

The Effect of Extrinsic Cues of Products on Brand Preference and Customer Purchase Intentions: The Moderating Effect of Social Factors

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Abstract

The present study aims to review the role of extrinsic cues of products in brand preference and customer purchase intention and the mediating effect of social factors. The statistical population of the study is comprised of customers demanding foreign automobiles in the city Tehran. There are infinite number of these customers. The simple random sampling method has been used in this study. The standard survey was distributed among 400 customers but 310 surveys were returned and analyzed. The structural equation modeling has been used in order to analyze the information using AMOS18 software. The obtained results indicate that the relationships between all of the research variables have been confirmed. Conversely, the moderating role of social factors has not been confirmed.

Key Words: Extrinsic Cues of Products/Brand, Brand Preference, Brand Purchase Intention

Introduction

With the globalization of economy and development of international business over the past few decades, consumers have been exposed to a wide spectrum of foreign products (Aayed Qasem, et al. 2016). The rise of globalization has led to a strong growth in the internationalization of consumer and industrial markets. It is because of the growth of world markets that the country of origin and brands have risen. Generally, customers rely on both intrinsic and extrinsic cues of the products and services in order to judge or forecast their quality (Nazari and Rezayi, 2014). Today, with the increase in the number of brands, there are two groups of intrinsic and extrinsic cues. The role that extrinsic factors, as factors that do not depend on actual cues of products, play in the understanding of the level of quality of products and consumers purchase intention are more important than ever. Customers' judgment is an indication of their understanding of various dimensions of intrinsic and extrinsic cues of products. Intrinsic cues of a product are its fundamental and basic cues which cannot be managed or changed without changing the physical cues of products. Extrinsic cues are the nonphysical

cues of the products (Olson, J. C. and Jacoby, 1972). For example, about car-related products, durability, engine capacity and function are the essential and intrinsic cues; whereas, price, country of origin and market brand are their extrinsic cues which influence the understanding of the customers of the car (Aayed Qasem, et al. 2016). Researches have shown that consumers are often not able to accurately evaluate these cues and the cues that can cueificantly affect the product quality might be neglected by them. Research literature showed that in general, intrinsic cues are usually more reliable; unless enough intrinsic cues in the minds of consumers cannot be forecasted or the consumers are not confident enough in their ability to evaluate the intrinsic cues (Kardes, F. R., Cronley, M. L., Kellaris, J. J. and Posavac, S. S. (2004). Other studies have also shown that customers are not always able to accurately evaluate these cues; in which case the product quality is judged post purchase not prior to it. Perhaps the most important reasons behind this inability are misunderstanding, lack of self-confidence and inability to obtain information (Veal, et al. 2006). In fact, there are a number of researches who have been attracted to the theory of extrinsic cues (Ching, F. C. and Chang, 2008). On the other hand, some of the extrinsic cues have a cueificant effect on the evaluation of quality and function of the product. Some of these cues are the country of origin, brand and price (Kalicharan, 2014). Given the limitations that consumers face in terms of time and cost, they have been deprived of the ability to accurately evaluate the quality of products and they won't have an accurate understanding of the product cues; thus, the customers attempt to estimate the quality level of various brands based on the extrinsic factors of the products. Understanding the quality level of products is a mental process which differs from one person to another (Alhabab, 2007). Given the increase of the informational asymmetry in the market, in addition to the intrinsic cues of the product, the producers must also take into consideration the extrinsic ones. Firms that produce high-quality products use the extrinsic cues in order to enable the buyers to detect their products and don't confuse them with low-quality ones (Nazari

and Rezayi, 2014). Recently, numerous studies have investigated the effectiveness of price and brand image of various source countries on the customers' understanding of the product and using it for evaluating its brand and quality. By taking into account the globalized business environment and the enhancement of consumers' choice and purchase power in addition to the importance of the aforementioned cues in the process of selecting a product, it is clear that there isn't a single study that focuses on a population in Iran. By reviewing the literature, it becomes evident that the understanding of consumers from third-world countries of foreign business brands has not been reviewed in any research.

Therefore, this study aims to review the role of intrinsic and extrinsic cues of imported automobiles and the products associated with them on brand preference and customer purchase intention by taking into consideration the moderating effect of social factors.

