STUDYING THE RELATIONSHIP BETWEEN BRAND EQUITY AND CONSUMER BEHAVIOR

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Abstract

The present study was conducted to investigate the relationship between brand equity and consumer behavior. In today's competitive world, where the consumer is faced with a broad range of products made in different countries, companies should further seek to identify the factors of customers’ trends towards products to encourage customers to select and purchase the product.

In the model proposed in this study, the relationship between brand equity and the dimensions of consumer behavior including the willingness to pay for extra cost, brand preference and purchase intention is investigated. The research method is a descriptive correlational. Structural equations and descriptive and inferential statistics and factor analysis were used to analyze the data.

The statistical population of the study includes the owners of Grand Vitara, Sportage and Santafe from the companies of Iran Khodro, Kia and Hyundai. The population was unlimited including 384 people using Cochran formula; and cluster sampling and endemic questionnaire tool were used.

In the marketing literature, the lack of empirical research that seeks to explore the relationship between brand equity and consumer behavior is tangible. This research focuses on those reactions that provide more sales and the ability to grow. According to the results, it seems that there is a relationship between brand equity and consumer behavior including paying extra cost, brand preference and purchase intention.

KEYWORDS: brand equity, purchase intention, brand preferences, willingness to pay extra cost

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**Introduction**

In the business world today, one of the main concerns of marketing managers is searching for ways to increase sales and profitability products. Successful brands try to establish a sense of trust because creating strong ties to the customer is one of the main bases of trade (Jing et al., 2015).

One of the most common strategies to achieve this goal is to understand the relationship between consumer behavior and brand and brand equity, because the brand equity is often an indication of its quality which affects the choice of consumers [2]. In recent studies, the importance of emotional relationship between the customer and the brand has been approved (Gianfranco Walsh et al., 2015), and these studies strongly emphasize that the brand equity is not only achieved by the goods and services, but also by interactions between buyers and sellers (Ballantyne, Varey, 2006; Grönroos, 2011; Payne et al., 2008; Jing et al., 2015).

It seems that brand equity from the perspective of consumer is an appropriate starts to assess product equity which contains a lot of interrelated dimensions such as brand awareness, brand quality, brand association and brand loyalty (Jing et al., 2015). This relationship includes mutual exchanges between the brand and consumers by a duplicate set of actions that has many advantages for both sides (Huang, Kandampully, 2012). The goal of any brand is to attract and retain customers to ensure the success of the brand and the product (Zavattaro et al., 2015 and it is observed that consumers are looking for brands that have specific features (Garsvaite, Caruana, 2014; Londoño et al., 2016). Brand equity is a powerful tool to improve marketing productivity (Cai et al., 2014) and evaluating brand equity is an effective way to measure customers’ satisfaction and brand performance by marketing managers (So, King, 2010; Sung Ho et al., 2015).

The main purpose of this article is to illustrate the relationship between brand equity and brand preference and consumer’s intention to purchase. The study also seeks to understand how we can create a successful brand by understanding the consumer behavior in the competitive market today.

**Research Background**

- In a study entitled “Studying the effect of brand equity on consumer response, Hosseini et al. (2009) concluded that there is a positive significant relationship between the four dimensions of loyalty, quality, awareness and willingness to spread brand.

- Karbaspour, Yaridel (2009) conducted a study entitled “Evaluation of brand equity and the affecting factors from the consumer’s perspective. The results showed that brand loyalty and association factor have direct impact on brand equity, and the factor of perceived quality has indirect impact on brand equity through loyalty.

- In a study entitled “Evaluation of the impact of brand equity on the continuation and promotion of customer relationship in the banking industry” Bavarsad et al. (2013) found that the willingness of customers to adopt Internet banking services is under the direct influence of brand equity.

- In a study entitled “Evaluation of the impact of brand equity on the consumer behavior in cellphone and computer shopping malls”, Anaraki et al. (2013) discussed the proposed model and confirmed the role of brand equity dimensions on customer reactions.
Theoretical Foundations

Brand Equity: Most studies about brand equity in the past two decades have been developed based on almost two frameworks: Acker’s brand equity and brand equity from a consumer perspective of Claire type. Acker was the first person who has studied the concept of brand equity. According to Acker, brand equity consists of four dimensions: brand loyalty, brand awareness, perceived quality and brand association (Zhuowei, Liping, 2015).

