Small	Dark Tones	Yurtiçi
13	Male	18 - 36	40 kg - 60 kg	Tshirt, Trousers	90 TL - 120 TL	Small	Light Tones	Yurtiçi
14	Female	18 - 36	40 kg - 60 kg	Dress, Trousers	60 TL - 90 TL	Small	Dark Tones	Yurtiçi
15	Male	over 54	40 kg - 60 kg	Tshirt	60 TL - 90 TL	Small	Light Tones	MNG
16	Female	36 - 54	40 kg - 60 kg	Dress	60 TL - 90 TL	Medium	Dark Tones	MNG
17	Male	18 - 36	40 kg - 60 kg	Trousers	90 TL - 120 TL	Medium	Light Tones	Aras
18	Male	18 - 36	60 kg - 80 kg	Trousers	90 TL - 120 TL	Large	Dark Tones	Yurtiçi
19	Female	18 - 36	60 kg - 80 kg	Trousers	over 120 TL	Medium	Dark Tones	Yurtiçi
20	Male	36 - 54	60 kg - 80 kg	Trousers	30 TL - 60 TL	Medium	Both of them	Yurtiçi
21	Female	18 - 36	60 kg - 80 kg	Trousers	60 TL - 90 TL	Medium	Dark Tones	MNG
22	Female	36 - 54	60 kg - 80 kg	Dress	90 TL - 120 TL	Small	Light Tones	Aras
23	Male	18 - 36	60 kg - 80 kg	Dress	30 TL - 60 TL	Medium	Dark Tones	Yurtiçi
24	Female	18 - 36	40 kg - 60 kg	Dress	60 TL - 90 TL	Large	Dark Tones	PTT
25	Male	18 - 36	40 kg - 60 kg	Dress, Underwear	90 TL - 120 TL	Large	Dark Tones	PTT
26	Male	18 - 36	40 kg - 60 kg	Underwear, Trousers	over 120 TL	Large	Light Tones	Yurtiçi
27	Male	18 - 36	40 kg - 60 kg	Tshirt	60 TL - 90 TL	Medium	Light Tones	Yurtiçi
28	Female	18 - 36	60 kg - 80 kg	Underwear, Dress	60 TL - 90 TL	Medium	Light Tones	Yurtiçi

