

## SIDE EFFECTS OF PSYCHOLOGICAL PRICING: HOW BRAND TRUST IS AFFECTED?

Edin Güçlü SÖZER\*

### ABSTRACT

This study aims to measure the effects of odd-ending prices, one of the psychological pricing tactics, on consumers' brand image perceptions and their trust towards the brand in a retailing context. Specifically, the difference between the perceptions of price conscious and non-price conscious consumers in terms of brand image and their brand trust are analyzed when they are exposed to 9-ending price information. The findings of the study confirm that price consciousness play a significant role in shaping their brand image perceptions and brand trust levels. Compared to non-price conscious consumers, those consumers with price consciousness level have negative perceptions in terms of both brand image and brand trust. The direct and strong negative effect of price consciousness on brand trust becomes stabilized in a minimal amount due to positive effect of brand image on brand trust. Based on the findings of this study, some practical implications are provided.

**Key Words:** Psychological pricing, odd-ending prices, brand image, brand trust

## PSİKOLOJİK FİYATLAMANIN YAN ETKİLERİ: MARKA GÜVENİ NASIL ETKİLENİR?

### ÖZ

Bu çalışma psikolojik fiyatlama taktiklerinden bir tanesi olan tek sayı ile biten fiyatlama yönteminin perakende sektörü bağlamında tüketicilerin marka imajı algıları ve markaya olan güvenleri üzerindeki etkisini ölçmeyi hedeflemektedir. Çalışma kapsamında özellikle, fiyat farkındalığı olan ve olmayan tüketicilerin 9 rakamı ile biten fiyatlara maruz kaldıklarında oluşan marka imajı algıları ve markaya duydukları güven seviyeleri arasındaki fark analiz edilmiştir. Çalışmanın sonuçları fiyat farkındalığının marka imajı algıları ve markaya olan güven seviyesi üzerinde etkili olduğunu teyit etmektedir. Fiyat farkındalığı olmayan tüketicilere göre yüksek fiyat farkındalığı olanlar hem marka imajı hem de markaya olan güven açısından daha negatif algılara sahip olmaktadır. Fiyat farkındalığının markaya olan güven üzerindeki doğrudan ve güçlü bir şekilde olumsuz olan etkisi, marka imajının markaya olan güven üzerindeki olumlu etkisi nedeniyle bir miktar stabilize olmaktadır. Çalışmanın bulguları ışığında, uygulamaya yönelik öneriler sunulmuştur.

**Anahtar Kelimeler:** Psikolojik fiyatlama, tek sayı ile biten fiyatlar, marka imajı, marka güveni

---

\*Asst. Prof. Dr., İstanbul Okan University, Faculty of Business and Administrative Sciences, Business Administration Department, İstanbul, edin.sozer@okan.edu.tr

## INTRODUCTION

Competitive market conditions push brands to think twice about the effectiveness of their marketing programs since the accountability became a major challenge in the last couple of decades. Return of marketing investment and its contribution to the bottom-line results is a critical performance criterion. As a result of global economic turmoil, consumers also became much more price-sensitive and try to get the highest value in their purchases (Kleinsasser & Wagner, 2011). These dynamics bring managers the necessity of generating pragmatic and effective tactical moves in their marketing programs. One of the methods they apply is to adjust the prices in a way that consumers will perceive the price as an advantageous one. It is true that the perception of price may be sometimes much more effective than the actual price level. In order to generate such effective perception, marketers apply a group of tactics called as psychological pricing. Applying psychological pricing involves forming and presenting the price information in a way that it triggers emotional responses which eventually affect consumer decision making process (Asamoah & Chovancova, 2011).

As one of the psychological pricing methods, odd-pricing (opposed to even-pricing), involves presenting the prices below the nearest round number (Blattberg & Neslin, 1990). The origin of this pricing methodology roots back to 1879 where odd-ending practices were introduced due to the operational issues of cash registers (Harris and Bray, 2007). Since then, odd-pricing became a popular psychological pricing method commonly used by many retailers. One research in United States reported that 90% of the presentations in 840 newspapers include an odd-number (9 or 5) at the end of the prices (Holdershaw, 1997). Other studies conducted by Schindler & Kirby (1997) and Folkertsma (2002) also confirmed the wide range use of odd-ends in at least 45% of cases. The reason behind common practice of odd-endings in pricing tactics is the belief that consumers do not always behave rationally and sometimes they are affected emotionally by some triggers. In this perspective, retailers are motivated to find ways of price-setting which will result in appealing and attractive prices for the consumers (Aalto-Setälä, 2005).

The wide range adoption of odd-pricing method in retailing and results of large number of studies focusing on this subject show some possibility of odd-priced products to influence the perception of consumers on the prices and make them prefer these products instead of upper-rounded priced ones (Choi et al. 2012; Stiving & Winer, 1997). However, despite the growing number of studies on this subject, the empirical evidence provided is still limited (Anderson & Simester, 2003). Moreover, most of the studies conducted on this subject generally focused on four types of categories, including the effect of price endings on sales, purchase intentions, memory performance of consumers and on the numbering preferences of brands in terms of price ending numbers (Liang & Kanetkar, 2006). However, there are some other questions to be addressed in order to provide a complete understanding of the dynamics related to the effect of price endings on consumer behavior. First, what if the consumers are price conscious and consequently aware that the price offered with price ending method does not bring a real advantage? Does it make any difference in their perceptions compared those consumers who are not price conscious? Are there any side effects of price consciousness on consumer perceptions about the brand, namely the brand image and brand trust? This study targets to fill the gap and contribute to the existing literature by addressing the following research questions within the light of the existing theoretical and conceptual background.

- When exposed to odd-ending price information, how the price consciousness level will affect the brand image perceptions and the brand trust levels of consumers?
- When they are exposed to odd-ending price information, will the brand trust level of consumers differ among those price conscious and non-price conscious consumers?
- When they are exposed to odd-ending price information, will the brand image perceptions differ among those price conscious and non-price conscious consumers?

- Will the brand image perceptions play a mediating role on the effect of price consciousness level on brand trust?

### **PRICE ENDINGS AND CONSUMER BEHAVIOR**

Use of psychological pricing tactics and especially utilization of price-endings in the odd-pricing format have a long tradition in marketing practices. Defined as the prices which are set few cents below the round ending prices (Schindler, 1991), these applications are regarded as effective tools to boost up the demand (Kalyanam & Shively, 1998). Due to their direct relationship with bottom line results of the company, perceptions about the price endings and their influence on consumer behavior became the focus of many studies in the literature. Those previous studies conducted on this subject can be categorized in three areas.