Brand loyalty: Studies show that brand loyalty creates a sense of attachment between the customer and the brand manufacturers (Pedeliento et al., 2015). Brand loyalty depends on the consumers’ brand recognition, and brand awareness and its image are important factors in the brand loyalty (Lua et al., 2015). In each brand, the purpose is to attract and retain loyal customers to ensure the success of the brand and the product (Zavattaro et al., 2015). Two dimensions are considered for brand loyalty: emotional and practical dimensions. Emotional loyalty represents the consumer’s preference and willingness to a particular brand where the actual purchase behavior is not occurred yet. While practical loyalty represents the actual behavior of consumer’s purchase of a particular brand (Lin, 2015).

Brand awareness: customers’ way of speaking about a brand indicates the brand awareness (Zavattaro, 2015). According to Claire, brand awareness affects the consumer behavior towards the marketing of that product. Brand awareness occurs when the consumer has a deep and specific image of the product in mind (Zhuowei, Liping, 2015). Customers achieve brand knowledge through direct experiences such as use of the product or service, and indirect experiences such as advertising and marketing (Lua et al., 2015).

Perceived quality: It includes the customers’ judgment of the advantage, excellence, credibility and a brand difference compared to other competing brands. Perceived quality not only affects other aspects of the brand, but also has impact on the classification of the product from the customer’s perspective (Aaker, Joachimsthaler, 2000). Once customers trust a brand, they prefer that particular brand among a wide range of products even if the price is higher than competitors’ products (He, Wang, 2014).

Brand association: The value of a brand is often based on associations to which it is linked. Associations such as the name of Ronald McDonald can create a positive attitude or feeling about the brand that has been attributed to.

Association of areas of application such as aspirin and heart attack can be a reason to purchase which eventually attracts customers. Strong association could be a basis to expand the brand (Aaker, Joachimsthaler, 2000).

Brand equity refers to the rational assessment of brand customers and can be a measuring tool for consumers’ attitude toward the brand (Lin, 2015). In recent years, writers like Ailawadi, Lehmann, Neslin (2003), Tong & Hawley (2009) argue that the brand equity is measured based on the consumers’ perspective (de Oliveira et al., 2015).

It can be said that the consumer behavior is the set of actions and processes that consumers apply at the time of information collection, purchase, evaluation and use of products and services to meet the needs and create the utility (Belch, Belch, 2004). In this paper, three aspects of consumer behavior in the face of the brand, including paying extra costs, brand preference and purchase intention, are studied.
**Paying extra costs**

In branding, the term refers to the difference between the prices received by a brand owner in the face of the same recommendations. A strong brand can make more money based on perception of quality, uniqueness and its other associations (Buil et al., 2013). The basic idea of using a brand refers to the enhancement of the value of a product when the producers realized that competition through price leads to lower profitability. Profitability reduction through price competition made them to apply methods to increase loyalty and brand value.

One of the factors that indicate the individuals’ willingness to determine the extra costs is the consumers’ perspective towards brand equity (Zavattaro et al., 2015). Thus, the following hypothesis is raised:

**H1.** Brand equity is associated with the consumer’s willingness to pay extra costs.

**Brand preference**

Brand preference can be the start for the consumers’ decision to buy. Some studies show that there is a positive correlation between brand preference and consumers’ decision to buy (Tolba, Hassan, 2009).

We can say that a brand is valuable in the eyes of customers when customers prefer them to other brands, and have the name of brand and its attributes in mind for a long time (Kumar et al., 2004).

Over time, services and products become more similar to each other, because competitors imitate the new products quickly. This makes it difficult for consumers to differentiate products (Chang et al., 2015). The main purpose of advertising and promotion operation is to achieve excellence, a place where a brand is more favorable than its competitors. Brand excellence is essential to consumers in the purchase of products (Buil et al., 2013). So the following hypothesis is raised:

**H2.** Brand equity is associated with brand preference.

**Purchase intention**

Purchase intention pints to the consumer’s willingness to purchase the product of a brand (Belch Vilch, 2004). When purchase intention is higher, it is also more likely to purchase. So, purchase intention is the most important predictor of purchase behavior (Long-Yi, Jui-chi, 2012).

Branding studies show that brand equity is an important factor in the consumers’ purchase intention increase and encourages them to buy more (Jing et al., 2015). Purchase intention is one of the steps of purchase intention, because it studies the behavior of the consumer to purchase a particular brand. Consumer’s intention to buy a brand is formed not only by the attitude toward the brand, but also by considering a series of other brands (Shah et al., 2012). Thus the following hypothesis arises:

**H3.** Brand equity is associated with the customer’s purchase intention.
**Research conceptual model**

According to what was said in Theoretical Foundations, the conceptual model is as follows:

![Diagram of research conceptual model](image)

**Research Methodology**

Considering that the aim of the study was to analyze the relationship between brand equity and consumer behavior, research is a practical by goal. It is descriptive and correlational in terms of data collection and, in particular, it is based on structural equations. Structural equation model is a statistical comprehensive approach that tests the hypothesis related to the relationship between observed and latent variables. With this approach, the acceptability of theoretical models in specific communities can be tested, and since most of the variables in management research are latent, the use of these models will be increased.