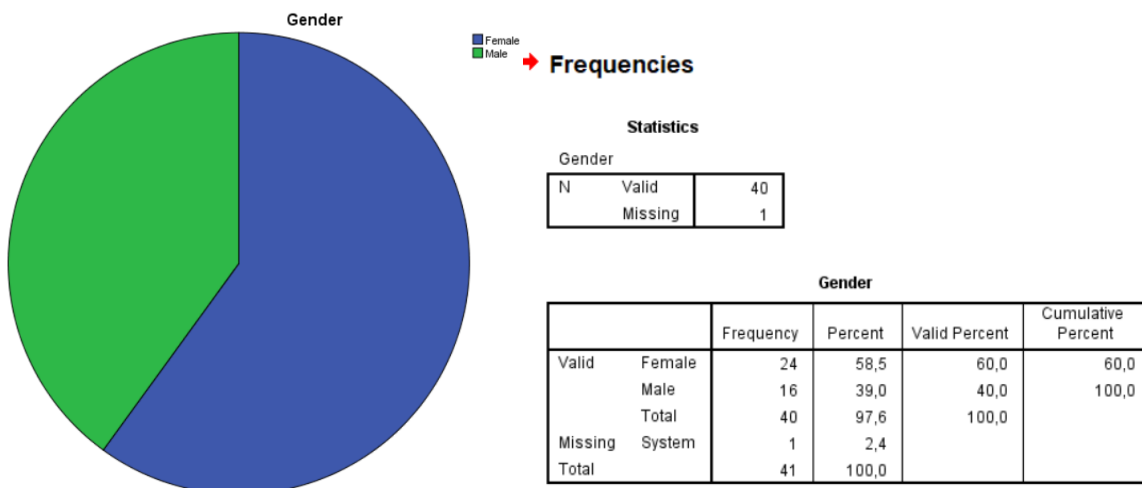
	Gender	Age	Weight	Category	Price	Size	ColorTone	Cargo
22	Female	36 - 54	60 kg - 80 kg	Dress	90 TL - 120 TL	Small	Light Tones	Aras
23	Male	18 - 36	60 kg - 80 kg	Dress	30 TL - 60 TL	Medium	Dark Tones	Yurtiçi
24	Female	18 - 36	40 kg - 60 kg	Dress	60 TL - 90 TL	Large	Dark Tones	PTT
25	Male	18 - 36	40 kg - 60 kg	Dress, Underwear	90 TL - 120 TL	Large	Dark Tones	PTT
26	Male	18 - 36	40 kg - 60 kg	Underwear, Trousers	over 120 TL	Large	Light Tones	Yurtiçi
27	Male	18 - 36	40 kg - 60 kg	Tshirt	60 TL - 90 TL	Medium	Light Tones	Yurtiçi
28	Female	18 - 36	60 kg - 80 kg	Underwear, Dress	60 TL - 90 TL	Medium	Light Tones	Yurtiçi
29	Female	18 - 36	40 kg - 60 kg	Dress	30 TL - 60 TL	Small	Light Tones	Yurtiçi
30	Female	18 - 36	40 kg - 60 kg	Trousers	30 TL - 60 TL	Small	Light Tones	Yurtiçi
31	Male	over 54	over 80 kg	Trousers	60 TL - 90 TL	Medium	Light Tones	Yurtiçi
32	Female	18 - 36	40 kg - 60 kg	Tshirt, Dress	90 TL - 120 TL	Large	Light Tones	MNG
33	Male	36 - 54	40 kg - 60 kg	Tshirt, Underwear	over 120 TL	Medium	Light Tones	Yurtiçi
34	Female	36 - 54	40 kg - 60 kg	Tshirt, Dress	90 TL - 120 TL	Small	Light Tones	MNG
35	Male	18 - 36	60 kg - 80 kg	Tshirt, Dress	60 TL - 90 TL	Medium	Both of them	Yurtiçi
36	Female	18 - 36	40 kg - 60 kg	Underwear	90 TL - 120 TL	Large	Both of them	Yurtiçi
37	Female	18 - 36	40 kg - 60 kg	Trousers	90 TL - 120 TL	Medium	Both of them	Yurtiçi
38	Female	36 - 54	40 kg - 60 kg	Tshirt, Underwear	over 120 TL	Medium	Both of them	MNG
39	Female	36 - 54	60 kg - 80 kg	Dress	90 TL - 120 TL	Medium	Dark Tones	Yurtiçi
40	Female	36 - 54	60 kg - 80 kg	Dress	60 TL - 90 TL	Medium	Both of them	PTT
41
42
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46
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4. RESULTS of THE EXPERIMENT

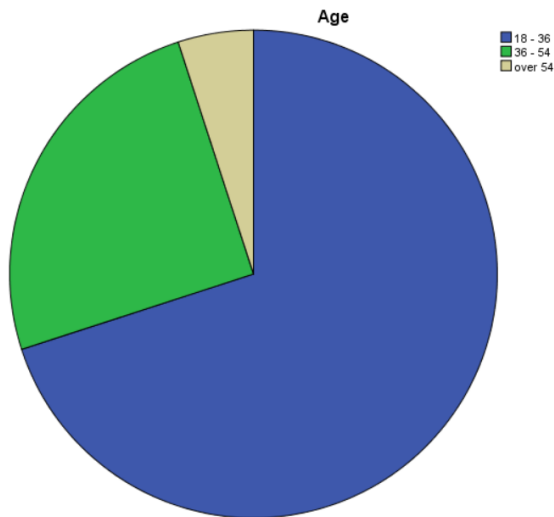
4.1 Frequencies

Frequencies

Statistics									
		Gender	Age	Weight	Category	Price	Size	ColorTone	Cargo
N	Valid	40	40	40	40	40	40	40	40
	Missing	1	1	1	1	1	1	1	1