In order for a consumer to have an opinion about the quality of a product, they need to use intrinsic and extrinsic cues.

Theoretical principles

Perceived quality is customer's understanding of the overall quality or superiority of a service or goods in comparison with their tendency towards alternatives. In order to understand the perceived quality, it will be useful to recognize and measure the basic dimensions. However, perceived quality on its own is a brief and universal structure. There is a strong link between perceived quality and customer which indicates the overall quality and is not necessarily based on the knowledge of customers of the specifications of the product. High quality can be based on the range of development of the brand (Bewil and Martinez, 2013).

Consumers use of intrinsic and extrinsic cues of quality

In the market, giving cues is a process through which purposeful signs with an informational nature are used. In fact, signaling completes the equation with an exchange of information. Buyers will consider quality cues desirable based on their abilities to forecast and their validity (Wells, et al. 2011). Sellers avoid using unreal cues about their products, because false cues will have a negative impact on the earnings and credit of the firm. Producers use the signaling process to provide information about the experimental goods. Because of the shortage of information prior to purchase of this group of products, the signaling aims to present information about the quality of products prior to purchase (Wells, et al. 2011). Signaling won't be effective for products which are at the maturity stage of their life span and for products that are rather known to

consumers and consumers are completely aware of their quality. It will be effective for new products that are being introduced and consumers have no information about their quality. It won't be efficient for authentic products either; because the quality of these products will remain unknown even post purchase. In 1972, Olson, et al. classified the quality cues in two groups: intrinsic and extrinsic cues (John Calson, 2008).

Intrinsic cues of a product are the essential characteristics of the product which are associated with the product itself such as engine capacity for a car or taste of a beverage. On the other hand, extrinsic cues of a product include characteristics which are not associated with the essence of the product and they are associated with the extrinsic characteristics of a product or service such as the country of origin, price and brand name and place of purchase (Lee and Lou, 1996; Teas and Agarwal, 2000). Wells, et al. (2011) believe that extrinsic cues are signs of the product which are known with the physical and essential nature of the product; but when these are being evaluated, the focus is not on interpreting the essence of the product such as price, product brand, country of origin and so on. Previous studies have shown that consumers are different when it comes to relying on intrinsic and extrinsic cues and their abilities for accurately evaluating the product cues (Kardes, Kim and Lim, 2001). Some examples of extrinsic cues have been used in the quality pooling form prior to purchase or post purchase. Therefore, marketers must take into account the effect of these cues on the process of quality evaluation by consumers with the purpose of selecting the product; so that they would make sure that their efforts have been able to use them in order to impact the consumers regarding the quality of product (Roberta Veale, et al. 2006). Two extrinsic cues often used by researchers are country of origin and price. Consumers must always be able to accurately evaluate the intrinsic and extrinsic cues of products prior to purchase. In some cases, they are not able to evaluate the products post purchase (Kardes, et al. 2001). This because of many reasons including lack of understanding, lack of self-confidence, wrong interpretation or not being able to have access to information. Consumers' quality of judgment can be impacted by visual cues, discounts and so on. For example, Park, et al. (2000) found out that emotional perceptions are not always accurate and it is vulnerable to beliefs and expectations. These findings confirm that marketers cannot assume that intrinsic characteristics of the product are always accurately interpreted by the customers (Veale, R., Quester, P. and Karunnaratna, A. 2006).

Table 1 illustrates the cues and signs used in previous studies.

Author and year	Country	Population and sample volume	Reviewed product	Cues or characteristics
Bergeron and Carver (1988)	America	Students (190 persons)	Clothes	Manufacturing coun
Parvin, et al. (2006)	Bangladesh	Qualitative study, students of the national university (60 persons)	Decorations	Brand evaluation, br image, percei quality, perceived pr perceived country origin
Voo and De lung (2006)	China	Denim buyers (219 persons)	Denim clothes	Comfort, shape, des fashion, quality, pr originality, brand, st manufacturing coun of origin