Several studies dealt with the consequences of adopting price endings, focusing mainly on the sales performance. As Liang & Kanetkar (2006) reported, the investigation of such studies dealing with the influence of price endings on sales confirmed an average of 24.1 % sales increase in eight studies analyzed. Bartsch & Paton (1999) measured the effect of odd-endings on the demand to state lottery for the period between 1992 and 1997. The authors confirmed the positive influence of odd-endings and reported that 670.000 more tickets were sold. Gendall, Holdershaw & Garland (1997) measured the effect of odd-endings in six types of goods including food and kitchen appliances. The results of the study confirmed the strong positive influence of odd-ending prices especially in low priced items. In another study, which was conducted by Anderson & Simester (2003), authors measured the effect of odd price endings on consumer demand in retailing context and confirmed their positive influence. Authors reported that odd-endings were more effective in the newly introduced products leading to the conclusion that limited information of consumers may increase the effectiveness of odd-endings. Some other studies measuring the effect of odd-endings on perceptions, sales or consumer purchase intentions reported both conclusive (Bizer & Petty, 2002; Schindler & Kibarian, 1996) and inconclusive (Wedel & Leeflang, 1998) results.

Another group of studies focused on the so called “level effects” of price endings to understand the mechanism of how consumer perceptions are influenced by the introduction of different types of price-endings. This group of studies mainly focused on the information processing and memory effects to explore the underlying mechanism. When consumers are exposed to price information, they mostly focus on left digits of prices by ignoring the right digits which creates a level effect on consumer perception (Thomas & Morwitz, 2005). As Bergen, Kaufmann and Dongwon (2004) suggest, the reason for left-sided processing and ignoring right-hand digits can be explained as a result of having limited processing capacity, filtering reaction as a result of exposure to a large amount of information and some other constraints such as available time. Thus, in cases of exposure to a large amount information in a continuous way, consumer show the propensity of storing only the most valuable part of this information, which, in this case, is the first digit of the price (Brenner & Brenner, 1982). When they translate price information into a mental representation, they truncate it to simply the remembering process (Schindler & Kirby, 1997). In case of two-digit numbers, consumers truncate it and remember only the left digit (Schindler & Wiman, 1989). Another explanation for such a processing way can be attributed to the habits of consumers to read the number from left to right and they tend to stop when they detect a difference (Poltrock & Schwartz, 1984). Bray & Harris (2006) associate this processing mechanism with the lack of analysis regarding the price information, which may lead us to the conclusion that it is an unconscious reaction. Several studies also confirm the processing of price information from left to right and report that consumers do not perceive the price in a unified way but in single digits (Stiving & Winer, 1997; Coulter, 2001).

A third group of studies focused on the inferences made by consumers when they are exposed to different types of price endings. These studies suggest that there is no lack of analyses as suggested by Bray & Harris (2006) but on contrary price endings are analyzed which leads to

some inferences. Thus, there is an informational effect of being exposed to price endings. It can be stated that, when they are exposed, consumers make some inferences from the right-end digits of the prices and especially odd-endings are heuristics generating a sense of sale or discount (Choi, Li, Rangan & Singh, 2014). In their study, Schindler & Kibarian (2001) distinguish the effects of price-endings between price-image and quality image effects. Price image is the perception about the level of the price, and they suggest that a price image becomes favorable to the seller when the price is perceived as low. The results of their study confirmed the positive effect of 99 endings on the price image and consumers perceived the advertised product on sale and discounted. On the other hand, the results of the study also confirmed the negative effect of 99 ending on the perceptions of consumers related to the quality of the products. Other studies in the literature also confirm the positive effect of odd-endings on price image and negative effects of price-endings on quality image (Schindler & Kibarian, 2001). Generally, it is suggested that 9-ending prices generate the perception of good value and round-endings imply the quality (Bray & Harris, 2006).

### **SIDE EFFECTS OF USING PRICE ENDING TACTICS**

The vast number of studies in the literature focusing on price endings show that odd-ending prices are an effective strategy to generate demand for the products offered (Manning & Sprott, 2009; Kalyanam & Shively, 1998) especially when consumers have limited information about the product category or prices (Anderson & Simester, 2003). But what about when consumers are knowledgeable about the category and the brand and they follow the prices continuously? What they think when they see odd-endings for the same products that they closely monitor the price changes? What is the effect of their perception on brand image and trust?

Although consumers differ in terms of their attention as well their reaction to cues related to the prices (Chang and Chen, 2014), they are becoming more and more price conscious due to the economic conditions as well as the availability of many alternative brand and products. Consumers are characterized as price conscious, when they show unwillingness to pay high prices, or they focus on paying always low prices (Lichtenstein, 1993). The main motivation of such consumers is to find out the best suitable price so they watch the category, products and the associated prices very closely. Thus, consumers with high price consciousness show higher reliance to price information compared to those with lower level of price consciousness (Suki & Suki, 2015). This also means that they follow and analyze the price information more than those consumers who are not price conscious. Although the existing literature includes studies which report some evidence about the effect of odd-ending prices on generating demand, sales and purchase intentions (Anderson & Simester, 2003; Gendall, Holdershaw & Garland, 1997; Dalrymple & Haines, 1970), we believe that this effect is not valid in case where the consumer is a price conscious one. On contrary, we also believe that price ending tactics under psychological pricing have some side effects generating negative outcomes in terms of brand image perceptions and trust of consumers. Our view is supported based on the expected difference in their price information processing mechanism between price conscious and non-price conscious consumers. As Chang and Chen (2014) explain this difference, since price conscious consumers are very concerned about finding the lowest price in the market, instead of making automatic inferences, they are most likely to encode the numbers of a price by checking each digit lexicographically, and this will lead to a fading underestimation effect of a 9-ending price. Thus, when they are exposed to 299 TL price instead of 300 TL, they will perceive the price as close to 300 TL instead of 200 TL. Thus, consumers who already aware of the prices in the category due to their price concerns, they will realize that the prices are not discounted. This perceptual output finds also support on the grounds of adaptation level theory (Helson, 1964) which suggests that consumer perceptions regarding a new stimulus, in this case the 9-ending price, is formed based on an internally existing standard which is also called adaptation level. In the pricing context, this existing internal standard is the price information which the consumer was previously exposed to. Thus, the new price exposed can be evaluated as being fair, acceptable, low or high as a result of

this process. This leads us to the conclusion that, price conscious consumers will immediately be aware that the price information provided with 9-ending is not a real discount and the price-image is not negative at all.