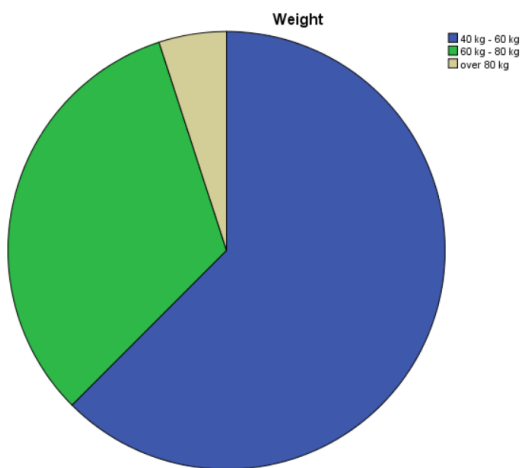


When we look at the 40 people who participated in the survey, we see 24 of them as women and 16 of them as men. The value of women is about 60%, while the value of men is about 40%. Thus, women shop more than men.



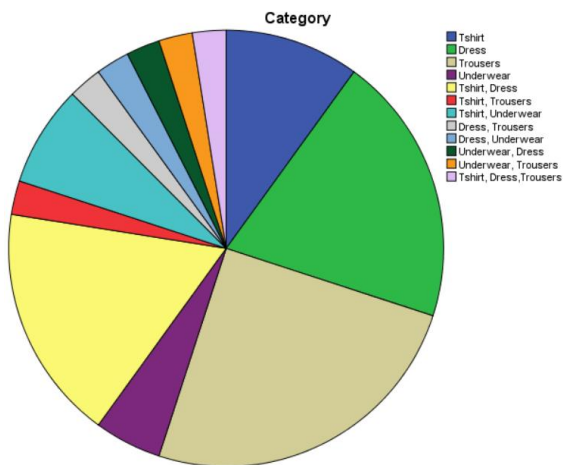
Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 36	28	68,3	70,0	70,0
	36 - 54	10	24,4	25,0	95,0
	over 54	2	4,9	5,0	100,0
	Total	40	97,6	100,0	
Missing	System	1	2,4		
Total		41	100,0		

The 28 people surveyed are in the 18-36 age range. They are almost 2.5 times more likely than participants in other categories.



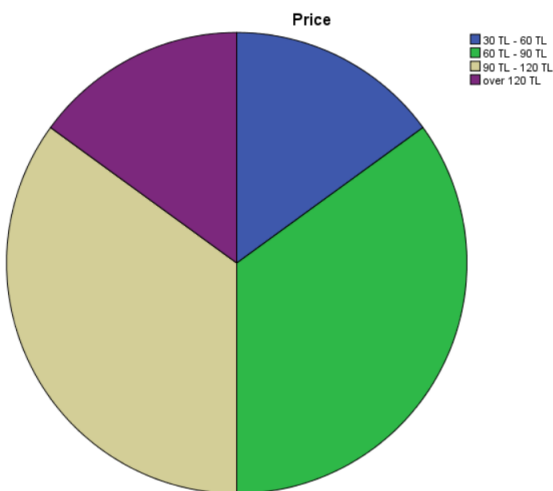
Weight					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40 kg - 60 kg	25	61,0	62,5	62,5
	60 kg - 80 kg	13	31,7	32,5	95,0
	over 80 kg	2	4,9	5,0	100,0
	Total	40	97,6	100,0	
Missing	System	1	2,4		
Total		41	100,0		

The 25 people surveyed weighed 40-60 , 13 people weighed 60-80 , 2 people weighed 80+. We see that thin people shop more than fat people.