Price, as an extrinsic characteristic

Price perception is a process in which consumers translates and interprets the price significantly (Parvin, et al. 2006). Over the years, many studies have focused on the role price. Consumers demand the highest level of desirability form the brand by sacrificing the money obtained from the advantage of buying the product from competitors. The perceived price is an effective variable for the perceived quality. The price gives the consumers information about the quality of the product (Parvin, et al. 2006). Most consumers often believe that products of higher quality are more expensive and the cheaper ones are low-quality products (Jover, et al. 2006). The relationship between quality and price has been described in the literature as the reliance on price. This relationship is indicative of this strict view: “you get what you pay for” (M. Lee and Lou, 1996). In fact, this belief might be strong enough to take over the experiencing of the quality of product. If the consumers believe that there is a bond between price and quality of products, then paying less means accepting low-quality products. Conversely, in order to have a better quality, customers must pay more (monetary sacrifice must be made) perhaps even more than a desirable amount. Creating a satisfying balance between price and quality is an important challenge for many consumers which means that price plays an important and unique role in the purchase decision (Kardes, et al. 2004). When the consumers have a limited knowledge about the product categories, they must rely on price.

Brand preference

A personal psychological interpretation of the brand is symbolically and scientifically crucial. Its practical advantages require the brand to be able to solve the problems (Acker, et al. 2001). For example, when a person is in a hurry, he/she will eat in a restaurant. On the other hand, abstract quality brands want to create symbolic advantages for individuals. Brand preference happens when the consumer is biased to select a specific brand instead of alternatives based on the advantage or value of that product (Chang and Liu, 2009).

This symbolic advantage includes explanations about the reason why consumers are ready to pay more for similar menus supplied in another

restaurant brand in comparison to their competitors. Therefore, creating a wonderful brand personality is an important way of signing a permanent contract with customers. According to relationships and consequences, previous studies have concluded that using a brand with a well-processed personality enables the consumers to speak their minds and state their ideals or some of their specific characteristics. The concept of self-actualization indicates that customers prefer familiar brands with personality characteristics which are compatible with their own characteristics. Hence, the brand personality can create a mechanism for differentiating the brands and it can be a key factor for determining the tendency of consumers (Brower and Bowler, 2012). In addition to the self-actualization theory, there are two other reasonable theories that support the relationship between brand personality and brand preference. Firstly, given that Acker’s brand personality dimension scale is now well-known, this can be considered as the weakness of this scale; because it is not logical to assume that all of the specifications of human personality are completely disclosed. When the actual characteristics of a brand are not compatible with the overall picture the consumers have of the brand, they might still be willingly accepted and understood. Thus, according to this logic, when self-actualization is not evident, a well-defined brand personality can still positively affect the increase of brand preference. Secondly, the other reason why the relationship between brand personality and brand preference and priority seems logical and acceptable is that it provides operational profit (Acker, 2004). When the consumers have an understanding of the brand personality, it helps them know the brand better. That is why dramatic implications of the brand personality may remind the consumer about the operational information about the brand and its operational profit. Therefore, the concept of presenting operational profit supports the thought that brand personality leads to brand preference which ultimately results in the advantage of recalling more for the consumer (Dolat Abadi, et al. 2013).

Purchase intention

Purchase intention is a mental tendency towards a product and can be an important factor for predicting consumers’ behavior (Vinh and Huy, 2016) which depends on the consumers’ ability to buy the brand products in the future (Tolba and Hassan, 2009).

**Development of hypotheses
Extrinsic characteristics of product and consumers purchase intention**

Today, it is not possible for consumers to know about the characteristics and quality the level of product quality while purchasing the product. The lack of accurate understanding of the product quality level will result in a selection that lacks confidence and trust on the consumers’ part. In this case,

producers must use the signs and cues in the respect of creating trust in buyers (Nazari and Rezayi Arab, 2014). In this study, extrinsic cues or characteristics, such as country of origin, price and brand name, have been considered and their impact on consumers purchase intention and brand preference have been reviewed. A few studies have focused on this issue. The results of the study of Deylami Azodi (2013) have shown that the mental impression of the country of origin, unlike the impression of the manufacturing country, has a positive and significant impact on consumers purchase intention. In addition, the positive impact of the country of origin on the knowledge of the brand, loyalty to the brand, brand implication and perceived quality on the relationship between these two variables is confirmed; whereas this is not the case for the country manufacturing the product. Ashtiani, et al. (2010) have reviewed the effective factors on the consumer behavior associated with preferring foreign brands to domestic ones among students. The findings of this study indicate that among Iranian consumers, the need for uniqueness has a direct relationship with the tendency towards foreign products. Moreover, among various factors affecting the intention behind purchasing foreign products, emotional value and social value have the highest effect on the intention behind purchasing foreign products; but the relationship between functional value and intention behind purchasing foreign products has not been confirmed.