The perception of consumers about a brand is mainly formed with the exposure to marketing stimuli as well as their previous experiences with that brand. These cognitive and affective based perceptions towards the brand constitute the basis of the brand image (Dobni & Zinkham, 1990). In line with the associative network model, brand image can be defined as the totality of perceptions generated by the group of associations, defined as anything in memory linked to the brand (Aaker, 1991; Rio, Vazquez & Iglesias, 2001). Every new experience with the brand or any stimuli exposed can generate a new association or update an existing association in the memory. Generally, there are three types of associations namely attributes, benefits or attitudes, all formed due to the direct experience, information or stimuli exposure (Keller, 1993). In cases of exposure to marketing stimuli as in the cases of 9-ending prices, all three types of associations can be formed. Thus, when consumers perceive the stimuli positively in terms of attribute or benefit, they may form positive associations (Grigaliunaite & Pileliene, 2017; Koll & Wallpach, 2014). On the other hand, when the perception is negative, this may generate negative associations (Sago

& Hinnenkamp, 2014). In this perspective, we believe that when price-conscious consumers are exposed to 9-ending prices, due to their prior knowledge about the prices, different associations will be formed compared to non-price conscious consumers. Consequently, while exposure to 9-ending price information will lead to the generation of positive associations in non-price conscious consumers' mind, the realization of pseudo discount information will generate negative associations in price-conscious consumers' mind, which will eventually damage the perceptions of consumers about the brand.

One tendency of consumers is to see brands as if they were human characters and assigning them human personality characteristics (Levy, 1985). In turn, these human characteristics lead to the generation of a brand personality perception (Aaker, 1997). Thus, as a relationship between two persons, consumers and brands engage into a dyadic relationship which is based on trust (Elliot & Yannopoulou, 2007). Sociological theory lists trust along with the familiarity and confidence, as one of three modes of forming the expectations about the future based on the experiences (Luhmann, 2000). At its pure format, trust is an expectation which eliminates the concern of one side in the relationship about the opportunistic behavior of the other side (Gulati, 1995). As Moorman, Zaltman and Deshpande (1992) suggest, trust is generated through the belief in reliability and honesty of one side to another. In the context of customer and brand relationships, if companies provide and maintain the safety, reliability and honesty, their brands will be trusted by the customers (Doney & Cannon, 1997). In this perspective, it can be suggested that trust is generated through the direct experiences or interactions of consumers with the brands (Kabadayi

& Alan, 2012) and one of the main characteristics of brand trust is the reliability perceived by the consumer (Moorman, Deshpande and Zaltman, 1993). Trust in branding is a dynamic process and relationship between the customer and the brand can be harmed due to the any disappointment which leads to decreasing trust level. Thus, we believe that when consumers will have positive experiences, due to the generation of positive associations about the brand, this will help brand trust to be stronger. In case of non-price conscious consumers, when they will be exposed to 9-ending prices, these will lead to the perception of increasing benefits provided by the brand, which eventually will lead to positive associations supporting the brand trust. On the other hand, when consumers will have negative experiences, due to the generation of negative associations about the brand, this will weaken the brand trust. In case of price conscious consumers, when they will be exposed to 9-ending prices, due to the immediate realization of the pseudo discount and formation of perceptions of being exposed to dishonest behavior by the brand, these will lead to a negative association weakening the brand trust. We also believe that, the effect of exposure to 9-ending price information on brand trust will be mediated by the perception of consumers about

the image of the brand as some evidence on the significant relationship between brand image and brand trust was already provided in the existing literature (Ulus, 2011).

In the light of the theoretical background presented as well as supportive findings in the literature, we propose the following hypothesis:

H<sub>1</sub>: Price consciousness will have a significant effect on brand trust in case of exposure to 9-ending prices.

H<sub>2</sub>: Increasing level of price consciousness will result in decreasing level of brand trust in case of exposure to 9-ending prices.

H<sub>3</sub>: Price consciousness will have a significant effect on brand image in case of exposure to 9-ending prices.

H<sub>4</sub>: Increasing level of price consciousness will negatively affect the brand image in case of exposure to 9-ending prices.

H<sub>5</sub>: Increasing levels of brand image will lead to increasing level of brand trust.

H<sub>6</sub>: The effect of price consciousness on brand trust will be mediated by the brand image perceptions of consumers.

H<sub>7</sub>: Compared to non-price conscious consumers, price conscious consumers will have lower levels of brand trust score in case they are exposed to 9-ending prices.

H<sub>8</sub>: Compared to non-price conscious consumers, price conscious consumers will have lower levels of brand image score in case they are exposed to 9-ending prices.

## RESEARCH METHODOLOGY

### Research Design

This study targets to measure the effects of being exposed to 9-ending price information on consumer perceptions about the brand image and the level of brand trust in the fast-moving consumer goods (FMCG) category. The study also tries to explore the mediating role of brand image on the effect of price consciousness level on brand trust. The participants of the study were chosen among the citizens living in Istanbul, aged between 25-45 and those who previously purchased a fast-moving consumer good in any supermarket. The number of questionnaires collected was 330 and following the non-response checks, total number of valid questionnaires qualifying for the analysis decreased to 320. The study was composed of two sections.

In the first section, participants were presented a list of product types in FMCG category and asked to mention to the product type under the FMCG category which they buy most frequently. Following their statements, they were asked to answer the statements targeting to measure their price-consciousness levels by taking into consideration the product type they mentioned. At the end of the first section, all participants were evaluated based on their price-consciousness scores and they were divided into two groups as price-conscious (PRC<sub>CON</sub>) and non-price conscious (PRC<sub>N-CON</sub>) groups. Those consumers who had a score or 3 or less out of 5, were labeled as non-price conscious and were included into PRC<sub>N-CON</sub> group. This group was composed of 186 participants. On the other hand, those participants with higher average scores, were labeled as price-conscious and were included into PRC<sub>CON</sub> group. This group was composed of 134 participants. Table 1 includes the comparison of average scores and the number of participants in each group.

**Table 1.** Price-Consciousness Groups

Group	Name	Participants	Average Score (M)
1	PRC <sub>N-CON</sub>	186	2.16
2	PRC <sub>CON</sub>	134	4.23

In order to confirm the statistical significance of the difference between the groups, an independent samples t-test was conducted to compare the level of price consciousness among the participants on two different groups. The results of the analysis confirmed that there is a significant difference between the two groups in terms of price consciousness levels;  $t(318) = -33.649$ ,  $p < .001$ . Those participants in PRC<sub>N-CON</sub> group have lower price consciousness score ( $M = 2.16$ ,  $SD = 0.69$ ) than those who belong to PRC<sub>CON</sub> group ( $M = 4.23$ ,  $SD = .42$ ).

In the second section of the study, all participants in both groups were presented a home page of a hypothetical retailer's web page which includes the pictures of products from different categories. Participants are asked to check the offer of the day in the product category that they buy more frequently. At the category section, consumers are exposed to the product picture and price information offered by the brand which implemented 9-ending prices in their product offerings. Following their exposure, all participants were answered the statements which measured the brand image and brand trust for the product in the category which they buy more frequently.

