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## **DO VALUE PERCEPTIONS OF TURKISH PEOPLE DIFFER BETWEEN TRADITIONAL CHANNEL AND INTERNET CHANNEL?**

### **Abstract**

Nowadays many retailers have started to use more than one sales channel. Especially traditional shopping and online shopping channels are the most preferred ones. Since the consumers who use those two channels are increasing, the question of why these two channels are mostly preferred is getting more important for both researchers and retailers. In this research; the value perception concept which explains the preferences and buying intentions of consumers, is used as a criteria for comparing those two channels.

The sample of this study is composed of consumers buying technology products from internet retailers or traditional retailers. Questionnaires were applied to 931 Internet store buyers and 802 traditional store buyers. The prerequisite for answering the questionnaire was to buy a technology product in the last six months either from the Internet or a technology store. All of the consumers who joined the survey were living in Istanbul.

T-test was applied in order to test the differences between Internet channel buyers and traditional channel buyers. The results of the study suggest that value perception and the antecedents of value perception were all different between the consumers of both channels. Monetary value perception of Internet channel consumers is found greater than traditional channel consumers. Whereas, traditional channel consumers' value perceptions for emotional, functional and social dimensions are found higher than Internet channel consumers. Interestingly traditional channel consumers' financial risk perceptions are greater than internet channel consumers. On the other hand, performance risk perception, perceived sacrifice, perceived relative price and quality perception dimensions are high in traditional channel consumers.

**Keywords:** Value perception, technology products, internet stores, traditional stores, t-test

## **1. Introduction and Objectives**

The number of people using the Internet for shopping is increasing day by day. So, finding an answer to why customers buy products online rather than offline has become an important issue for retailers. Recent results of Turkish Statistical Institute's ICT (Information Communications Technology) Usage in Households Survey (2010) shows that in Turkey 15% of internet consumers used the Internet for shopping. According to the same source, this number was only 5,59% in 2005 (TUIK, 2005). When compared to traditional shopping, this number is still not so high. But the change in the rate has tripled in five years.

According to Nicholson, Clarke and Blakemore (2002), effective marketing begins with an understanding of how and why customers behave as they do. They state that, with the emergence of Internet shopping this knowledge of consumer behavior increasingly requires a multichannel dimension. If the retailer is to successfully operate both physical and electronic distribution channels, and to direct consumers to preferred channels for certain products and services, an understanding is needed of why customers select particular modes of shopping for certain products.

Also the same products are sold in both traditional and Internet channels, there are some main differences that customers experience. Lack of personal service and face to face communication, inability to inspect or handle the product are those features that a customer cannot experience in an online retail store. Those are the perceived disadvantages of shopping online compared to traditional bricks and mortar stores (Levin, Levin and Heath, 2003). But, traditional channels of retailing are challenged by Internet's ability to offer products to customers who are far away, with resulting increased competition in both product range and price (Burton, Pulendran and Sauer, 2001). In the near future, those advantages will not be a competition fact for online retailers anymore. As the number of people using Internet for shopping purposes increases, some e-tailers realized that most of the features which were special to traditional shopping are also becoming important for online shopping.

So, it is important to emphasize an overall concept for comparing those two channels. In this study perceived value and antecedents of perceived value were used to make this comparison. Perceived value is a concept, which is used to explain consumer preferences and consumers' shopping behavior in many studies (Dodds and Monroe, 1985; Baker, 1990; Dodds, Monroe and Grewal, 1991; Sweeney, 1995; Sweeney, Soutar and Johnson, 1999).

In the literature, value perception concept is mostly used for analyzing consumers making traditional shopping or Internet shopping. But, there are not many studies that compare those two shopping channels (Sim and Koi, 2002; Levin, Levin and Weller, 2005; Ahn, Ryu and

Han, 2004; Broekhuizen, 2006). The main objective of this study is to find out if value perceptions of consumers differ between traditional channel and Internet channel. Besides the main purpose, determining the differences for the antecedents (risk perception, quality perception, perceived sacrifice, and perceived relative price) of value perception is also aimed. While value perception is represented by only monetary value dimension in many researches, this study covers all dimensions (social value, functional value, emotional value and monetary value) of value perception. Risk perception is represented with its two different dimensions which are financial risk and performance risk.

