Motives in Online Shopping through Digital Platforms in Textile: Risk Perception and Purchase Intention

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Abstract

This study aims to provide a great deal of insight into how risk perception and purchase intention differ for the consumer with different online shopping motives. Data were collected through a questionnaire with 359 voluntary consumers aged 18-28 living in Istanbul. 14 motives leading them to online shopping through digital platforms for textile products were defined with the focus group technique. First, clustering analysis was conducted to define consumers according to the guiding motives in online shopping. Next, whether the consumer segments identified by these motives have different levels of risk perception and purchase intention was investigated via ANOVA analysis.

Keywords

online shopping motives, digital platforms, textile, risk perception, purchase intention.

1. Introduction

How has online shopping through digital platforms become increasingly widespread? What are the motives that lead people to online shopping? Is the purchase decision an action that involves risk? What is the difference between uncertainty and risk? How to define consumer motivation? How does the perceived risk level associated with purchasing change according to the online shopping motives? How does the intention to shop online change according to the online shopping motives? In this empirical research, where you can find answers to these questions, the results will contribute to the development of theoretical knowledge about online shopping behaviour. In addition, companies and marketers can orient their markets according to different consumer motivation structures in online shopping.

Digital platforms, also called online platforms, facilitate the interaction between two or more distinct or independent users, such as individuals and companies. Online marketplaces, app stores, search engines, and social media are examples of such online platforms. These platforms have emerged as new organisational forms uniquely positioned to create and capture value in the digital economy. The exponential formation and growth of digital platforms occurred with the advent of personal computers, the internet, mobile devices, and cloud servers [1]. Although taking part in online shopping has increased with the current pandemic crisis [2], there was a tendency toward this direction in people's purchasing behaviour before [3] because of the advent of the internet along with technological developments [4]. It can be understood why the behaviour to shop online is attractive by determining what its underlying motives are.

The growth and innovations in computer-aided technology have led to the fact that online shopping is widely preferred in most developing countries. Previous studies explain the motivation factors for online shopping (e-shopping) as trust, perceived usefulness, perceived ease of use, web design, security, privacy, and enjoyment [i.e. 5]. Consumers have recognised that online shopping is convenient because they can buy products whenever they want and wherever they want. Moeover, people can buy the products they want more cheaply online [6]. The motives for online shopping have been dealt with in different aspects. Enjoying online shopping and related shopping shed light on the hedonic motive. The purchase price as the main element affecting the ability to shop is the economic motive; the convenien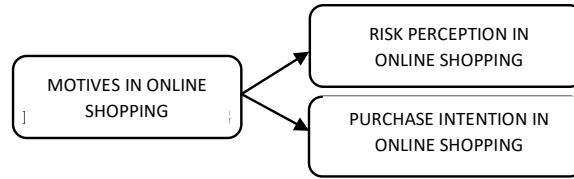ce motive is aimed at saving time and energy, and there is the informational motive which includes advertising, accessible consumer reviews, and word-of-mouth [7]. Utilitarian quality (web quality and security) and hedonic quality were used to evaluate the e-service quality on online sale platforms of the textile and fashion sector. The online fashion and textile sector has become one of the online sectors with the highest capacity [8]. Textile companies prefer to use internet channels to promote and sell their products [9].

"The risk component in online shopping is immense as the nature of the transaction is intangible." [10]. In 1960, Bauer stated that consumer behaviour is considered an act of risk-taking. Purchasing is a decision taken under uncertainty because people could judge if their purchase is a good decision or not by their post-behavioural evaluations [11]. Uncertainty in risk-taking behaviour could be related to which output will be obtained and the probability of occurrence of each output, as well as uncertainty about the value or usefulness of a possible output [12]. In other words, the "state of uncertainty" is that the probability of this result occurring cannot be predicted, regardless of whether the likely result is a gain or a loss. According to Mowen's approach (1987) [13], perceived risk refers to negative perceptions of a decision or

behaviour whose results are unclear. That is, the perceived risk is the expected possible losses or negative consequences.