### Operationalization of Variables

The scales used by the study were borrowed from the studies in the existing literature. Price consciousness scale was borrowed by the study of Lichtenstein, Ridgway and Netemeyer (1993) who developed and validated the scale in their study measuring the relationship between price perceptions and consumer shopping behavior. The Likert-type scale was composed of 5 items measuring the price sensitivity and intention to spend extra effort to search and find the best price. Authors confirmed the construct, discriminant validity as well as internal reliability of the scale. The second scale employed in the study was brand image perception of consumers. This scale was borrowed from the studies of Sondoh et al. 2007 who adopted the scale from the studies of Sweeney & Soutar (2001). The Likert-type scale was composed of 5 items measuring the experiential perceptions of consumers about the brand. Authors confirmed the internal reliability of the scale by reporting an alpha score of 0.77. The third scale employed in this study was brand trust. The scale was borrowed from the original studies of Mackenzie and Lutz (1989), McCroskey (1966) and Ohanian (1990). The scale focuses on the measurement of credibility focusing on honesty and sincerity. The semantic differential scale was originally composed of 13 items which are reduced to 5 items mainly emphasizing the sincerity, honesty, trustworthiness, credibility and believability. Several authors confirmed the internal reliability of the scales ranging from 0.71 to 0.95 (Lohse & Rosen, 2001; Till & Busler, 2001).

The scales are adjusted and modified in line with the objectives of the study. This brings the necessity to confirm the reliability of the modified scales. In order to test the reliability of the scales, a principal component analysis (PCA) was conducted. Three components, namely Price Consciousness, Brand Trust and Brand Image were extracted as the result of the PCA. The measurement of alpha scores to confirm the internal reliabilities of all scales yielded high values of Cronbach alpha scores which lead us to conclude that all scales employed in the study have a satisfying degree of internal reliability. Table 2 includes the results of the principal component analysis.

**Table 2.** Results of the Principal Component Analysis

Component	Construct	Coverage	Items	Loadings	$\alpha$
1 Consciousness	Price	Measures the price sensitivity and intention to spend extra effort to search and find the best price.	5	0.337	0.952
2	Brand Trust	Measures the credibility of brand related to primarily to honesty and sincerity.	5	0.222	0.939
3	Brand Image	Measures the experiential perceptions of consumers about the brand.	5	0.203	0.842

### Analysis

Statistical Package for Social Sciences (SPSS) version 25 and the PROCESS SPSS macro were the main tools used in the analysis of the data. PROCESS SPSS macro, which is developed by Andrew F. Hayes, is an important and widely used tool to measure moderation, mediation and moderated mediation effects. It is the tool used in this study to test the mediation model and associated hypothesis related to the total, direct and the indirect effects of price consciousness on brand trust through brand image (mediation effect). The statistical approach is based on the observed variable OLS and logistic regression path analysis and this tool is widely used in many disciplines including social and health sciences. The estimation of the the direct and indirect effects of independent variables in single and multiple mediator models, measuring the interaction between the moderation models and testing of moderated mediation models can be completed using PROCESS SPSS macro (Hayes, 2018). This macro provides the asymmetric bootstrap confidence interval (CI) estimates for the measurement of both relative indirect and relative conditional indirect effects (Hayes and Preacher, 2014). In addition to the testing of the mediation model, differences between the perceptions of price conscious and non-price conscious consumers was done using the Statistical Package for Social Sciences version 25. The MANOVA analysis was conducted to explore the differences between the two groups in terms of their perceptions regarding brand image and brand trust.

### FINDINGS

#### The Effects of Using Price Ending Tactics on Brand Image and Trust

Three estimation models are generated as a result of the test measuring the effect of price consciousness on brand image and brand trust and the mediator role of brand image on the effect of price consciousness on brand trust when consumers are exposed to 9-ending price information . The three models generated, help for testing the research hypothesis as well as understanding the strength and direction of the relationships between price consciousness, brand image and brand trust. The details of the results of the mediation analysis are presented in Table 3.

**Table 3.** Results of the Mediation Analysis

	Model 1			Model 2			Model 3		
	Brand Trust (Y)			Brand Image (M)			Brand Trust (Y)		
Antecedents	Coefficient	SE	p	Coefficient	SE	p	Coefficient	SE	p
Price Consciousness	$c_1$ -0.357	0.03	<0.001	$a$ -0.389	0.04	<0.001	$c^1_1$ -0.133	0.11	<0.001
Brand Image	-	-	-	-	-	-	$b$ 0.575	0.03	<0.001
Constant	$I_y$ 4.842	0.12	<0.001	$I_m$ 4.527	0.14	<0.001	$I_y$ 2.238	0.18	<0.001
	$R^2 = 0.2179$			$R^2 = 0.1947$			$R^2 = 0.5716$		
	F(1,318) = 88, p<0.001			F(1,318) = 76, p<0.001			F(2,317) = 211, p<0.001		



The total effect of price consciousness level on the brand trust is estimated in Model 1. The results of the analysis confirm the significant effect of price consciousness level on brand trust ( $R^2 = 0.2179$ ,  $F(1,318) = 88$ ,  $p < 0.001$ ) which results in support of  $H_1$ . The results in Model 1 also confirm that when consumers are exposed to 9-ending price information, those consumers with one-unit higher level of price consciousness will have 0.357 units lower level of brand trust. Thus, increasing levels of price consciousness will lead to the deterioration of brand trust in case of exposure to 9-ending prices ( $B = -0.357$ ,  $p < 0.001$ ). In the light of this result,  $H_2$  is also supported.

The effect of price consciousness level on the brand image is estimated in Model 2. The results of the analysis confirm the significant effect of price consciousness level on brand image ( $R^2 = 0.1947$ ,  $F(1,318) = 76$ ,  $p < 0.001$ ) which results in support of  $H_3$ . The results in Model 2 also confirm that when consumers are exposed to 9-ending price information, those consumers with one-unit higher level of price consciousness will have 0.389 units lower level of brand image. Thus, increasing levels of price consciousness will lead to the deterioration of brand image in case of exposure to 9-ending prices ( $B = -0.389$ ,  $p < 0.001$ ). In the light of this result,  $H_4$  is also supported.

Model 3 estimates the direct effects of price consciousness level and brand image on brand trust. The results of the analysis confirm that both price consciousness level and brand image have statistically significant direct effects on brand trust ( $R^2 = 0.571$ ,  $F(2,317) = 211$ ,  $p < 0.001$ ). The results also confirm that the level of brand image has a positive influence on the brand trust. Thus, as the brand image becomes more positive, brand trust also becomes more stronger ( $B = 0.575$ ,  $p < 0.001$ ). This result leads us to support  $H_5$ .