## **2. Conceptual Framework**

### ***2.1. Perceived Value***

The selection of the Internet versus traditional stores for shopping can vary for different customers and in different situations, even for the same customer (Kim, 2002). This study's framework is based on perceived value and its antecedents. Perceived value has gained much attention from marketers and researchers because of the important role it plays in predicting purchase behavior and achieving sustainable competitive advantage (Chen and Dubinsky, 2003).

Before addressing the role of value perception on consumer's channel selection behavior it is believed that making a broad definition about perceived value will be more appropriate. According to Sinha and DeSarbo (1998) value is central to economic exchange and endemic to marketing, in which both the buyer and seller obtain a value greater than each gives up. So that, both parties are economically the gainer because each receives something more useful to him/her than what he/she has given up. If both of the parties believe that they make a profit from a transaction, they will think that transaction has a value for them.

Numerous studies have been conducted in marketing to understand the concept of perceived value. One of the pioneering studies in this field was made by Zeithaml in 1988. In her exploratory study, people were asked to define what they understand from value perception.

The consumer responses from the exploratory study suggest four definitions of value:

1. Value is low price.
2. Value is whatever I want in a product.
3. Value is the quality I get for the price I pay.
4. Value is what I get for what I give.

Those expressions about perceived value were conceptualized in one overall definition: "Perceived value is the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given." Zeithaml's definition provides a basis for

most of the studies made about perceived value in the literature. This definition of perceived value involves a trade-off between what a customer receives and what he/she gives up to acquire a product or service (Tam, 2004). Based on previous definitions, this study defines perceived value as consumers' perceptions of net benefits in which they endure for the costs in order to get the benefits from a transaction.

### ***2.2. Dimensions of Perceived Value***

Most of the studies in the past assume that perceived value is a unidimensional concept which can be measured by directly asking consumers to rate their value perception after a purchase behavior (Kerin, Jain and Howard, 1992; Sweeney, Soutar and Johnson, 1999). The main problem with this kind of measurement is assuming that all people have common sight while evaluating value perception. According to Sánchez-Fernández and Iniesta-Bonillo (2007) this approach includes the possibility that this unidimensional construct might be produced by the effects of multiple antecedents, but it does not include the view that value is an aggregate concept formed from several components.

A second approach conceives perceived value as a multidimensional construct that consists of several interrelated dimensions (Sheth, Newman and Gross, 1991; Kotler, 2000; Sweeney and Soutar, 2001; Long and Schiffman, 2000; Petrick, 2002; Tsan and Liu, 2005). Sinha and DeSarbo (1998) states that perceived value is a multidimensional construct which is derived from perceptions of price, quality, quantity, benefits, and sacrifice, and whose dimensionality must be established for a given product category. This approach allows overcoming some of the problems of the traditional approach to perceived value, particularly its excessive concentration on economic utility (Sanchez, Callarisa, Rodriguez and Moliner, 2006).

This paper adopts to the second approach and tries to measure the value perceptions of consumers with a multidimensional scale. There are many scales developed to measure perceived value in a multidimensional construct (Sheth, Newman and Gross, 1991; Kantamneni and Coulson, 1996; Sweeney, Soutar and Johnson, 1999; Sweeney and Soutar, 2001; Petrick, 2002), but the PERVAL (Perceived Value) scale developed by Sweeney and Soutar in 2001 was used mainly in this study. PERVAL scale was used both in pre-purchase and post-purchase buying behaviors and was valid and reliable in those behaviors. At first this scale was developed to measure the value perceptions of consumers in brand level. But Lizhu (2006) used this scale to compare the shopping channels as in this study.