First hypothesis: the extrinsic cues of products have a positive impact on the consumers' brand preference.

Consumers preference and product purchase intention

Given the logical action theory, in order to review the relationship between approaches, intentions and behaviors (Fishben and Ajzen, 1975), positive attitude towards the brand results in purchase intention (Bewil, et al. 2013). A higher special brand value leads to more purchase intention. Special brand value is reflected in brand preference and brand and product purchase intention reflect brand preference. In this field the following studies confirmed the positive relationship between brand preference and purchase intention: Chan and Chung, 2008; Talbo and Hassan, 2009; Moradi and Zeraee, 2010; Ebrahimi, et al. 2014). Tran Trung Vinh and Le Van Huy (1010) argued that brand special value and brand preference both have positive impacts on the motorcycle purchase intention in Vietnam. Many researches have focused on the relationship between brand preference and purchase intention. Ebrahimi, et al. (2014) conducted a research entitled "the role of service quality on the creation of brand preference and consumers purchase intention in the country's banking industry. The findings of their research are an indication of the significant effect quality of

services has on perceived value. In addition, quality of services and perceived value both significantly special value of the brand and special value of brand has had a significant impact on brand preference and consumers purchase intention. Ultimately, brand preference significantly affects consumers purchase intention.

Second hypothesis: brand preference has a positive impact on consumer purchase intention.

The mediating role of social factors

Social factors are indicative of the individual's understanding of social pressure in order to get involved in a specific behavior (Fishbein and Ajzen, 2006). Social factors are a key factor as far as the product/brand purchase decision makings are concerned including purchasing products such as cars. Social literature researchers have attempted to recognize various factors that affect brand preferences. Nonetheless, the most important groups that affect the behavior of buyers include social groups including family, roles, positions and reference groups (Kotler, P. and Armstrong, 2001). The social theory of consumers is a starting point for determining the priorities of the business brand; because this perspective provides a conceptual framework for investigating behaviors associated with consumption, skills and attitudes of consumers. By reviewing the literature, it becomes evident that the relationship between social factors and product/brand purchase is being reviewed in more researches nowadays (36-39). According to this discussion, the expectation is that there is a positive relationship between consumer's brand preference and purchasing certain products/brands with the mediating role of social factors. Social influence might substantially impact the purchase of some products/brands. These factors have a considerable effect on the decisions associated with purchasing specific products/brands (Kotler, P. and Keller, K., 2006).

Third hypothesis: social factors have a mediating role in the relationship between brand preference and brand purchase intention.

Conceptual model of the research

This study aims to investigate the effect of extrinsic characteristics (cues) of the quality of products on brand purchase intention by considering the role of mediators. Extrinsic cues are measured through brand name, perceived price and country of origin dimensions. Brand preference is the mediating variable and purchase intention is the dependent variable. Social factors, which include family, reference groups, position and role of individuals, has been considered as the mediator of the relationship between brand preference and purchase intention. The conceptual model of the research can be seen in figure no. 1.