**The Mediator Role of Brand Image on the Effect of Price Consciousness on Brand Trust**

The mediation role of brand image on the effect of price consciousness level on brand trust is measured by calculating the indirect effect of price consciousness level on brand trust through brand image. This calculation is based on the product of regression coefficients in Model 2 and Model 3. In line with the suggestions made by Hayes & Preacher (2013) for the cases with regression coefficients having non-normal sampling distribution, a bootstrap confidence interval with 5,000 bootstrap samples is applied. Indirect effect of message valence was calculated based on the following equation:

$$\text{Indirect Effect } PRC_{CON} = ab = -0.3898(0.5752) = -0.2242$$

Checking of the results for the indirect effects of price consciousness show that the confidence intervals are 95% CI = -0.2762 to -0.1801. As the confidence intervals are both negative and do

not contain any zero, this result confirms the mediating effect of brand image on the effect of price consciousness on brand trust (Hayes & Preacher, 2013). Moreover, as both confidence intervals are negative, this result indicates that the indirect effect of price consciousness on brand trust is also negative. This is a partial mediation since the results confirm both total and direct effects as different from zero and statistically significant. In the light of these results, we support  $H_6$ . Table 4 includes the results of the mediation analysis.

**Table 4.** Indirect Effect of Price Consciousness on Brand Trust

	Price Consciousness	Brand Image	Brand Trust
	Effect	Boot SE	Boot LLCI
Brand Image (M)	-0.2242	-0.0247	-0.1801

### **Differential Effects of Price Consciousness Levels on Brand Image and Brand Trust**

The differential effect of price consciousness levels on the perception of brand image and the brand trust of consumers was measured by conducting a series of MANOVA tests. The analysis included the comparison of two groups, namely non-price conscious and price conscious consumers in terms of perceptions of brand image and their brand trust. The results of the test confirmed the differentiated effect of price consciousness levels on brand image and brand trust. When these perceptual outcomes considered jointly, there is a significant difference on consumers' perception of brand image and their brand trust between those consumers who are non-price conscious and price conscious (Wilks'  $\Lambda = .341$ ,  $F(2,317)=306.504$ ,  $p=.000$ , partial  $\eta^2=.65$ ).

Additionally, in order to measure the separate effects of price consciousness on brand image and brand trust, a series of ANOVA tests are conducted. The results confirmed that there is a significant difference on the brand image perceptions between those who are non-price conscious and price conscious;  $F(1,318)=557.756$ ,  $p=.000$ , partial  $\eta^2=.63$ , with non-price conscious consumers ( $M=4.05$ ) received higher scores than price-conscious consumers ( $M=2.36$ ) when they are exposed to 9-ending price information. The same comparison test is made in terms of brand trust and the results also confirm that there is a significant difference between the two groups of price consciousness level;  $F(1,318)=290.108$ ,  $p=.000$ , partial  $\eta^2=.47$ . Non-price conscious consumers have higher brand trust scores ( $M=4.29$ ) than price conscious consumers ( $M=3.02$ ) when they are exposed to 9-ending price information. In the light of these results,  $H_7$  and  $H_8$  are also supported.

### **DISCUSSION AND PRACTICAL IMPLICATIONS**

The objective of this study was to measure the effects of being exposed to 9-ending price information for a retail product on brand image perceptions of consumers and their trust towards the brand. Specifically, the difference between the perceptions of price conscious and non-price conscious consumers in terms of brand image and their brand trust was analyzed. Although there are several studies confirming the significant effect of odd-ending price information on consumer perceptions and demand (Choi et al. 2012; Stiving & Winer, 1997), there is a lack of studies which take into consideration the effect of price consciousness on the formation of such perceptions. Moreover, to the best of our knowledge, there is no any other study which measures this effect in terms of its reflections on brand image and brand trust constructs in a retailing context.

The theoretical framework for the differential price consciousness effect was established based on the adaptation level theory (Helson, 1964). We adapted the theory into the study by bridging the 9-ending price information to the internally existing standard which is also called adaptation level. Thus, we claimed that customers who are price conscious, that is they are familiar with the category prices and track them continuously, will have negative perceptions when they are exposed to 9-ending price information as these consumers will not perceive the price as a real discount and on contrary, a dishonest behavior by the brand. This will lead to the generation of negative associations (Sago & Hinnenkamp, 2014) and eventually will harm the brand image and brand trust. In line with the theoretical framework, it is found that in case of exposure to 9-ending price information, price consciousness level negatively affects the brand image and brand trust levels. Consumers who have higher price consciousness level, have relatively negative perceptions compared who are not price conscious in terms of both brand image and brand trust. This result is one of the contributions of this study to the marketing literature. Moreover, the results also confirmed that the brand image has a significant and positive affect on brand trust. In line with the existing literature, when the brand image perceptions are more positive, brand trust level also increases (Ulus, 2011). Additionally, it is also found that the brand image mediates the effect of price consciousness level on brand trust. The direct and strong negative effect of price consciousness on brand trust stabilizes in a minimal amount due to positive effect of brand image on brand trust. This finding is the second important contribution of the study to the existing marketing literature.

In the light of the contributions made to the existing marketing literature, the results of the study also require some elaboration on the managerial implications of employing 9-ending pricing tactics. Although it is a widely used pricing tactic by retailers and it is also believed that it contributes to the bottom line results by boosting demand, increasing purchase or sales volume, managers need to be very careful when they implement odd-ending pricing tactics. Consumers are becoming more and more selective and look for higher value due to the availability of many alternatives as well as economic conditions. Therefore, as the results of the study indicate, implementing 9-price endings may lead to negative associations about the brand and consequently may harm the trust relationship between the customer and brand. Since it is not possible to understand upfront which consumers are price-conscious, it is a serious risk to implement 9-ending prices as the main pricing tactic for all customers. We expect that the value sensitivity of consumers will increase in the coming years and price ending tactics will start to lose their effectiveness due to the increasing consciousness level among consumers. In order to protect the image perceptions and trust relationship, instead of using price endings, value perceptions should be managed by differentiating the price based on offering different product content sizes, bundle products, and direct real discounts for multiple purchases. Recency, frequency and monetary based loyalty programs, which directly link consumer buying behavior with the benefits provided in exchange for buying performance, will be such effective tools for supporting these value perceptions of consumers and will prevent the formation of negative associations which may harm the brand image and trust relationship.

#### **LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH**

There are some limitations of this study as well as suggestions for future research which need to be stated. The study measured the effect of price consciousness on brand image and brand trust in a retailing context and FMCG category. This limits the generalizability of the study to other sectors and application areas. It can be extended to other sectors, business to business markets, and high-involvement product categories in order to have more generalizable results.