The PERVAL scale is a 19 item measure that can be used to assess customers' value perceptions. This scale has four dimensions which are social, monetary, functional and emotional dimensions. According to Castro (2004), PERVAL scale demonstrates that

consumers make value judgments for products, not just in functional terms of expected performance, but also in terms of the enjoyment or pleasure derived from the product's emotional and social value.

### ***2.3. Antecedents of Perceived Value***

The main antecedents of perceived value in the literature are perceived price, quality, perceived sacrifice, risk perception, service quality and perceived relative price (Broekhuizen, 2006; Snoj, Korda and Mumel, 2004; Hellier, Geursen, Carr and Rickard, 2003; Chen and Dubinsky, 2003; Agarwal and Teas, 2001; Teas and Agarwal, 2000; Cronin, Brady and Hult, 2000; Chapman and Wahlers, 1999; Sweeney, Soutar and Johnson, 1999; Cronin, Brady, Brand, Hightower and Shemwell, 1997; Sweeney, Soutar and Johnson, 1997; Dodds, Monroe and Grewal, 1991; Zeithaml, 1988). This study includes risk perception, quality perception, perceived relative price and perceived sacrifice as antecedents of perceived value. Risk perception is measured with its two dimensions which are financial risk and performance risk.

#### ***2.3.1. Risk Perception***

Risk perception is defined as the subjective expectation of a loss (Sweeney, Soutar and Johnson, 1999). Before buying a product consumers want to touch, taste, smell, in other words experience a product. They want to perceive risk as little as possible. According to Geert Hofstede's study Turkish people's risk avoidance coefficient is 85, which is a high rate. So, it can be said that Turkish consumers want to buy the products by seeing, touching or tasting as possible (Koç, 2007). The inclusion of perceived risk in a value model may help to explain how perceived value is evaluated in a retail setting. In this study two risk dimensions are included, financial and performance risk. Each risk dimension can be viewed as an expectation of a future cost that contributes to a good's perceived value for money at the time of purchase. Financial risk is defined as a net financial loss to a customer, including the possibility that the product may need to be repaired, replaced or the purchase price refunded. Performance risk is defined as the loss incurred when a brand or product does not perform as expected. These two dimensions of risk perception were found the strongest ones in the literature constructing risk perception (Bearden and Shimp, 1982; Sweeney, Soutar and Johnson, 1999; Agarwal and Teas, 2001). Similarly, the most significant results for risk perception in Internet shopping were the same dimensions (Bhatnagar, Sanjog and Raghav, 2000; Bhatnagar and Ghose, 2004; Forsythe, Chuanlan, Shannon and Gardner, 2006).

#### ***2.3.2. Perceived Sacrifice***

Sacrifice is defined by Cronin, Brady and Hult (2000), as what is given up or sacrificed to acquire a product or service. Specifically, items that represent consumers' perceptions of the

monetary and the non-monetary price associated with the acquisition and use of a service or product is the indicators of the sacrifice construct. Zeithaml (1988) states that sacrifice should not be limited to monetary price alone, especially in situations where time costs, search costs, and convenience costs are salient to the consumer. In both channels (traditional shopping channel and Internet channel), consumers are exposed to both monetary and nonmonetary costs while shopping.

### ***2.3.3. Perceived Relative Price***

Perceived relative price is defined in terms of consumers perceptions of the price compared to other brands of the same product with similar features. This is clearly different from the actual price of the product (Swait and Sweeney, 2000). In the same manner perceived relative price of a shopping channel can be defined as the price of that channel compared to alternative shopping channels. Sweeney, Soutar and Johnson (1999) argues that the relevance of price to perceived value for money in a retail situation is likely to be derived from comparing the price of the given brand with competitive brands with the same features, size and functions. For this reason, perceived relative price was considered more relevant to the purchase decision than any dollar metric.