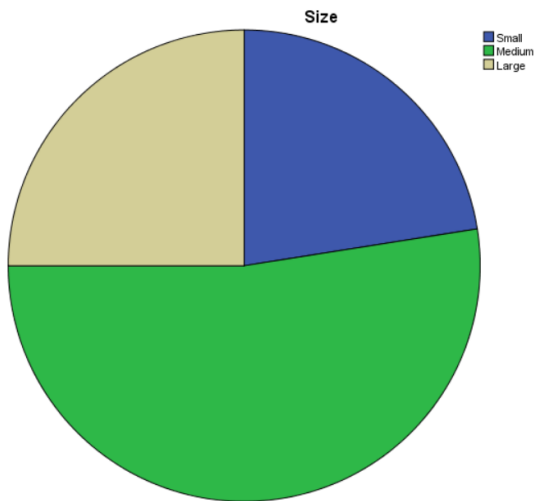
		Category			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Tshirt	4	9,8	10,0	10,0
	Dress	8	19,5	20,0	30,0
	Trousers	10	24,4	25,0	55,0
	Underwear	2	4,9	5,0	60,0
	Tshirt, Dress	7	17,1	17,5	77,5
	Tshirt, Trousers	1	2,4	2,5	80,0
	Tshirt, Underwear	3	7,3	7,5	87,5
	Dress, Trousers	1	2,4	2,5	90,0
	Dress, Underwear	1	2,4	2,5	92,5
	Underwear, Dress	1	2,4	2,5	95,0
	Underwear, Trousers	1	2,4	2,5	97,5
	Tshirt, Dress, Trousers	1	2,4	2,5	100,0
	Total	40	97,6	100,0	
	Missing System	1	2,4		
Total		41	100,0		

Participants make 1,2 and 3 types of purchases, as shown in the table. Those who make one type of preference are 1.5 times more than those who make 2 preferences and 22 times more than those who make 3 preferences.



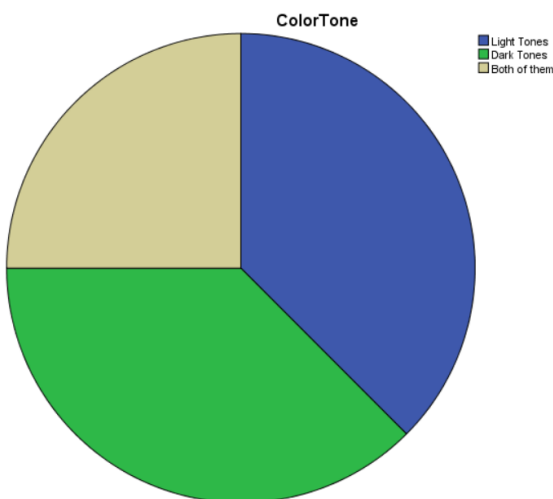
		Price			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	30 TL - 60 TL	6	14,6	15,0	15,0
	60 TL - 90 TL	14	34,1	35,0	50,0
	90 TL - 120 TL	14	34,1	35,0	85,0
	over 120 TL	6	14,6	15,0	100,0
	Total	40	97,6	100,0	
Missing	System	1	2,4		
Total		41	100,0		

When we look at the price range of products that participants buy, we see that the number of people receiving 60-90 TL and 90-120 TL is equal and is more preferred than other price ranges.



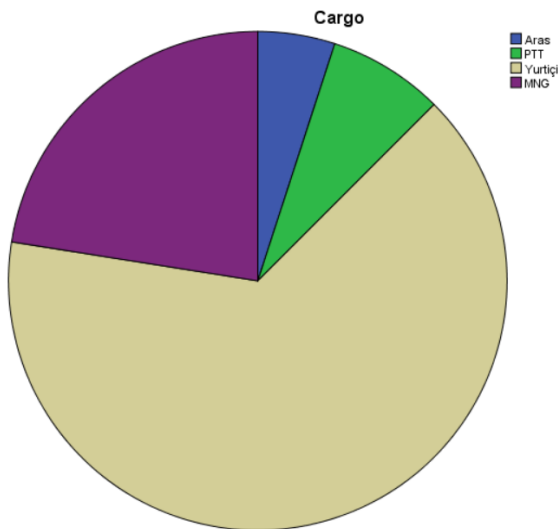
		Size			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Small	9	22,0	22,5	22,5
	Medium	21	51,2	52,5	75,0
	Large	10	24,4	25,0	100,0
	Total	40	97,6	100,0	
Missing	System	1	2,4		
Total		41	100,0		

Although the large proportion of participants were thin, the Medium size was 2.5 times more preferred than other sizes.



		ColorTone			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Light Tones	15	36,6	37,5	37,5
	Dark Tones	15	36,6	37,5	75,0
	Both of them	10	24,4	25,0	100,0
	Total	40	97,6	100,0	
Missing	System	1	2,4		
Total		41	100,0		

As can be seen from the table, we see that participants prefer 15 light tones , 15 dark tones, and 10 both of them. Those who choose one type of tone are more than those who choose 2 types of tone. Thus, one type of tone is more preferred.