#### **REFERENCES**

- Aaker, D. (1991). *Managing Brand Equity: Capitalizing on the value of a brand name*. New York: The Free Press.
- Aaker, J. (1997). Dimensions of brand personality. *Journal of Marketing Research*, 34(3), 347-357.
- Anderson, E. & Simester, D. (2003). Effects of \$9 price endings on retail sales: Evidence from field experiments. *Quantitative Marketing and Economics*, 1, 93–110.
- Asamoah, E.S. & Chovancova, M. (2011). The influence of price endings on consumer behaviour: an application of the psychology of perception. *Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis*, 7, 29–38.
- Bartsch, R. & Paton, V. (1999). The presence of odd pricing in the Texas State Lottery. *Journal of Applied Social Psychology*, 29( 11), 2394-2409.
- Bergen, M, Kauffman, R.J. & Lee, K. (2004). Store Quality image and the rational inattention hypothesis: An empirical study of the drivers of \$9 and 9¢ price-endings among internet-based sellers. INFORMS Conference on Information Systems and Technology, Denver, Colorado, October 23-24, 2004.
- Bizer, G.Y. & Petty, R.E. (2002). An implicit measure of price perception: exploring the odd-pricing effect. *Advances in Consumer Research*, 29, 220-221.
- Blattberg, R.C. & Neslin, S.A. (1990). *Sales Promotion, Concepts, Methods and Strategies*. Prentice-Hall, Englewood Cliffs, NJ.
- Bray, J. P. & Harris, J. (2006). The Effect of 9-Ending Prices on Retail Sales: A Quantitative UK Based Field Study. *Journal of Marketing Management*, 22, 601-617.

- Brenner, G.A. & Brenner, R. (1982). Memory and markets, or why are you paying \$ 2.99 for a widget? *Journal of Business*, 55(1), 147-158.
- Chang, H.H. & Fang, P.C. (2014). When is a 9-ending price perceived lower than a 0-ending price? The Moderating role of price consciousness. *International Journal of Business and Information*, 9(1), 89 – 116.
- Choi, J., Li, Y.J., Rangan, P., Chatterjee, P. & Singh, S.N. (2014). The odd-ending price justification effect: The influence of price endings on hedonic and utilitarian consumption. *Journal of the Academy of Marketing Science*, 42(5), 545-557.
- Coulter, K. (2001). Odd-Ending price underestimation: and experimental examination of left-to-right processing effects. *Journal of Product and Brand Management*, 10(5), 276-292.
- Dalrymple, D.J. & Haines, G.H. (1970). A study of the predictive ability of market period demand-supply relations for a firm selling fashion products. *Applied Economics*, 1, 277-285.
- Dobni, D. & Zinkham, G.M. (1990). In search for brand image: A foundation analysis. *Advances in Consumer Research*, 17, 110-119.
- Doney, P.M. & Cannon, J.P. (1997). An Examination of the Nature of Trust in Buyer-Seller Relationships. *Journal of Marketing*, 61(April), 35-51.
- Elliot, R. & Yannopoulou, N. (2007). The nature of trust in brands: a psychosocial model. *European Journal of Marketing*, 41(9/10), 988-998.
- Folkertsma, C.K. (2002). The euro and psychological prices: simulations of the worst-case scenario. *De Economist*, 150(1), 19-40.
- Gendall, P., Holdershaw, J. & Garland, R. (1997). The effect of odd pricing on demand. *European Journal of Marketing*, 31(11/12), 799-813.
- Grigaliunaite, V. & Pileliene, L. (2017). Attitude toward smoking: the effect of negative smoking-related pictures. *Oeconomia Copernicana*, 8(2), 317-328.
- Gulati, R. (1995). Does familiarity breed trust? The Implications of repeated ties for contractual choice in alliances. *The Academy of Management Journal*, 38(1), 85-112.
- Harris, C. & Bray, J. (2007). Price endings and consumer segmentation. *Journal of Product & Brand Management*, 16(3), 200-205.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: The Guilford Press.
- Hayes, A. F. & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, 67, 451-470.
- Holdershaw, J., Gendall, P. & Garland, R. (1997). The widespread use of odd pricing in the retail sector. *Marketing Bulletin*, 8, 53–58.
- Kabadayı, E. T. & Alan Koçak, A. (2012). Brand trust and brand affect: Their strategic importance on brand loyalty. *Journal of Global Strategic Management*, 6(1), 80-88.
- Kalyanam, K. & Shively, T.S. (1998). Estimating irregular pricing effects: A stochastic spline regression approach. *Journal of Marketing Research*, 35(1), 16-29.
- Keller, K.L. (1993). Conceptualizing, measuring and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22.
- Kleinsasser, S. & Wagner, U. (2011). Price endings and tourism consumers' price perceptions. *Journal of Retailing and Consumer Services*, 18, 58–63.
- Koll, O. & Wallpach, S. (2014). Intended brand associations: Do they really drive consumer response? *Journal of Business Research*, 67, 1501–1507.
- Levy, S. J. (1985). Dreams, fairy tales, animals, and cars. *Psychology and Marketing*, 2(2), 67-81.
- Liang, J. & Kanetkar, V. (2006). Price endings: magic and math. *Journal of Product & Brand Management*, 15(6), 377–385.
- Lichtenstein, D.R., Ridgway, N.M. & Netemeyer, R.G. (1993). Price perceptions and consumer shopping behavior: A field study. *Journal of Marketing Research* 30(2), 234-245.
- Lohse, G. L. & Rosen, D. L. (2001). Signaling quality and credibility in yellow pages advertising: The influence of color and graphics on choice. *Journal of Advertising*, 30 (2), 73-85.

- Luhmann, N. (2000). Familiarity, confidence, trust: Problems and alternatives', in Gambetta, Diego (ed.) *Trust: Making and Breaking Cooperative Relations*. Department of Sociology, University of Oxford, 94-107.
- Mackenzie, S. B. & Lutz, R. J. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *Journal of Marketing*, 53 (April), 48-65.
- Manning, K.C. & Sprott, D.E. (2009). Price endings, left-digit effects, and choice. *Journal of Consumer Research*, 36 (August), 328-335.
- McCroskey, J. C. (1966). Scales for the Measurement of Ethos. *Speech Monographs*, 33 (March), 65-72.
- Moorman, C., Deshpandé, R. & Zaltman, G. (1993). Factors affecting trust in market research relationships. *Journal of Marketing*, 57(1), 81-101.
- Moorman, C., Zaltman, G. & Deshpandé, R. (1992). Relationships Between Providers and Users of Market Research: The Dynamics of Trust Within and Between Organizations. *Journal of Marketing Research*, 29(August), 314-29.
- Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19 (3), 39-52.
- Poltrock, S. & Schwartz, D. (1984). Comparative judgements of multidigit numbers. *Journal of Experimental Psychology: Learning Memory and Cognition*, 10(1), 32-45.
- Río, A. B., Vázquez, R. & Iglesias, V. (2001). The effects of brand associations on consumer response. *Journal of Consumer Marketing*, 18(5), 410-425.
- Sago, B. & Hinnenkamp, C. (2014). The impact of significant negative news on consumers behavior towards favorite brands. *Global Journal of Business Research*, 8(1), 65-72.
- Schindler, R.M. & Kirby, P.N. (1997). Patterns of Rightmost digits used in advertised prices: implications for 9-ending Effects. *Journal of Consumer Research*, 24 (September), 192-201.
- Schindler, R. M. (1991). Symbolic meanings of a price ending, Rebecca H. Holman and Michael R. Solomon (Eds.), *Advances in Consumer Research*, 18, 794-801.
- Schindler, R. M. & Kibarian, T.M. (1996). Increased consumer sales response through use of 99-ending prices. *Journal of Retailing*, 72 (Summer), 187-199.
- Schindler, R. M & Wiman, A.R. (1989). Effect of odd pricing on price recall. *Journal of Business Research*, 19, 165-177.
- Schindler, R. M. & Kibarian, T.M. (2001). Image communicated by the use of 99 endings in advertised prices. *Journal of Advertising*, 30(4), 95-99.
- Sondoh, S. L., Omar, M. W. & Wahid, N. A. (2007). The effect of brand image on overall satisfaction and loyalty intention in the context of color cosmetic. *Asian Academy of Management Journal*, 12(1), 83-107.
- Stiving, M. & Winer, R.S. (1997). An empirical analysis of price endings with scanner data. *Journal of Consumer Research*, 24(1), 57-67.
- Suki, N. M. & Suki, N. M. (2015). Moderating effects of price consciousness between customer environmental satisfaction and customer loyalty. *Advanced Science Letters*, 21(5), 1354-1358.