### ***2.3.4. Quality Perception***

Perceived quality is different from objective quality or actual quality in which the same logic is processing with perceived relative price. According to Zeithaml (1988), objective quality is the term used in the literature to describe the actual technical superiority or excellence of the products or services. But perceived quality is different from objective quality and can be defined as “consumer assessment regarding the global excellence or superiority of a product”. Perceived quality consists of intrinsic and extrinsic cues. Physical features are the color, flavor, and texture of products. Extrinsic cues are product-related but not part of the physical product itself, like brand, advertising, and image (Chu and Lu, 2007). This study tries to expose the perceived qualities of shopping channels by measuring the consumers’ quality perceptions for the products sold in those channels.

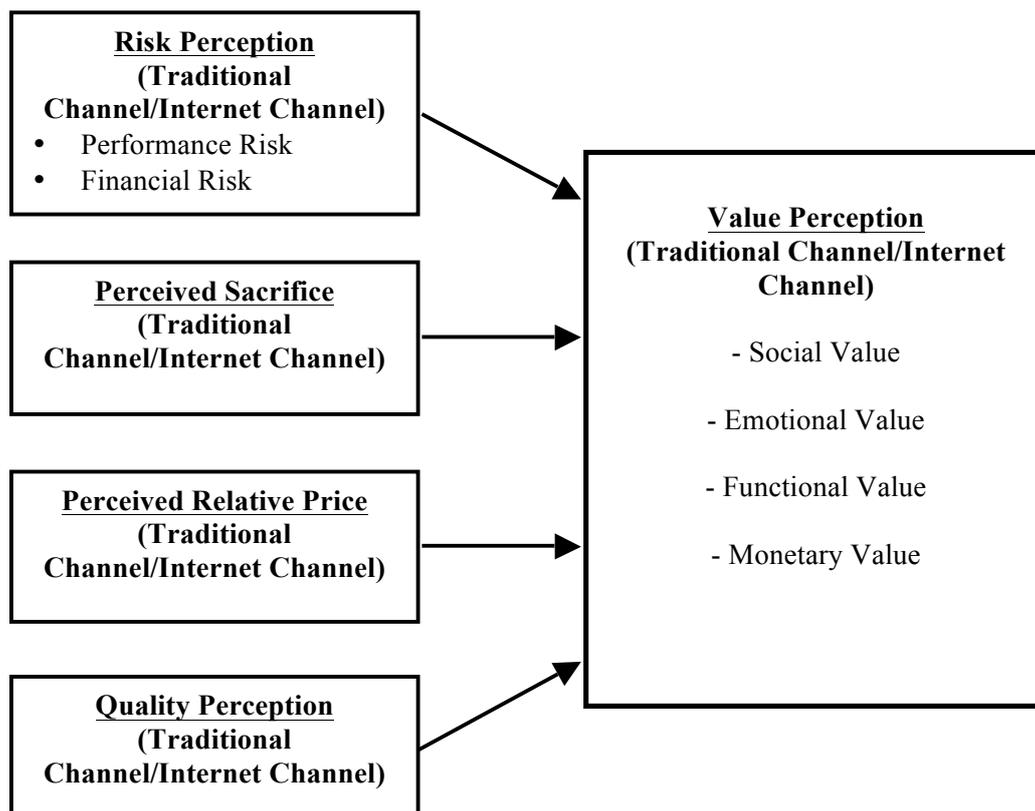
## **3. Research Model and Hypotheses**

The rapid growth of e-commerce, transformed the world marketplace and retailing is one of the key areas of this revolution. As the retail industry faces this new trend, it is natural to compare the two modes of retailing. Only a clear understanding of the differences and their implications can help retailers establish sound strategies that can materialize (Otto and Chung, 2000). The main purpose of the study is to determine whether consumers using the traditional shopping channels and consumers using Internet shopping channels differentiate according to

their value perceptions. Besides this main purpose, to find out the differences between those two groups according to the antecedents of value perception are also aimed.

This study tries to investigate consumers' perceptions of buying technology products offline and online. This product group is selected because they are often sold both through the Internet and from traditional stores. For these products, the consumers have a real opportunity to choose between those two channels. Technology products have the highest turnover rates in both retailing channels in Turkey. Furthermore, technology products in Turkey are widely sold from Internet stores as well as from traditional stores. Because there are a number of companies using both channels to sell technology products.