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Aras	2	4,9	5,0	5,0
	PTT	3	7,3	7,5	12,5
	Yurtiçi	26	63,4	65,0	77,5
	MNG	9	22,0	22,5	100,0
Total		40	97,6	100,0	
Missing	System	1	2,4		
Total		41	100,0		

Considering the 4 cargo companies preferred by the participants, Yurtiçi cargo was the most preferred with 65% compared to other cargo companies.

4.2 DESCRIPTIVES

→ Descriptives

Descriptive Statistics								
	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Gender	40	1	2	1,40	,496	,246	-1,919	,733
Age	40	2	4	2,35	,580	,336	1,269	,733
Weight	40	3	5	3,43	,594	,353	,241	,733
Category	40	1	17	4,67	3,899	15,199	3,662	,733
Price	40	2	5	3,50	,934	,872	-,786	,733
Size	40	1	3	2,03	,698	,487	-,848	,733
ColorTone	40	1	3	1,88	,791	,625	-1,345	,733
Cargo	40	1	4	3,05	,714	,510	2,073	,733
Valid N (listwise)	40							

In this descriptive analysis, where we see minimum, maximum, mean, standard deviation, variance and kurtosis analysis, we see the effects of people on online clothing orders.

4.3. CROSTABS

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Price * Category	40	97,6%	1	2,4%	41	100,0%

Price * Category Crosstabulation

			Category												Total
			Tshirt	Dress	Trousers	Underwear	Tshirt, Dress	Tshirt, Trousers	Tshirt, Underwear	Dress, Trousers	Dress, Underwear	Underwear, Dress	Underwear, Trousers	Tshirt, Dress, Trousers	
Price	30 TL - 60 TL	Count	1	2	2	0	0	0	0	0	0	0	0	1	6
		% within Price	16,7%	33,3%	33,3%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	16,7%	100,0%
		% within Category	25,0%	25,0%	20,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	15,0%
		% of Total	2,5%	5,0%	5,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	2,5%	15,0%
	60 TL - 90 TL	Count	3	4	2	0	3	0	0	1	0	1	0	0	14
		% within Price	21,4%	28,6%	14,3%	0,0%	21,4%	0,0%	0,0%	7,1%	0,0%	7,1%	0,0%	0,0%	100,0%
		% within Category	75,0%	50,0%	20,0%	0,0%	42,9%	0,0%	0,0%	100,0%	0,0%	100,0%	0,0%	0,0%	35,0%
		% of Total	7,5%	10,0%	5,0%	0,0%	7,5%	0,0%	0,0%	2,5%	0,0%	2,5%	0,0%	0,0%	35,0%
	90 TL - 120 TL	Count	0	2	5	1	3	1	1	0	1	0	0	0	14
		% within Price	0,0%	14,3%	35,7%	7,1%	21,4%	7,1%	7,1%	0,0%	7,1%	0,0%	0,0%	0,0%	100,0%
		% within Category	0,0%	25,0%	50,0%	50,0%	42,9%	100,0%	33,3%	0,0%	100,0%	0,0%	0,0%	0,0%	35,0%
		% of Total	0,0%	5,0%	12,5%	2,5%	7,5%	2,5%	2,5%	0,0%	2,5%	0,0%	0,0%	0,0%	35,0%
	over 120 TL	Count	0	0	1	1	1	0	2	0	0	0	1	0	6
		% within Price	0,0%	0,0%	16,7%	16,7%	16,7%	0,0%	33,3%	0,0%	0,0%	0,0%	16,7%	0,0%	100,0%
		% within Category	0,0%	0,0%	10,0%	50,0%	14,3%	0,0%	66,7%	0,0%	0,0%	0,0%	100,0%	0,0%	15,0%
		% of Total	0,0%	0,0%	2,5%	2,5%	2,5%	0,0%	5,0%	0,0%	0,0%	0,0%	2,5%	0,0%	15,0%
Total	Count	4	8	10	2	7	1	3	1	1	1	1	1	1	40
		% within Price	10,0%	20,0%	25,0%	5,0%	17,5%	2,5%	7,5%	2,5%	2,5%	2,5%	2,5%	2,5%	100,0%
		% within Category	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
		% of Total	10,0%	20,0%	25,0%	5,0%	17,5%	2,5%	7,5%	2,5%	2,5%	2,5%	2,5%	2,5%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37,855 ^a	33	,257
Likelihood Ratio	38,123	33	,248
Linear-by-Linear Association	1,069	1	,301
N of Valid Cases	40		

a. 48 cells (100,0%) have expected count less than 5. The minimum expected count is ,15.