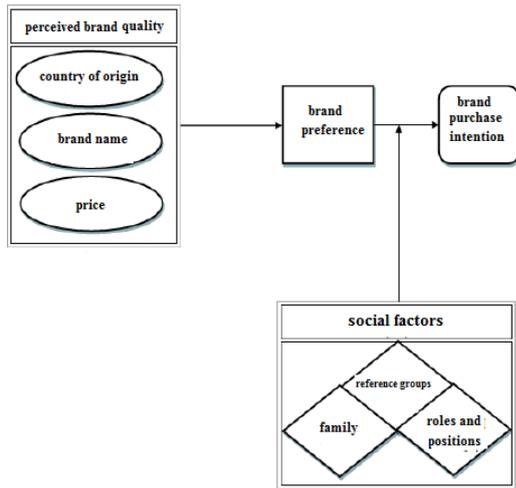


Figure (1): conceptual model

Research methodology

The present study aims to review the role of extrinsic cues of products (perceived brand quality) on brand purchase intention and consumer’s brand preference by taking into consideration the social factors. This is a descriptive applied survey research in terms of method. The statistical population of this research is comprised of foreign cars customers in three districts (1, 2 and 3) of the city Tehran. The sampling method used in this research is a simple random sampling method. The sample volume was calculated to be 384 people according to Morgan’s table given the fact that the volume of the population was infinite. The standard survey adopted from the study conducted by Qasim, et al. (2016) was used to measure the research variables. The arrangement of the questions of this survey and its validity and reliability have been expressed in table no. 1. The information was analyzed using structural equation modeling. The AMOS software was used for fitting the measurement model of the study and the structural equation model.

Reliability and validity of research variables

In order to measure the fitting of the conceptual model of the research, the measurement model is used. The measurement model establishes a covariance between all of the latent variables. This model is used to determine the extent to which the latent variables are measured by the observable variables. Are the observable variables able to measure the latent variables well? (Kalantari, 2012). In order to evaluate the structural model, the fitting indexes must be in proportion. The confirmatory factor analysis is used for evaluating the fitting of the model. In order to measure the convergent validity of the load factors, average variance extracted (AVE) is used. In order to measure the

reliability of the load factors of the research variables, the composite reliability test (CR) is used. The acceptable value for AVE is a value of higher than 0.5 and the acceptable value for CR is a value of higher than 0.7. Table no. 1 shows the results.

Table no. 1: validity and reliability of research variables

Components	Mean	Standard deviation	Convergent validity	Cronbach’s alpha	Composite reliability
Country of origin	4.23	0.562	0.615	0.823	0.863
Brand name	3.65	0.642	0.606	0.745	0.737
Price	4.11	0.426	0.670	0.766	0.710
Brand preference	3.25	0.412	0.576	0.845	0.870
Purchase intention	4.12	0.345	0.683	0.923	0.906
Social factors	3.16	0.452	0.583	0.725	0.844

Fit indexes

Fit indexes of the structural equation model have been presented in table no. 2. The presented values have been recommended by Su, et al. (2016).

Table no. 2: fit index of the measurement model of the research

Indexes	Acronyms	Acceptable value	Obtained value	Accepted/unaccepted
Goodness of the fit index	GFI ¹	≥0.9	0.9	Accepted
Adjusted goodness of the fit index	AGFI ²	≥0.9	0.899	Accepted
Comparative	CFI ³	≥0.9	0.944	Accepted

¹ Goodness-of- fit index

² Adjust goodness- of- fit index

³ Comparative fit index

fit index				
Relative fit index	RFI ⁴	≥0.9	0.963	Accepted
Normed chi-square	CMIN/DF ⁵	≤3	1.667	Accepted
Root mean squared error of approximation	RMS EA ⁶	≤0.08	0.080	Accepted

As the table above shows, the measurement model of the research has an appropriate fitting.

Structural equation model

The structural equation model of the research has been presented in figure no. 2.

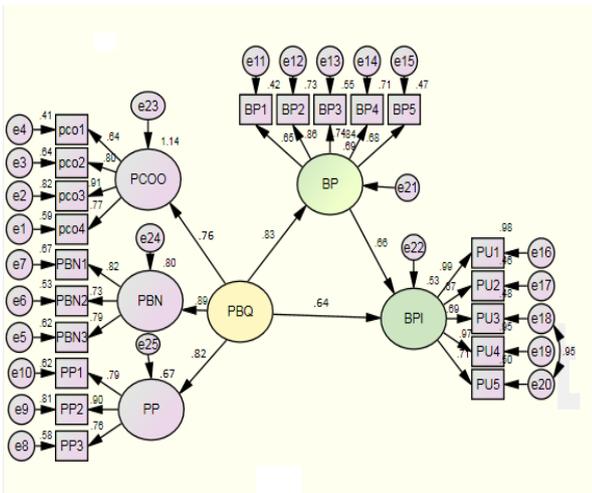


Figure no. 2: structural equation model

By reviewing the research hypotheses, the results presented in table no. 2 were obtained.