Consumer shopping motivation first gained widespread recognition among marketing scientists in the 1970s [14]. While discussions on consumer motivation are intensively ongoing, it is also a concept that is the focus of research on consumer shopping behaviour [15]. "Consumer motivation is an internal state that drives people to identify and buy products or services that fulfill conscious and unconscious needs or desires. The fulfillment of those needs can then motivate them to make a repeat purchase or to find different goods and services to better fulfill those needs" [16]. By considering the product to be worth buying [17], purchase intention refers to the possibility of a consumer's willingness to buy the product [18]. While there have been some studies linking the relationship between shopping motivations and purchase intention [i.e.19], no study has been conducted in terms of whether the level of perceived risk in online shopping is varied by consumer motivation (i.e. benefits, needs, goals). Therefore, in the context of digital platforms, the current study aims to explore such change for not only purchase intention but also risk perception.

There have been studies conducted on how consumers perceive the benefits obtained from the features of the systems on online platforms or channels that take place in a purchase and what personal values the benefits reinforce. The possible results can be positive as well as negative [20]. People with different motivations have different pursuits. Since each individual is a unique being, and people with different motivations for self-realisation and revealing their full potential act in different directions [21]. Thus, the intention to purchase online is expected at different levels among individuals with different online shopping motives. It is also likely that the perceived level of risk associated with purchasing is higher or lower due to differences in their motive for online shopping. In the light of these expectations, a research model on motives, risk perception, and purchase

intention in online shopping is presented. The hypotheses are as follows in Figure 1.

2. Method

Survey and scales A focus group study involving 9 people was conducted via a discussion based on "the reasons why they prefer online shopping". This information was commented on with the support of a literature review and a 14-item list was compiled. A survey questionnaire was created which included a list of motives for online shopping, consumers' overall risk perception towards online shopping, online shopping tendency (purchase intention) measurements, and some demographics. The preliminary survey was a pilot tested and reviewed. Next, the data of the pen-and-paper questionnaire

study conducted with 359 volunteer participants living in Istanbul were used in hypothesis tests. Measures were adapted from previous studies: 3 items for risk perception [12, 22] and 3 for purchase intention [22]. To respond to the measurement items by the participants, a 5-Likert type scale was used: from -2=Strongly Disagree to +2=Strongly Agree. The scales used to measure the variables of risk perception and purchase intention were found to be valid according to the result of exploratory factor analysis and reliable according to Cronbach's Alpha values (> 0.70) (See Table 1).

While answering the survey questions, the participants were asked about their risk perception and purchase intention for the digital platform they last shopped on. For this reason, what the last textile

H1: Consumers have similarities according to their different motives in online shopping.
H2: In online shopping, consumers with different motives have different levels of risk perception.
H3: In online shopping, consumers with different motives have different levels of purchase intention.

Fig. 1. Research model

Extraction Method: Principal Component Analysis, Rotation Method: Varimax. (*reverse question)		Factor 1	Factor 2	Alpha
Risk perception	I would not feel safe shopping on an online website/social media/social network.	0.723		0.711
	There is too much uncertainty associated with shopping on an online website/social media/ social networks.	0.838		
	You can face some losses when you make purchases on an online website/social media/ social networks.	0.813		
Purchase intention	I would never consider shopping on an online website/ social media/social networks again.*		0.913	0.938
	I would probably shop again via an online website/social media/ social networks.		0.944	
	I cannot shop online/ on social media/social networks again.*		0.945	

Table 1. Exploratory factor analysis and Cronbach's Alpha

Which online website/social media/ social network did you shop on last?	f	%	What was the last textile product you bought on an online website/social media/social network?	f	%
Trendyol	92	25.7	Shoes	52	14.3
Hepsiburada	54	15.0	Clothing	15	4.2
N11	31	8.7	T-Shirt	13	3.6
Instagram	11	3.1	Sweater	10	2.8
f: frequency			Dress	10	2.8
			Others (sweatpants, shorts, shirt, coat, jersey, pants, pajamas, sweatshirt, shawl, shorts, suit, trench coat, Jumpsuit)	41	12