Data collection tools: Tools used include valid and reliable questionnaire, library studies, interviews and free interview and the internet, each of which has been used in the area of research for compilation of the specific data.

Validity and reliability: content validity and Cronbach's test were used to review research and assess the reliability of the research, respectively. Since the obtained value of Cronbach's alpha for all variables is higher than 0.7, it can be said that the questionnaire has acceptable reliability.
Cronbach’s alpha coefficients for research variables

<table>
<thead>
<tr>
<th>Research variables</th>
<th>Brand equity</th>
<th>Paying extra costs</th>
<th>Brand preference</th>
<th>Purchase intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s alpha</td>
<td>0.766</td>
<td>0.777</td>
<td>0.768</td>
<td>0.748</td>
</tr>
</tbody>
</table>

In this study, descriptive statistics were used to display demographic information. The following demographic information is extracted from 384 questionnaires:

Gender: Based on the analysis of the research findings, 55.3% of respondents were men and 44.7% women.

Level of education: Based on the analysis of the research findings, 10.9% of respondents had diploma or were under diploma, 30.04% Associate Degree, 36.4% B.A., and 22.3% M.A. and higher.

Age: Based on the analysis of the research findings, 11.4% of respondents were under 20, 18.2% between 20 and 30, 25.2% between 31 and 40, 29.9% between 41 and 50, and 15.3% above than 50.

Purchase history: Based on the analysis of the research findings, 34.5% of respondents had purchase history of 1 to 3 years, 31.7% 3 to 5 years, 20.5% 5 to 7 years, and 21.8% more than 7 years.

Inferential statistics: In this study, statistical inference related to data analysis and hypothesis testing is used. In the first stage, data normality is investigated using the Kolmogorov - Smirnov test. Then, the structural validity of all three variables and indicators derived from them are examined using confirmatory factor analysis. Finally, research hypotheses are tested using structural equation modeling and correlation coefficient.

Before getting to the stage of hypothesis testing, it is necessary to ensure normality of data information in order to use tests according their normality. In this test, if the achieved significance level of the test is larger than error i.e. $\alpha = 0.05$, $H_0$ or otherwise, $H_1$ will be verified.

$H_0$: The data are not normal (they are not from the normal population)

$H_1$: The data are normal (they are from the normal population)

Kolmogorov-Smirnov test table for research variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paying extra costs</td>
<td>0.062</td>
</tr>
<tr>
<td>Brand preference</td>
<td>0.083</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>0.320</td>
</tr>
<tr>
<td>Brand equity</td>
<td>0.301</td>
</tr>
</tbody>
</table>

Since the significance level for research variables is greater than 0.05, $H_1$ is confirmed and we conclude that the data collected are normal for variables.

![Figure 1: Structural equation modeling of the conceptual model (standard estimation)](image-url)
Table 3: Path coefficients, t-statistic and the coefficient of determination (predictor variable: brand equity)

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Path coefficient (β)</th>
<th>t-statistic</th>
<th>Total coefficient of determination (R²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paying extra costs</td>
<td>0.58</td>
<td>8.91 **</td>
<td>0.34</td>
</tr>
<tr>
<td>Brand preference</td>
<td>0.73</td>
<td>11.58 **</td>
<td>0.53</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>0.51</td>
<td>7.09 **</td>
<td>0.26</td>
</tr>
</tbody>
</table>

** p < 0.01  * p < 0.05

According to path coefficient (0.58) and t-statistic (8.91), it can be said that: at the significance level of 99%, there is a positive and significant relationship between brand equity and paying extra costs; so, the first hypothesis is significant and it is confirmed.

Multiple coefficient of determination (R²) is 0.34. This factor investigates the ability to predict the dependent variable by the independent variable. Accordingly, the variable of brand equity has been able to predict 34% of the changes in extra costs.

According to path coefficient (0.73) and t-statistic (11.58), it can be said that: at the significance level of 99%, there is a positive and significant relationship between brand equity and brand preference; so, the second hypothesis is significant and it is confirmed.

Multiple coefficient of determination (R²) is 0.53. This factor investigates the ability to predict the dependent variable by the independent variable. Accordingly, the variable of brand equity has been able to predict 53% of the changes in brand preference.