Research model in Figure 1 shows that shopping channel is a factor that discriminate value perceptions and antecedents of value perceptions of consumers.



**Figure 1: Research Model**

Previous studies in the literature suggests that consumers differ from each other according to the shopping channels they use from different aspects (Broekhuizen, 2006; Levin, Levin and Weller, 2005; Dennis, Fenech and Merrilees, 2004; Swinyard and Smith, 2003; Sim and Koi, 2002; Otto and Chung, 2000). According to Swinyard and Smith (2003), compared with traditional shoppers, online shoppers are younger, wealthier, better educated, have higher computer literacy, spend more time on their computer, spend more time on the Internet, find online shopping to be easier and more entertaining, and are more fearful of financial loss from

online shopping. Most of the consumers using the Internet channel for shopping are goal oriented people (Gilly and Wolfenbarger, 2000). A study made in Turkey found that online shoppers differ from traditional shoppers with their value awareness (Enginkaya, 2006). So, considering those, it is possible to assume that people using the Internet channel and people using traditional channel for shopping will also differ in their value perceptions. Also it is assumed that they will differ according to the antecedents of value perception. Therefore, the following research hypotheses are proposed:

H<sub>1</sub>: Consumers using Internet channel and consumers using traditional channel for shopping differ according to their value perceptions.

H<sub>2</sub>: Consumers using Internet channel and consumers using traditional channel for shopping differ according to their risk perceptions.

H<sub>3</sub>: Consumers using Internet channel and consumers using traditional channel for shopping differ according to their quality perceptions.

H<sub>4</sub>: Consumers using Internet channel and consumers using traditional channel for shopping differ according to perceived sacrifice.

H<sub>5</sub>: Consumers using Internet channel and consumers using traditional channel for shopping differ according to perceived relative price.

#### **4. Method**

Value perception and antecedents of value perception were measured with multiple items. Items were generated from a literature review. Value perception scale was adapted from Sweeney and Soutar (2001) and Petrick, (2002) and has 21 items. Value perception is used in this study with its four dimensions. Antecedents of perceived value which are risk perception, perceived sacrifice, perceived relative price and quality perception are measured by 21 items. Perceived risk is composed of financial risk and performance risk and has seven items (Sweeney, Soutar and Johnson, 1999; Stone and Gronhaug, 1993; Broekhuizen, 2006). Perceived sacrifice is measured by seven items (Cronin, Brady and Hult, 2000; Teas and Agarwal, 2000). Perceived relative price has three items (Baker, Parasuraman, Grewal and Voss, 2002; Sirohi, McLaughlin and Wittink, 1998; Sweeney, Soutar and Johnson, 1999). Finally, quality perception is measured with four items (Dodds, Monroe and Grewal, 1991; Broekhuizen, 2006).

All of the items mentioned above were questioned with answer options on a five point Likert scale (1: strongly agree, 2: agree, 3: neither agree nor disagree, 4: disagree and 5: strongly disagree). The questionnaire included also the demographic profile of the respondents.

The sample of this study is made up of from both consumers who have bought a technology product from a traditional retailer and those who bought from an Internet retailer in the last six months. So, there were two kinds of samples for the study. The data which represents the traditional part was collected by face to face questionnaires. Those questionnaires were collected from different districts of Istanbul which are close to shopping malls having electronic stores. The data representing the Internet shoppers were collected via an online survey. People were contacted by e-mail and asked to participate in a questionnaire. A well known Turkish electronic company sent those e-mails to people who have shopped from their Internet stores at once for buying technology products. But, those consumers were not only using this website to buy technology products online. Both the offline sample and online sample were people shopping from different electronic stores and were living in Istanbul.