Table 2. Digital platform and products purchased

| Online shopping motives	Cluster 1 N=96		Cluster 2 N=45		Cluster 3 N=218	
	Mean	SD	Mean	SD	Mean	SD
1. I use an online website/social media/social network to discover and research popular or new products.	-0.39	1.248	-0.09	1.362	1.26	0.651
2. I use an online website/social media/social network to conduct price research on the product and brand.	0.25	1.163	1.31	0.848	1.40	0.815
3. I use an online website/social media/social network to follow fashion.	-0.38	1.172	-0.87	1.198	1.06	0.898
4. I use an online website/social media/social network to make shopping faster and easier.	-0.18	1.363	0.58	1.485	1.21	1.011
5. I use an online website/social media/social network to participate in competitions (such as travel, food, and holidays) that the brand organises outside of its products.	-0.64	1.085	-1.18	0.934	0.35	1.344
6. I use an online website/social media/social network to follow bloggers who promote the brand.	-0.47	1.130	-1.76	0.435	-0.05	1.390
7. I use an online website/social media/social network to get information about brand campaigns (promotion, discount, etc.)	0.30	1.185	-1.40	0.915	1.06	0.867
8. I use an online website /social media/social network to see alternative brands.	0.62	1.119	1.09	1.083	1.34	0.871
9. I use an online website/social media/social network to read reviews about the brand or its products.	0.23	1.198	0.02	1.600	1.20	0.816
10. I use an online website/social media/social network to access easily the brands I want.	0.28	1.166	1.40	0.654	1.14	0.892
11. I use an online website/social media/social network because I can benefit from customer service.	-0.45	1.085	-0.46	1.146	1.03	1.007
12. I use an online website/social media/social network because I can find the product I want at a more affordable price.	-0.34	1.143	0.93	1.031	1.32	0.691
13. I use an online website/social media/social network because I can find a product that I cannot find anywhere else.	-0.47	1.168	0.97	0.867	1.19	0.868
14. I use an online website/social media/social network because I do not have time to go shopping.	-0.39	1.105	0.32	1.144	0.66	1.126

Table 3. Descriptive statistics of online shopping motives in the cluster/segments identified

products they bought were, and which website /social media /social network they bought these products from last were also learned. Of these, only those that were stated with the highest frequency are indicated in Table 2.