## Uzun Öz

Rekabetçi pazar koşulları, artan performans baskısı ve fiyat hassasiyeti olan tüketiciler, markaların oluşturdukları pazarlama programlarının etkinliklerini iki kez düşüncelerini gerektirmektedir. Yöneticiler bu yeni dinamiklere faydacı ve etkili çözümler geliştirerek cevap vermeye çalışmaktadırlar. Bu çözümlerden bir tanesi de fiyatların tüketicide avantajlı algısı oluşturacak şekilde düzenlenmesidir. Psikolojik fiyatlandırma olarak adlandırılan bu yöntem, fiyat bilgisinin tüketici kararlarını etkileyecek duygusal reaksiyonların oluşmasını sağlayacak şekilde oluşturulması ve sunulmasını içermektedir (Asamoah & Chovancova, 2011). Sonu tek rakamla biten fiyat sunumu oldukça yaygın kullanılan bir psikolojik fiyatlandırma yöntemi olup, bu yöntemin tercih edilmesindeki en önemli sebep tüketicilerin her zaman rasyonel davranışların yerine duygularından da etkileniyor olmalarıdır (Aalto-Setälä, 2005). Bu kapsamda yapılan birçok çalışma fiyatların son rakamlarının satışlar, satın alma niyeti, hafıza performansı ve fiyat son rakamlarına göre marka tercihlerinin tespitine odaklanmıştır (Liang & Kanetkar, 2006). Bu çalışmaların katkısına rağmen, fiyatların son rakamlarının etkilerinin arkasındaki dinamiklerin daha iyi anlaşılabilmesi için cevaplanması gereken sorulardan bir tanesi de, tüketicinin fiyat farkındalığı var ise ve buna bağlı olarak fiyat bilgisinde yer alan son rakamın aslında avantajlı bir teklif olmadığı anlaşılır ise, bunun karar mekanizmaları ve marka imajına ve markaya olan güvene yönelik etkilerinin ne olacağıdır. Bu çalışma, söz konusu soruya cevap vererek literatüre katkı sağlamayı hedeflemektedir. Genel olarak yuvarlanmış fiyatların

birkaç sent altında belirlenen fiyatlar olarak tanımlanan tek sayı ile biten fiyat (Schindler, 1991) yöntemi ile ilgili birçok araştırma yapılmıştır. Bazı araştırmalar satış performansları üzerindeki etkisine odaklanmıştır. Bu çalışmalar sonucunda tek sayı ile biten fiyatların satış performansı üzerinde pozitif katkısı olduğunu raporlayan (Liang & Kanetkar, 2006; Bartsch & Paton, 1999) çalışmalar ile birlikte bu konu da istatistiksel olarak anlamlı bir bulguya ulaşamayan çalışmalar da (Wedel & Leeflang, 1998) bulunmaktadır. Diğer bir çalışma grubu farklı fiyat sonu rakam seviyelerinin etkilerine ölçmeye odaklanmıştır. Bu etkileri bilgiyi işleme alma ve hafıza kapsamında açıklamaya çalışan araştırmacılar, hafıza kapasite limitleri, zamansal kısıtlamalar veya soldan sağa okuma alışkanlıkları sebebiyle tüketicilerin fiyat bilgisini sağ rakamın gerçek değerine bakmadan, sol baştan değerlendirmeye aldıklarını öne sürmüşlerdir (Thomas & Morwitz, 2005; Bergen, Kaufmann & Dongwon, 2004; Poltrock & Schwartz, 1984). Diğer bir araştırmacı grubu ise fiyat bilgisinin tüketiciler tarafından bilinçli bir şekilde incelendiğini ve tek sayı ile biten fiyatların bir indirim işareti olarak algılandığını belirtmişlerdir (Choi, Li, Rangan & Singh, 2014). Bu konuda yapılan araştırmalar da 99 gibi tek sayı ile biten fiyatların indirim ve avantajlı fiyat algısını güçlendirdiğine dair bulgular elde etmiştir (Schindler & Kibarian, 2001). Tüketicilerin özellikle ürün kategorisi veya fiyat bilgisi konusunda yeterli bilgisi olmadığı durumlarda tek sayı ile biten fiyat uygulaması etkili olmasına rağmen, tüketicilerin ürün kategorisini bilen ve fiyatları yakından takip eden fiyat farkındalığı olan kişiler olması durumundaki tepkileri bilinmemektedir. Tüketicilerin daha yüksek değer elde etme motivasyonu sonucu her gün artan seviyedeki fiyat hassasiyeti ve fiyatları yakından takip etme eğilimleri (Lichtenstein, 1993) fiyat farkındalıklarını yükseltmektedir. Dolayısıyla, fiyat farkındalığı yüksek olan tüketiciler değerlendirmelerini fiyat bilgisine dayalı yapmaya eğilim göstermektedirler (Suki & Suki, 2015). Bu durumda daha önceki çalışmaların elde ettiği pozitif bulgulara rağmen (Anderson & Simester, 2003; Gendall, Holdershaw & Garland, 1997; Dalrymple & Haines, 1970), tek sayı ile biten fiyat uygulamasının fiyat farkındalığı olan tüketicilerin fiyat bilgisindeki her rakamı sırasıyla inceleyecek olmalarından dolayı etkisinin olmayacağı beklenmektedir (Chang and Chen, 2014). Bununla beraber, bu durumun marka imajı ve markaya olan güven konusunda negatif etkileri olacağı da öngörülmektedir. Marka imajının zihinsel ve duygusal algı ve çağrışımlar bütünü olarak ele alındığını düşündüğümüzde (Aaker, 1991; Rio, Vazquez & Iglesias, 2001), çağrışım ağları modeli kapsamında, sunulan fiyatın gerçek bir avantaj oluşturmadığının anlaşılmasının negatif algılara sebep olacağı, bu durumun da marka algılarını ve bunların oluşturduğu imajı zedeleyeceği beklenmektedir. Tüketicilerin markaları insani özellikler ile özdeşleştirme yatkınlıkları (Levy, 1985), onlarla olan ilişkilerinde bir faktörün de güven unsuru olmasını sağlamaktadır (Elliot & Yannopoulou, 2007). Marka ile olan etkileşimler sonucu oluşan marka güveni (Kabadayı & Alan, 2012), markanın tüketici tarafından algılanan güvenilirliği olarak tanımlanmaktadır (Kabadayı & Alan, 2012). Bu kapsamda, fiyat farkındalığı olan tüketicilerin tek sayı ile biten fiyatların gerçek anlamda bir avantaj sunmadığını tespit etmesi durumunda, markaya olan güvenin de negatif yönde etkileneceği beklenmektedir. Bu kapsamda kuramsal altyapıya ve daha önceki çalışmaların bulgularına dayanarak 8 hipotez geliştirilmiştir. Bu hipotezlerin test edilmesi amacıyla, 320 kişilik, 25-45 yaş arası ve İstanbul'da yaşayan tüketicilerin 9 sayısı ile biten fiyat bilgisine maruz kalmaları sonucundaki algılarını ve fiyat farkındalığının bu ilişkideki aracı değişken etkisini ölçmek amacıyla hızlı tüketim malları kategorisinde iki aşamalı bir çalışma tasarımı oluşturulmuştur. Birinci aşamada tüketicilerin öncelikle fiyat farkındalığı ölçmek amacıyla ilgilendikleri kategorideki fiyat farkındalıkları ölçülmüştür. Bu ölçüm sonucunda tüketiciler fiyat farkındalığı olan (PRC<sub>CON</sub>) ve fiyat farkındalığı olmayan (PRC<sub>N-CON</sub>) iki gruba ayrılmışlardır. İkinci aşamada, katılımcılara çalışma amacıyla oluşturulan bir web sitesi üzerinde ilgilendikleri kategorilere ait ürünlerinde içinde bulunduğu çeşitli ürünlerin fiyatları gösterilmiştir. Bu gösterim sonrasında katılımcılar markaya yönelik imaj ve güven algılarını ölçen sorulara cevap vermişlerdir. Araştırma sonuçlarına göre fiyat farkındalığının tüketicinin markaya olan güveni üzerinde etkili olduğu,  $R^2 = 0.2179$ ,  $F(1,318) = 88$ ,  $p < 0.001$  ve artan fiyat farkındalığı seviyesinin markaya olan güven üzerinde negatif etki yaptığı tespit edilmiştir ( $B = -0.357$ ,  $p < 0.001$ ). Bu bulgular ışığında H<sub>1</sub> ve H<sub>2</sub> hipotezleri desteklenmektedir. Benzer olarak, fiyat farkındalığının marka imajı üzerinde etkili olduğu, ( $R^2 = 0.1947$ ,  $F(1,318) = 76$ ,  $p < 0.001$ ) ve artan fiyat farkındalığı seviyesinin marka imajı