According to path coefficient (0.51) and t-statistic (7.09), it can be said that: at the significance level of 99%, there is a positive and significant relationship between brand equity and consumer’s purchase intention; so, the third hypothesis is significant and it is confirmed.

Multiple coefficient of determination (R²) is 0.26. This factor investigates the ability to predict the dependent variable by the independent variable. Accordingly, the variable of brand equity has been able to predict 26% of the changes in consumer’s purchase intention.
Research conceptual model fitness

Various indices were used to evaluate the fitness of the model including Root Mean Square Error of Approximation: The first index to determine the fitness of the model is root mean square error of approximation shown as RMSEA. When the value of this statistic is less than 0.05, it indicates that the model has a good fitness; Absolute Fit Indices; Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI): These indices should be between zero and one, and values greater than 0.9 indicate acceptable model fitness. Relative fit indices show the extent to which the model fitness is more appropriate than the base line model which is the model of independence. These indices include: Normed Fit Index (NFI), Non-Normed Fit Index (NNFI), Comparative Fit Index (CFI).

With the exception of NNFI index, values of all indices of this group are between zero and one and when their values are closer, they represent a good model fit (NNFI amount may be greater than one). In general, working with LISREL program, each of the indices obtained for the model, does not alone show the fitness model, but indices should be interpreted together.

Table 4: Research conceptual model fitness indices

<table>
<thead>
<tr>
<th>Index name</th>
<th>Limit</th>
<th>Obtained value</th>
</tr>
</thead>
<tbody>
<tr>
<td>X2/df</td>
<td>3 and less</td>
<td>1.73</td>
</tr>
<tr>
<td>NFI</td>
<td>0.9 and more</td>
<td>0.96</td>
</tr>
<tr>
<td>NNFI</td>
<td>0.9 and more</td>
<td>0.97</td>
</tr>
<tr>
<td>IFI</td>
<td>0.9 and more</td>
<td>0.97</td>
</tr>
<tr>
<td>CFI</td>
<td>0.9 and more</td>
<td>0.97</td>
</tr>
<tr>
<td>GFI</td>
<td>0.9 and more</td>
<td>0.94</td>
</tr>
<tr>
<td>RMSEA</td>
<td>Less than 0.08</td>
<td>0.043</td>
</tr>
</tbody>
</table>

Discussion and Conclusion

Relations between the brand and consumer are one of the most important structures that have important roles in profitability and obtaining competitive advantage by companies. This has led marketing researchers to focus on this issue. Hosseini has shown that there is a positive relationship between the dimensions of brand equity but the dimensions of consumer behavior are not mentioned. Karbaspour and Yardel suggested that brand loyalty and association, and perceived quality have direct and indirect impact on brand equity, respectively. Bavarsad reached the conclusion that in banking industry, customers’ willingness to accept banking services is affected by brand equity. Anaraki concluded that the special dimensions of brand have impact on the reaction of customers.

This study examines the relationship between brand and consumer in terms of brand equity, willingness to pay extra costs, and brand preference and customer purchase intention, because one of the ways of identifying product position in the market is to measure brand equity to the customer.

According to this study, it seems that brand equity is associated with some aspects of consumer behavior including willingness to pay extra costs, brand preference and purchase intention. And there is a stronger relation between brand equity and brand preference than
the two other variables. We can say that a strong brand creates added value for products that leads to customer preference in selection. In the later stages of purchase behavior, brand preference may lead to more payment and purchase intention by the consumer.

**Research Limitations**

1. Like other studies of behavioral sciences, this study also has limitations. The most important limitation is the qualitative factors that must be converted to quantitative variables to become measureable.
2. The purpose of the study is to examine the effects of brand equity and consumer behavior. Because of the variety of products and brands in the automotive industry, the researcher is forced to limit his research area. Because of these limitations, extension of the results of this research to other brands and products must be done with caution.
3. Using questionnaires, due to reasons including personal perceptions of respondents, variables specialty, etc. has always been a major constraint for human scientists.

**Recommendations**

In fact, trying to be a brand is the same effort to sell and profit more; that is why it is believed that the brand is the most valuable asset of any business.

It is suggested that companies with sufficient knowledge of the target market,

- Focus more on these markets.
- Identify loyal customers and give them special privileges
- Create a foundation for lasting in the minds of customers using good communication techniques
- Create a complete image of the brand in the mind of the audience and reinforce the brand image created
- Use market analysts to monitor the customer's needs at different times

**Suggestions for Future Research**

- Insert advertising variable into the research model
- Evaluate the association of the brand in the mind of the audience when hearing the brand name
- Examine the audience perception of the quality and other values of the brand
- Study the previous experiences of the audience in interaction with the brand and brand strength in recalling these experiences
References


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