Sample description 150 women and 209 men answered the questionnaires. In a sample group of 359 people, the average age of respondents is 21 years. The highest percentage of people from 18 to 28 years old are 20 (19.8%), followed by 19 (16.4%), 21 (15.9%), 22 (15.6%), 23 (11.7%), 24 (8.4%), 18 (6.1%) and 25-28 year-olds (4.7%), respectively. The participants who are university students ranked as follows: those in 1st year - 33.1%, 4th year - 30.9%, 2nd year - 21.7% and 3rd year - 11.7%. The family's monthly income was distributed between US$-355 and US$-686. The top four highest percentages for income are as follows: $466-$520 (21.2%), $521-$575 (16.4%), $411-$465 (15.6%) and $356-$410 (13.4%). Others are $355 or less (9.2%), $686 or more (9.2%), $576-$630 (8.1%), and $631-$685 (6.7%).
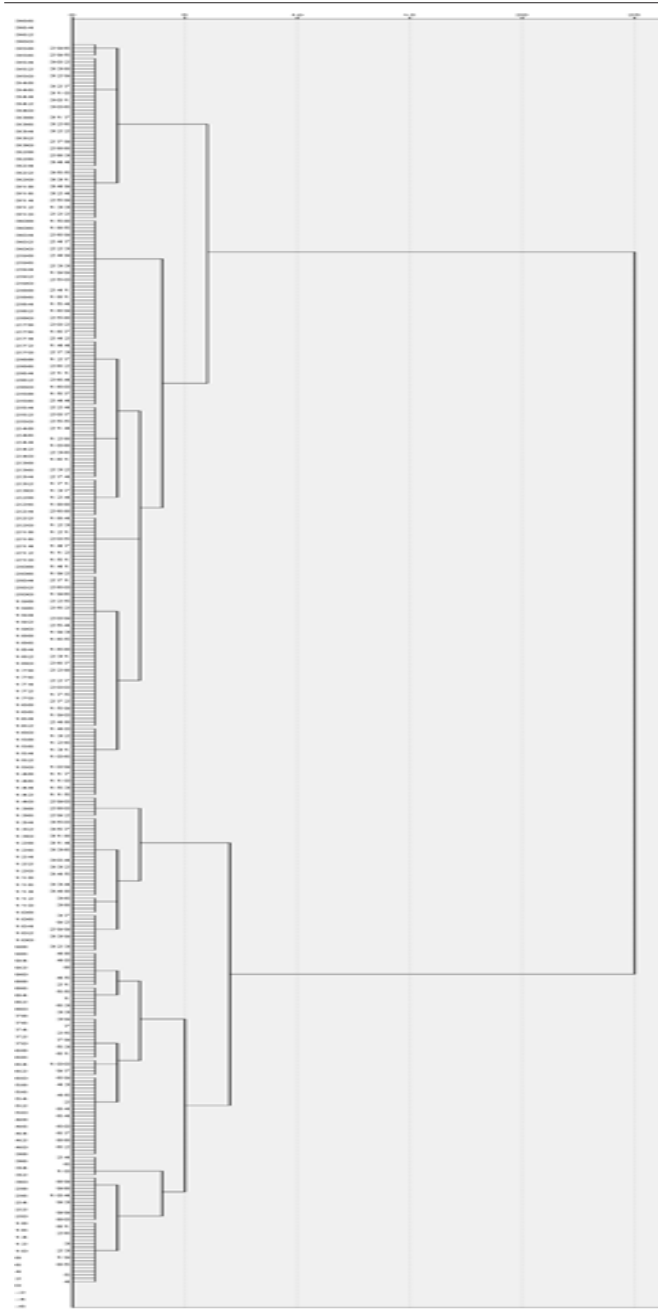
In the dendrogram on the left side, it is seen that there are three separate clusters according to the values observed. According to the evaluations made about the motivation criteria in online shopping, different segments were formed by dividing consumers into three separate clusters. The fact that there are three separate clusters shows that there are three separate evaluation levels for each of the online shopping motives, and these evaluations occur in three clusters at three separate levels from highest to lowest. Regardless of the standard deviation, the highest value that it can get according to the measurement scale will be 2, the average value will be 0, and the lowest value -2. For example, for motivation criterion 1, the evaluations of the individuals who make up cluster 3 are above zero by 1.26 and have a higher value than the evaluations of the individuals in other clusters. The resulting value for cluster 2 is below zero by -.09. The value that cluster 1 receives is below zero by -.39 and is lower than the assessments of individuals in other clusters. In this way, the evaluations of the individuals who make up the three clusters that arise as shown in the dendrogram for each motivation criterion can be interpreted as follows. (See Table 3)

Cluster/Segment (1): Among the motivation criteria leading to online shopping, evaluation levels of criteria 3, 5, 6, 7, 9 and 11 are observed as relatively high for individuals in cluster 1 compared with those in cluster 2, but lower than those involved in cluster 3. Although, based on these criteria mentioned. they have a relatively high level of motivation compared to those in cluster 2, all but a few criteria are below zero. Although a few of them are above zero, they cannot exceed the level of 1. Therefore, in terms of all motivation criteria, cluster 1 individuals are a segment whose motivation for online shopping is at a low level.

Cluster/Segment (2): Among the motivation criteria leading to online shopping, evaluation levels of criteria 1, 2, 4, 8, 10, 12, 13 and 14 are observed as relatively high for individuals in cluster 1 compared with those in cluster 2, but lower than those involved in cluster 3 (except for criterion 10). In online shopping, some motivational criteria evaluations are close to 1 or up from 1 (2, 8, 10, 12, 13) and some are close to -1 or lower than -1 (3, 5, 6, 7). Therefore, the motives that cause people in cluster 2 to make purchases online are just some of the 14 motives studied.