üzerinde negatif etki yaptığı tespit edilmiştir ( $B = -0.389$ ,  $p < 0.001$ ). Bu bulgular ışığında  $H_3$  ve  $H_4$  hipotezleri desteklenmektedir. Marka imajının marka güveni üzerindeki etkisine yönelik yapılan ölçümde de istatistiksel olarak anlamlı sonuçlar elde edilmiş ( $R^2 = 0.571$ ,  $F(2,317) = 211$ ,  $p < 0.001$ ) ve yüksek marka imajı algısının markaya olan güven üzerinde pozitif etki yaptığı tespit edilmiştir ( $B = 0.575$ ,  $p < 0.001$ ). Bu bulgular ışığında  $H_5$  hipotezi desteklenmektedir. Marka imajının aracı değişken rolüne yapılan ölçüm sonucunda ise, fiyat farkındalığının marka güveni üzerindeki marka imajı aracılığı ile oluşan istatistiksel olarak anlamlı etkisi tespit edilmiştir. Bu bulgu ışığında  $H_6$  hipotezi desteklenmektedir. Son olarak, farklı marka farkındalığı seviyelerinin marka imajı ve marka güveni üzerinde ki etkileri test edilmiş ve 9 rakamı ile biten fiyat bilgisine maruz kalındığında fiyat farkındalığı olan  $PRC_{CON}$  grubunun ( $M = 2.36$ ) fiyat farkındalığı olmayan  $PRC_{N-CON}$  grubuna ( $M = 4.05$ ) kıyasla marka imajı algılarının daha düşük olduğu tespit edilmiştir. Aynı karşılaştırma marka güveni skoru açısından yapıldığında da, benzer olarak fiyat farkındalığı olan  $PRC_{CON}$  grubunun ( $M = 3.02$ ) fiyat farkındalığı olmayan  $PRC_{N-CON}$  grubuna ( $M = 4.29$ ) kıyasla marka güven skorlarının daha düşük olduğu tespit edilmiştir. Bu bulgular ışığında  $H_7$  ve  $H_8$  hipotezleri desteklenmektedir. Çalışma sonuçları değerlendirildiğinde, adaptasyon seviyesi kuramı (Helson, 1964) ile uyumlu olarak zihinlerinde kategori fiyatları ile ilgili standartlar oluşmuş olan fiyat farkındalığı olan tüketicilerin sonu 9 rakamı ile biten fiyatları gerçek bir indirim ve avantaj olarak algılamadıkları, buna bağlı olarak da bu durumun marka ile ilgili negatif çağrışımlar oluşturduğu tespit edilmiştir (Sago & Hinnenkamp, 2014). Bu bulgu çalışmanın literatüre önemli bir katkısı olmuştur. Buna ek olarak, marka imajının marka güveni üzerinde pozitif etkisi olduğu tespit edilmiştir. Bu bulgu literatürdeki geçmiş çalışmaların sonuçlarını teyit etmektedir (Ulus, 2011). Son olarak, 9 ile biten fiyat bilgisine maruz kalındığında, marka imajının fiyat farkındalığı seviyesinin marka güveni üzerindeki etkisinde düzenleyici değişken rolü oynadığı tespit edilmiştir. Bu da çalışmanın literatüre katkısı olarak öne çıkmaktadır. Çalışmanın bulguları sonu 9 ile biten fiyat uygulamasının risklerine dikkat çekmektedir. Tüketicilerin artan fiyat farkındalığı göz önüne alındığında, bu tip bir psikolojik fiyatlandırma yöntemi yerine, tüketicilerin değer algılarının gramaj, boyut, ikili paket ürün, dönemsel indirim gibi alternatif seçenekler ile yönetilmesi ve dolayısıyla marka imajı ve markaya olan güvenin zarar görmesinin engellenmeye çalışılması önerilmektedir.