Before collecting the final data, in order to ensure that the questionnaire is well understood and to detect the existence of misinterpretation as well as any spelling and grammatical errors, face to face and online interviews were applied to 50 people each who have both technology products offline and online. The suggestions were subsequently incorporated into the final questionnaire. The final analysis included 931 valid and complete responses for the offline survey, 802 valid and complete responses for the online survey.

## **5. Results**

Both samples of the study composed of well educated and mostly young people. Men were more than women, but in the online survey men were numerically superior to women with 92.8%. But this number is not surprising, since consumers using the Internet channel for shopping are mostly men in Turkey (TUIK, 2010). Given that men are more interested in technology products, this number is usual. The 62.9% of the offline sample were men. The participants were similar with their education.

### **5.1. Validity and Reliability of the Scales**

Following the studies of Dodds, Monroe and Grewal (1991), Agarwal and Teas (2001) and Broekhuizen (2006), the dimensionality of the scales used to measure perceived value, risk perception, perceived sacrifice, perceived monetary value and quality perception were all assessed by using exploratory factor analysis with varimax rotation and confirmatory factor analysis. After examining the validity of the scales by using exploratory and confirmatory factor analyses, reliabilities were assessed by cronbach's alpha coefficients.

The results of the exploratory factor analyses indicate similar results with the literature. Value perception items of both data indicated four factors that are consistent with the intended measures, but two items were removed from both data. After removing those items, the factor

solutions accounted for 64.72% and 74.82% of the total variance for the offline and online context, respectively. After performing exploratory factor analysis to perceived value, the same procedure was applied to the antecedents of perceived value which were risk perception, perceived sacrifice, perceived monetary value and quality perception. Five factors were obtained for both dataset. Only financial risk and performance risk were loaded on the same factor in both contexts. Perceived sacrifice was divided into two factors which were named as “time/effort cost” and “sacrifice from other purchases”. The solutions accounted for 68.11% and 74.26% of total variance for the offline and online context, respectively.

According to Gerbing and Anderson (1988), confirmatory factor analysis (CFA) is a stricter interpretation of dimensionality than can be provided by exploratory factor analysis. Therefore, confirmatory factor analysis was conducted in which every measurement item was restricted to load on its before specified factors, and the factors themselves were allowed to correlate (Agarwal and Teas, 2001). The model was consequently refined by eliminating items contributing most to lack of fit and have the largest error variances (Broekhuizen, 2006). According to this three items from value perception and two items from the antecedents (one from time/effort cost and one from perceived relative price) were removed. The results of confirmatory factor analyses for both dataset are given in Table1. The fit of the confirmatory factor analysis models are assessed on a number of fit indices, including chi-square, relative chi square, goodness of fit (GFI), comparative fit index (CFI), normed fit index (NFI), adjusted goodness of fit index (AGFI), Root Mean Square of Approximation (RMSEA) (Hair, Anderson, Tatham and Black, 1998; Kline, 2005; Raykov and Marcoulides, 2006).

**Table 1:** Test of Discriminant Validity Using CFA for Online and Offline Dataset

	<b>X<sup>2</sup>/sd</b>	<b>GFI</b>	<b>AGFI</b>	<b>NFI</b>	<b>CFI</b>	<b>RMSEA</b>
<b>Online Dataset</b>	2.73	0.90	0.88	0.93	0.96	0.047
<b>Offline Dataset</b>	2.76	0.91	0.90	0.92	0.95	0.044
<b>Recommended Level</b>	< 3.00	> 0.09	> 0.09	> 0.09	> 0.09	< 0.05 (0.08)

The chi square statistics were significant and the ratios of the chi square value relative to degrees of freedom were less than the cutoff point of 3. Furthermore, the goodness of fit index (GFI), adjusted goodness of fit index, normed fit index, and comparative-fit index were closer or greater than the recommended 0.9; and the root mean square error of approximation

(RMSEA) was less than 0.08 and not statistically different from 0.05 (Hair, Anderson, Tatham and Black, 1998). Therefore, it was found that the model fit the data reasonably well.