Cluster/Segment (3): For each of the motivation criterion examined, the motivation levels of the individuals in cluster 3 are higher than the levels of those in the other two clusters. All other motivation criteria, except criteria 5, 6 and 14, are above 1. Therefore, cluster 3 individuals are a segment whose motivation for online shopping is high.

Table 4. Dendrogram using Ward Linkage for online shopping motives

3. Analysis and results

Cluster analysis Clustering analysis is the appellation given to the techniques that ask if the data are sorted based on similarities or distinctions in the category [23]. The observations within each group are near to each other (similar observations); however, the clusters themselves are dissimilar. Unlike classification analysis, which takes place in the form of reassigning each observation to a predefined set, there are no predefined set or group assumptions in clustering analysis. In clustering analysis, the number of groups will be determined according to the similarity between observations (i.e. criteria, items) [24]. In this study, clustering analysis was performed on similar individuals of groups in the same clusters according to their similarities in online shopping motives. Hierarchical clustering analysis using Ward's method was performed to identify the segment and predict which cluster the individuals are included in. Through the analysis, participants were assigned to a cluster according to numerous motivation criteria in online shopping. A dendrogram produced through hierarchical agglomerative algorithms using Squared Euclidean Distance shows that the nature of the sample is represented by 3 clusters in regards to the similarity in terms of online shopping motives (see Table 3). The results provided support for H1.

		Descriptive statistics				Test of homo-geneity of variances		ANOVA				
		N	Mean	Std. deviation	Std. error	Levene statistic		Sum of squares	df	Mean square	F	Sig.
Risk perce-ption	1	96	-0.320	0.804	0.082	2.211	Between groups	6.455	2	3.228	3.990	0.019
	2	45	-0.180	0.886	0.132	df1=2, df2=356	Within groups	288.013	356	0.809		
	3	218	-0.014	0.941	0.064	Sig.= 0.111	Total		358			
	Total	359	-0.117	0.907	0.048							
Purchase inten-tion	1	96	0.650	0.880	0.090	6.610	Between groups	7.228	2	3.614	3.488	0.032
	2	45	1.133	0.882	0.131	df1= 2, df2= 356	Within groups	368.816	356	1.036		
	3	218	0.771	1.097	0.074	Sig.= 0.002	Total	376.044	358			
	Total	359	0.784	1.025	0.054							

Sig.: Significance, Std.: Standardizsd, df: degree of freedom

Table 5. ANOVA analysis and Levene statistics

Dependent variable	(I) Ward method	(J) Ward method	(I-J) Mean difference	Std. error	Sig.
Risk perception	Cluster/Segment 1	Cluster/Segment 2	-0.140	0.155	0.641
		Cluster/Segment 3	**-0.306***	**0.104**	**0.010**
	Cluster/Segment 2	Cluster/Segment 1	0.140	0.155	0.641
		Cluster/Segment 3	-0.166	0.147	0.498
	Cluster/Segment 3	Cluster/Segment 1	**0.306***	**0.104**	**0.010**
		Cluster/Segment 2	0.166	0.147	0.498
Purchase intention	Cluster/Segment 1	Cluster/Segment 2	**-0.482***	**0.159**	**0.009**
		Cluster/Segment 3	-0.120	0.117	0.559
	Cluster/Segment 2	Cluster/Segment 1	**0.482***	**0.159**	**0.009**
		Cluster/Segment 3	**0.362***	**0.151**	**0.049**
	Cluster/Segment 3	Cluster/Segment 1	0.120	0.117	0.559
		Cluster/Segment 2	**-0.362***	**0.151**	**0.049**

*. The mean difference is significant at the .05 level. Sig. Significance, Std. Standardized