Hypothesis	Independent variable	Dependent variable	Significance level	Path coefficient	Significance value
First	Extrinsic characteristics of brand	Brand purchase intention	***	0.64	5.326
Second	Brand preference	Brand purchase intention	***	0.66	6.543
Third	Extrinsic characteristics of brand	Brand preference	***	0.83	8.893

As the results presented in the table above indicate, all of the research hypotheses are confirmed.

⁴ Relative fit index
⁵ Normed chi-square

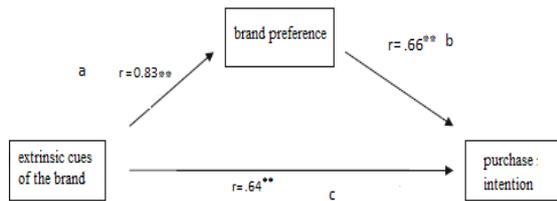
Investigation of the moderating role of brand preference

Significance of Indirect Effect

There are many ways for reviewing the significance of indirect effect (reviewing the relationship with the presence of the moderating variable). The following methods are the most important ones:

- Test of Joint Significance
- Sobel Test
- Bootstrapped Confidence Intervals

In this research, the first method is used. This test indicates that if either path a or path b are significant, therefore a*b will also be significant.



Graph (1): indirect path analysis

By taking into consideration the structural equation model and secondary hypotheses, path a, path b, path d and path e are significant and the intensity of their relationship has been expressed as well. Path c (the relationship between the independent and the dependent variable) has also been significant.

Measurement of the Effect of the Mediators⁷

There are numerous ways for calculating the effect of the mediating variable (Preacher and Kelly, 2011). The two most common methods are:

- 1) Percentage of mediation (P_M)
- 2) Completely Standardized Indirect Effect (ab_{cs})

In this research, the first method is used for measuring the effect of the mediating variable using the following formula.

$$P_M = \frac{de}{de + c'} = \frac{de}{c} :$$

Given the following formula, first the slope of path c must be calculated.

In this section, the percentage of mediation formula (brand preference) is calculated.

$$ab = .83 * .66 = .53$$

$$c = .64$$

⁶ Root mean squared error of approximation
⁷ Effect Sizes for Mediation

Given the calculations above, it can be argued that preference is a mediator in the relationship between the research variables and the percentage of mediation is 0.83. It can be concluded that the effect of extrinsic characteristics of brand quality on purchase intention is approximately 0.18 which is higher than the direct effect (path c). Therefore, this hypothesis is confirmed and the relationship between the independent and the dependent variable with the mediation of brand preference is reinforced.

The mediating role of social factors

The following steps must be taken in order to measure the moderating variables:

- 1) Reviewing the rate of effect of the independent variable on the dependent variable (brand preference on purchase intention)
- 2) Reviewing the rate of effect of social factors on the dependent variable (social factors and purchase intention)
- 3) Reviewing the effect of the product of moderator and independent variables on the dependent variable

In this research, by taking the aforementioned steps, it was specified that the relationship between the moderating and the dependent variable has not been confirmed. Therefore, in this study, the social factor has not been able to act as the moderating factor.

Discussion and conclusion

This study aims to review the role of extrinsic cues and characteristics of products on brand purchase intention and brand preference and the role of social factors in the relationship between brand preference and purchase intention has been investigated. As the research results showed, all of the relationships between research variables have been confirmed and the brand preference variable, as the moderating variable, has been able to increase the effect of the extrinsic cues of products on purchase intention. In this field, Qassim, et al. (2016) conducted a research on automobile production in Oman and came to the same conclusion. Harichand, et al. (2004) conducted a study in America and obtained similar results. By accurately recognizing the perception process and consumers' behavior, the consumers will become more satisfied. In this respect, the marketing sectors of the firms must recognize the products quality cues and increase their products' chance to be selected by considering them in the marketing and production programs. Therefore, the cues that consumers use for recognizing the quality level of various products are different as well. Using cues for detecting the quality of a product is rather logical and will lead to the creation of a balance between supply and demand forces at various levels of price (Nazari, et al. 2014). The results obtained from identifying the quality cues can be used for implementing processes

such as pricing, market segmentation and product positioning (Verma and Gupta, 2004).

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