H = Price and category are directly proportional.

H₀ = Price and category are not directly proportional.

Since cells (100%) are greater than 20%, the minimum expectation should be considered. Since the Minimum Expected Number (15) was less than 25, the Pearson Chi-square value also turned out to be equal to 0.257. Since $0.257 > 0.05$, H₁ is rejected, H₀ is accepted.

4.4. T- TEST

One Sample Test - Price

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Price	40	3,50	,934	,148

One-Sample Test

	Test Value = 65					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Price	-416,580	39	,000	-61,500	-61,80	-61,20

One Sample Statistics table shows that the average value of its prices is 3.50. However, the expected average value is 65. As a result, there is a significant difference between the realized average and the expected average value. At the 95% confidence level, the H0 hypothesis was rejected because the significance value was 0.000 and the significance value was less than 0.05.

Independent Samples Test - Gender / Weight

T-Test

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Weight	Female	24	3,33	,482	,098
	Male	16	3,56	,727	,182

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Weight	Equal variances assumed	6,097	,018	-1,202	38	,237	-,229	,191	-,615	,157
	Equal variances not assumed			-1,109	23,724	,279	-,229	,207	-,656	,198

Since the Sig.Value (0.018) < 0.05 variance is not homogeneously distributed.

When the general weight status by gender is compared in the table, it is seen that it is (Mean: 3,56 Std. Deviation: ,727) in men. On the other hand, it is seen that is (Mean: 3,33 Std. Deviation: ,482) in women.

The 'T-test for independent groups' have been used to test whether participants' weight status differed significantly. As a result of the analysis, significant differences have been found by gender. (p<0.05)

As a result, men's weight status have been found to be significantly higher.

4.5 . ONEWAY ANOVA

Oneway

Descriptives

Gender

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Aras	2	1,50	,707	,500	-4,85	7,85	1	2
PTT	3	1,33	,577	,333	-,10	2,77	1	2
Yurtiçi	26	1,46	,508	,100	1,26	1,67	1	2
MNG	9	1,22	,441	,147	,88	1,56	1	2
Total	40	1,40	,496	,078	1,24	1,56	1	2

Test of Homogeneity of Variances

Gender

Levene Statistic	df1	df2	Sig.
3,184	3	36	,035

Since its significant value is less than $0.035 < 0.05$, it is not distributed homogeneously.

ANOVA

Gender

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,416	3	,139	,544	,655
Within Groups	9,184	36	,255		
Total	9,600	39			

There is no significant difference between the groups as the significant value is greater than $0.655 > 0.05$.

Robust Tests of Equality of Means

Gender

	Statistic ^a	df1	df2	Sig.
Welch	,454	3	3,414	,731
Brown-Forsythe	,406	3	3,798	,758

a. Asymptotically F distributed.

POST HOC TEST

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Gender

Games-Howell

(I) Cargo	(J) Cargo	Mean Difference (I-J)	Std. Error	Sig.	99,2% Confidence Interval	
					Lower Bound	Upper Bound
Aras	PTT	,167	,601	,990	-11,62	11,96
	Yurtiçi	,038	,510	1,000	-53,36	53,43
	MNG	,278	,521	,941	-38,85	39,41
PTT	Aras	-,167	,601	,990	-11,96	11,62
	Yurtiçi	-,128	,348	,979	-4,64	4,38
	MNG	,111	,364	,988	-3,54	3,76
Yurtiçi	Aras	-,038	,510	1,000	-53,43	53,36
	PTT	,128	,348	,979	-4,38	4,64
	MNG	,239	,178	,548	-,43	,91
MNG	Aras	-,278	,521	,941	-39,41	38,85
	PTT	-,111	,364	,988	-3,76	3,54
	Yurtiçi	-,239	,178	,548	-,91	,43

All significant values are greater than 0.05. There is no significant difference between the groups.