In order to test the reliabilities of the measures cronbach's alpha coefficient was used. All of the alpha coefficients were large enough to say that the measures were reliable. Because all of the coefficients were greater than 0.70 which is the cutoff point. The higher the coefficient score, the more reliable the generated scale is. 0.7 is an acceptable reliability coefficient but lower thresholds are also sometimes used in the literature (Santos, 1999). The coefficient alpha scores for the scales are summarized in Table 2.

**Table 2:** Cronbach's Alpha Coefficients

<b>Dimensions</b>	<b>Cronbach's Alpha Coefficients-Offline Dataset</b>	<b>Cronbach's Alpha Coefficients-Online Dataset</b>
Perceived Value	0,874	0,900
Perceived Monetary Value	0,858	0,876
Perceived Emotional Value	0,810	0,917
Perceived Functional Value	0,750	0,839
Perceived Social Value	0,911	0,967
Antecedents of Value Perception	0,741	0,828
Financial Risk Perception	0,845	0,824
Performance Risk Perception	0,862	0,851
Time/Effort Cost	0,882	0,890
Sacrifice From Other Purchases	0,918	0,930
Perceived Relative Price	0,746	0,804
Quality Perception	0,856	0,936

### **5.2.Differences in Value Perception and its Antecedents between Consumers Using Internet Channel and Traditional Channel**

After testing the validities and the reliabilities of the scales t test was employed to data. T test was used in order to determine the differences between consumers using traditional channel and consumers using Internet channel according to their value perceptions. In addition to value perception, differences are also tested according to the antecedents of value perception. Table 3 summarizes the mean values, standard deviations and standard errors of those measures.

**Table 3:** Mean Values, Standard Deviations and Standard Errors of Scales for Measuring Value Perceptions and its Antecedents of Consumers Using Different Channels

<b>Factors</b>	<b>Mean Values</b>	<b>Standard Deviations</b>	<b>Standard Errors</b>
Perceived Monetary Value (Traditional C.)	3,4904	,75390	,02471
Perceived Monetary Value (Internet C.)	3,8209	,65888	,02327

Perceived Emotional Value (Traditional C.)	3,7320	,69687	,02284
Perceived Emotional Value (Internet C.)	3,4557	,88487	,03125
Perceived Functional Value (Traditional C.)	3,7558	,69323	,02272
Perceived Functional Value (Internet C.)	3,5528	,78181	,02761
Perceived Social Value (Traditional C.)	2,7731	,95581	,03133
Perceived Social Value (Internet C.)	2,5985	1,07895	,03810
Financial Risk Perception (Traditional C.)	2,2113	,71117	,02331
Financial Risk Perception (Internet C.)	1,9769	,70441	,02487
Performance Risk Perception (Traditional C.)	2,0680	,73350	,02404
Performance Risk Perception (Internet C.)	2,3558	,84508	,02984
Time/Effort Cost (Traditional C.)	2,6985	1,11343	,03649
Time/Effort Cost (Internet C.)	1,9855	,82389	,02909
Sacrifice From Other Purchases (Traditional C.)	2,7243	,94111	,03084
Sacrifice From Other Purchases (Internet C.)	1,9310	,78617	,02776
Perceived Relative Price (Traditional C.)	2,5612	,85321	,02796
Perceived Relative Price (Internet C.)	2,1901	,76499	,02701
Quality Perception (Traditional C.)	3,9025	,65641	,02151
Quality Perception (Internet C.)	3,3946	,68886	,02432

Following Table 3, Table 4 summarizes the t test results of this study. According to those results, all of the differences between traditional store consumers and Internet store consumers are significant. Perceived monetary value of consumers using Internet channel for buying technology products are greater than traditional store consumers who use this channel for buying technology products. Whereas, traditional channel consumers' value perceptions for emotional, functional and social dimensions are higher than Internet channel consumers. Interestingly traditional channel consumers' financial risk perceptions are greater than internet channel consumers. On the other hand, performance risk perception, perceived sacrifice, perceived relative price and quality perception dimensions are high in traditional channel consumers. All of the hypotheses are supported, since there are significant differences between those consumers using traditional channel and Internet channel for buying technology products.