Table 6. Post-hoc analysis: Multiple comparisons via Games Howell test

ANOVA Analysis Differences in risk perception and purchase intention levels between the three different segments, which turned out to vary in terms of their motivations, were tested by ANOVA analysis. According to the results shown in Table 5, the risk perceptions and purchase intentions of people with different levels of motivation, formed into 3 groups, in online shopping differ significantly (p=.019, and p=.032). To test the homogeneity of the variances, which is an assumption on which the analysis of variance is based, the Levene statistical test was applied. Accordingly, homogeneity of variance in terms of risk perception was achieved for 3 segments with different motivations (p=.111), but the homogeneity of variance in terms of purchase intention (p=.002) was not obtained.

To understand which clusters of individuals of different motivations differ in risk perception and purchase intention, it is necessary to study the results of the analysis of multiple comparisons. As can be seen from Table 6, the "Games Howell" test was applied, which is appropriate when the number of group units is not equal to each other in multiple comparisons. When the risk perceptions related to online shopping were compared between clusters with different motivations, only a significant difference was found between clusters 1 and 3 (p=.010). The average risk perception for cluster 1 (-.320) is lower than that of cluster 3 (-.014). These

results provided some evidence for H2. In terms of the purchase intentions arising in online shopping, there was no significant difference between clusters 1 and 3. On the other hand, cluster 2's purchase intention in online shopping differs significantly from both cluster 1's and cluster 3's (p=.009, p=.049). The average purchase intention for cluster 2 is 1.333, higher than the other 2 groups. Accordingly, the average purchase intention for cluster 3 is .771. The average purchase intention for cluster 1 is the lowest at .650. The results provide notable support for H3.

4. Discussion

This study aims to understand what motivations play a role in this process when consumers want to purchase some textile products on an online platform, what the links between these motives are, and the risk they perceive about shopping and their purchase intentions. For this purpose, consumers were divided into 3 separate segments according to 14 separate motives defined. Next, different segments with low, high and moderate motivation were compared in terms of risk perception and purchase intention. It is an interesting finding that online shopping is perceived as less risky for the consumer segment, whose motivation is low compared to the segment with high motivation. The risk of online shopping in two segments is low, but the relative

difference between them is significant. While people are motivated by positive outcomes related to online shopping, concurrently the possibility of these outcomes occurring oppositely may also be salient. Thus, people with high motivation may perceive online shopping as relatively riskier. Next, compared to the segment with high motivation for online shopping, the purchase intentions in online shopping do not differ for the consumer segment, which has low motivation. While their motivation levels were so different, there was no significant difference between their purchase intentions, and both consumer segments approached positively the act of purchasing on an online platform. If so, the difference in purchasing intentions is not due to varying levels of motivation; but can be due to other possible different factors. On the other hand, the other consumer segment, which has a pronounced motivation for online shopping in terms of some motives, is the group with the highest intention to purchase on an online platform. This segment shows significantly higher purchasing intention compared to the others, which are with the lowest and highest motivation. As a result, apparently; depending on not only which of the motives is more dominant in online shopping but also which motivation is higher, the consumer's perception of risk and purchase intention regarding online shopping could be shaped.

5. Conclusion

People may have different motives due to different needs in online shopping while they shop for some textile products through digital platforms. Risk perceptions and purchase intentions that will guide their behaviour may differ with a different motive or with the same one but at different levels of influence. Within the framework of this research, three separate consumer segments have been identified with different motives and/or motivation levels according to the 14 separate online shopping motives examined. The first segment refers to the people who have low motivation for online shopping. The second segment consists of a group of people where only some motives related to online shopping are more prominent (i.e. searching for a price and sort of product and/or brand). The third segment includes people whose motivation for online shopping is high in terms of all motives defined. First, it was found that people are included in separate groups because they have similarities or differences according to the motivating reasons for online shopping. Secondly, risk perceptions vary among some groups of consumers whose motives or motivation levels vary. Thirdly, it is concluded that purchase intentions also differ significantly among the groups with different motivations.

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