4.6 REGRESSION

➔ Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Size ^b	.	Enter

a. Dependent Variable: Age

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,339 ^a	,115	,092	,552

a. Predictors: (Constant), Size

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,508	1	1,508	4,945	,032 ^b
	Residual	11,592	38	,305		
	Total	13,100	39			

a. Dependent Variable: Age

b. Predictors: (Constant), Size

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,921	,271		10,771	,000
	Size	-,282	,127	-,339	-2,224	,032

a. Dependent Variable: Age

The forces affecting these variables;

The regression model is significant since the significance level is $p < 0.05$. The R² value, which is expressed as the explanatory power of the model, was calculated as 0,115 (R value = 0.339). There is a 1.15% significance between height and age.

4.7 CORRELATIONS

→ Correlations

		Correlations							
		Gender	Age	Weight	Price	Category	Size	ColorTone	Cargo
Gender	Pearson Correlation	1	,036	,191	,111	,016	,193	-,196	-,130
	Sig. (2-tailed)		,827	,237	,496	,922	,234	,225	,423
	N	40	40	40	40	40	40	40	40
Age	Pearson Correlation	,036	1	,153	-,095	-,107	-,339*	-,126	,142
	Sig. (2-tailed)	,827		,347	,561	,510	,032	,439	,381
	N	40	40	40	40	40	40	40	40
Weight	Pearson Correlation	,191	,153	1	,116	-,160	,097	,280	-,112
	Sig. (2-tailed)	,237	,347		,478	,323	,550	,080	,492
	N	40	40	40	40	40	40	40	40
Price	Pearson Correlation	,111	-,095	,116	1	,166	,256	,122	,038
	Sig. (2-tailed)	,496	,561	,478		,307	,111	,455	,814
	N	40	40	40	40	40	40	40	40
Category	Pearson Correlation	,016	-,107	-,160	,166	1	-,044	-,105	,006
	Sig. (2-tailed)	,922	,510	,323	,307		,787	,519	,971
	N	40	40	40	40	40	40	40	40
Size	Pearson Correlation	,193	-,339*	,097	,256	-,044	1	,238	-,003
	Sig. (2-tailed)	,234	,032	,550	,111	,787		,139	,987
	N	40	40	40	40	40	40	40	40
ColorTone	Pearson Correlation	-,196	-,126	,280	,122	-,105	,238	1	,057
	Sig. (2-tailed)	,225	,439	,080	,455	,519	,139		,728
	N	40	40	40	40	40	40	40	40
Cargo	Pearson Correlation	-,130	,142	-,112	,038	,006	-,003	,057	1
	Sig. (2-tailed)	,423	,381	,492	,814	,971	,987	,728	
	N	40	40	40	40	40	40	40	40

*, Correlation is significant at the 0.05 level (2-tailed).

As a result of the Pearson correlation analysis;

- The coefficient between the wage and the category is positive. It is observed that the wage increases significantly as the category increases. Correlation is not causation. The relationship between them is directly proportional. For this reason, it has a strong correlation,

$$r = 0,166 , p < 0,307$$

- In the correlation relationship between age and cargo, the coefficient is positive. The relationship between them is directly proportional,

$$r = 0.142 , p < 0.381$$

- The coefficient between wage and weight is positive. The relationship between them is directly proportional. For this reason, it has a strong correlation,

$$r = 0.116 , p < 0.307$$

4.8 CONCLUSION

The aim of this project is to analyze what criteria people act when shopping for clothes, taking into account the risks in today's world. By analyzing the experimental results, it can be concluded that the final factors and levels are:

#	FACTORS	LOW LEVEL	HIGH LEVEL
1	Gender	Male	Female
2	Age	over 54	18 - 36
3	Weight	over 80 kg	40 kg - 60 kg
4	Category	Underwear	Trousers
5	Price	over 120 TL	30 TL - 60 TL, 60 TL - 90 TL
6	Size	Small	Medium
7	Color tone	Light tones, Dark tones	Light tones
8	Cargo	Aras	Yurtiçi

As a result, people's choices when shopping for clothes online differ according to many criteria.