**Table 4:** T Test Results for Value Perceptions and its Antecedents of Consumers Using Different Channels

Factors	t Values	d.o.f.	Sig.	Mean Differences
Perceived Monetary Value	-9,642	1731	0,000	-0,331
Perceived Emotional Value	7,264	1731	0,000	0,276
Perceived Functional Value	5,730	1731	0,000	0,203
Perceived Social Value	3,572	1731	0,000	0,175
Financial Risk Perception	6,872	1731	0,000	0,234
Performance Risk Perception	-7,588	1731	0,000	-0,288
Time/Effort Cost	14,950	1731	0,000	0,713

Sacrifice From Other Purchases	18,866	1731	0,000	0,793
Perceived Relative Price	9,467	1731	0,000	0,371
Quality Perception	15,697	1731	0,000	0,508

## 6. Conclusion and Managerial Implications

In this study, the results of two models were reported to gain insight into the perceptions of consumers using either retailers' websites or physical stores to buy technology products. First of all a literature review was made to determine the factors that affect the consumers' channel choice behaviors both in online and offline environments. But, it was seen that online channel and offline channel behaviors of consumers were mostly investigated in isolation from each other. In this study those two types of channels are compared by investigating the factors to use specific online and offline channels to buy technology products. Value perception and its antecedents were selected to make the comparison.

A number of important conclusions can be drawn from these results that are of interest to both research and practice. First, consumers buying technology products from the Internet perceive monetary value higher than the other dimensions of value. This implies that, internet consumers are still using this channel because of its price advantages, not for fun or to be socially accepted by others. Internet retailers selling technology products could emphasize the advantageous prices of their products in their promotion campaigns. Second, internet retailers are still perceived risky about the performances of the products they are selling. The perception of the performance for their products needs to be improved significantly, so that those concerns of consumers can be addressed. Internet retailers may provide their consumers the opportunity of speaking and discussing with other consumers who are shopping at the same time with them. So, those people who are planning to buy products could share their experiences with each other by this way. This could also be made by using social media channels. Since, most of the technology stores have their own pages in social media sites like Facebook, they can also get in touch with those customers. By this way, the customers will get prompt answers to their questions. At last, but interestingly, financial risk perceptions of consumers preferring traditional retailers were slightly higher compared to internet consumers. It can be said that consumers buying technology products from the Internet do not consider security of their transactions anymore.

## 7. Limitations and Further Research

This study represents some limitations as follows. First of all the results and conclusions of this study are limited by technology products and samples of consumers selected. Results are limited to the consumers, because the respondents in the current study are consumers living in

Istanbul and who buy technology products either from the Internet or from traditional stores. The main objective was to compare the Internet and traditional channel, but as it is hard to make a general comparison, technology products were selected. In Turkey, this product type is actively sold using those two types of channels. Future research extending the present study should recruit a larger, more diverse sample to overcome such limitations and broaden interpretation. Also, future researchers who attempt to make a comprehensive comparison of online/offline shopping preferences may include a wide diversity of products.

Besides, this study uses risk perception, quality perception, perceived sacrifice and perceived relative price as antecedents of value perception. Those factors are used in this study because of their conformity to the objectives and the product type selected. But, some researchers in the literature used other antecedents of value perception in their studies which were country of origin, consumer experience and service quality (Sweeney, Soutar and Johnson, 1999; Teas and Agarwal, 2000; Cronin, Brady and Hult, 2000; Agarwal and Teas, 2001; Chen and Dubinsky, 2003; Broekhuizen, 2006). In the future, the other antecedents of value perception could be included and the difference may be retested. Furthermore, the two types of shopping channels are selected in this study in order to make a comparison. This is because these are the channels that are mostly preferred for shopping by consumers. But, the other shopping channels like tele-shopping or catalogue shopping could also be included to make a broader comparison.

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