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# Investigating the Effect of Brand Equity on Customer's Lifetime Value (Household Goods of LG Company in Mashhad City)

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#### Abstract

One of the most important marketing concepts is brand equity which is not only creates value for customer and company, but also creates a competitive advantage. Thus, it is critical for marketing managers to create a powerful brand to identify and maintain the profitable customers with higher lifetime. This study uses Structural Equation Modeling (SEM); and data was analyzed by SPSS and AMOS computer applications. Research method is applied descriptive survey. Data were gathered by questionnaire. The statistical population was customers of LG household products in Mashhad from which the sample (405) was randomly selected. This study represents two SEM models. First, to investigate the strength of the relationship among brand equity and customers' lifetime value from the customer perspective as a main point, which the result is positive and significant. The second model shows that the effect of brand equity's dimensions (awareness, association, perceived quality) on dimensions of customer's lifetime value (usage rate, purchase intention, loyalty), were also positive and significant except for the effect of awareness on loyalty which was not confirmed and the related hypothesis was rejected.

Keywords: Brand equity, customer lifetime value, LG Company.

# 1. Introduction

Brand equity is measured for various international brands by the world's leading institutions every year. In the meantime, brand evaluation from customer perspectives is of great importance for companies, because their success and survival depend on customers. That's why the brand equity is of significantly greater value compared to physical assets; this indicates the great importance of this factor [11]. In fact, the brand equity based on the customer perspective is an important strategic role and competitive advantage that is taken into considerations in strategic management decisions and has a huge impact on marketing decisions. Researchers use different domestic and foreign branded products to measure brand equity. Brand equity measurement allows senior managers of companies to evaluate the strengths of their brand, evaluate their brand equity over time, and develop their own marketing strategies [23]. On the other hand, with reduction of the goods' life cycle, the time and cost required for the marketing and meeting the different needs of customers have made managers pay greater attention to customer attraction and retention with higher profitability. Customers with higher profitability are identified by a tool called customer lifetime value. CLV is a measure to determine the customers with high lifetime value which makes a perception of customers in order to allocate resources to a specific customer [14].

Customers initially buy a product with a particular brand tentatively and after satisfaction with that brand continue to buy the same brand or brands because they know that product and are sure about its quality [41]. In the current markets where customers are empowered enough to regulate the rules of competitive games, the need for paying attention to all the marketing principles by domestic and foreign companies in order to survive and succeed in business is being felt more than ever before. In recent years, increased quantity of imported products in the market of household goods on one hand, and government policies in support of products similar to domestic products on the other hand, have led to formation of a new competitive environment [21]. Thus, the household goods industry is one of the country's industries which are faced with many challenges in recent years. The influx of different famous brand names which are smuggled into the country without paying interest and tolls and competition with imported brands of household goods as well as general obstacles and problems of industries (including, inefficient industrial, commercial, banking and social security rules,) have imposed difficult conditions to the domestic manufacturers in this unhealthy competitive market within the country. Therefore, investigation of marketing policies in foreign companies can be of great importance for the domestic companies [4]. LG is one of the well-known brands for household goods in Iran and throughout the world. Increasing competitiveness in the markets of household goods has forced many companies including LG to consider their brand from the perspective of a competitive advantage. Just like service marketing and product marketing which are sometimes separated from each other, brand names and management of them are two distinct categories. A large proportion of the company's credit with customers depends on the brand, the company's name [26]. Therefore, The challenge that LG company is being faced for sales of household appliances in the domestic markets, is related to lack of knowledge about the needs and behavior of customers who have a high lifetime value for LG, as well as lack of planning for marketing activities of the company to strengthen the LG Brand compared to other competitors in the market, that is because companies don't need to pay any price to gain a customer with any level of profitability, but should efficiently spend their limited resources in order to gain and maintain the company's key customers [6]. The LG Company is no exception in this regard. According to the above- mentioned information, development of a model to strengthen the status of LG brand in the Iranian market in order to predict profitable customers' behavior and take steps to meet the needs of these customers is quite essential for the LG company and can provide a competitive advantage for this company. Therefore, in this study, the Aaker's model which is the most popular measure of brand equity, and is also considered a psychological model, is used to investigate three aspects of LG

brand including LG brand awareness, perceived quality and association to evaluate the effect of these variables on the lifetime value of the LG household goods customers. Given that except for recent limited studies, no extensive study has been carried out on the relationship between brand equity and customer lifetime value from consumers' perspective as well as estimation of customers' lifetime value via non-computational approaches. It is not only important, but necessary to address this issue and provide Practical solutions to increase the profitability of LG household goods. Thus, the main concern of the researcher in this study is to answer this question: how does brand equity affect the lifetime value of LG household goods customers? These relationships are shown by providing an integrated conceptual model in this regard.

### 2. Literature Review

# 2.1. Brand

According to Tom Duncan, we don't sell products any longer, but we sell brands and consume products [27]. One simply does not earn income by selling products, but income can be earned by selling brands (tangible and intangible set of values) [18].

Most companies are realizing that the brand associated with a product and service is one of the most important assets [2, 39]. Brand is something beyond a product. The factors that distinguish a branded product from non-branded products and gives greater value to it include the total customer perceptions and feelings about features, performance, brand name, and its reason for existence as well as the perceived characteristics of the related companies [20]. Brand is defined as the mark of a company or product together with the external signs associated with them [28]. According to the American Marketing Association, a brand (from the legal point of view) is defined as: a series of signs that indicate the origin of the product or service and distinguishes it from other competing brands. This definition suggests that the main value of a brand depends on the seller, while customer's mind is the origin of this value and brand is more than a simple sign for them [36]. This definition is criticized because it is highly product-driven. Most managers regard brand as a concept which provides awareness and reputation in the market [20].

In fact, this definition emphasizes the visual characteristic (as a source of differentiation) [43]. From the perspective of customers, brand can be defined as the total set of experiences that are achieved about a brand. In this regard, Professor Keller states that Brand is a combination of mental and psychological signs in consumers that increases the consumer perception of a product or service and these signs should be unique, outstanding, and desirable [19].

# 2.2. Brand Equity (BE)

In 1989, the scientific Marketing institute defined brand equity as the added value which is achieved by name in the market and through better profit margins with market share for the product; this added value can be regarded by customers and other channel members as a financial asset and a set of desirable relationships and behaviors [46].

A growing attitude has emerged in the marketing world: creation of intangible assets for development of loyalty and further relationship with customers. Personal experience, organizational culture, knowledge and brand equity are among these assets; and just like other intangible assets, brand equity can also become a powerful tool in a competitive market [45]. Brand equity, is the value that is added to a given product by a brand. In general, brand equity is the consumer's perception of all the advantages a given brand may have compared to other competing brands. One of the advantages of brand equity is the ability to reduce costs and increase profits. Brand equity also helps companies to increase prices and may also be effective in marketing communications. Brand equity may also have a positive impact on development of a brand to other categories of products and reduce the advertising and sales costs. In other words, higher brand equity leads to higher brand distinctiveness and brand knowledge as well as better consumer reactions [13].

Lisa Wood (2000), states that brand equity is associated with added value, in other words the brand equity includes the value which is added to a given product through customer relationship and perception of a brand. In general, brand equity is defined a set of relationships and behavior of customers, distribution channels and members of a specific company, which allow a brand achieve higher profits compared to the nonbranded products [43].

### 2.3. Brand awareness

Brand awareness is an ability to recognize and remind potential buyers of a brand as a member of a particular category of products. In other words, a product category (like cars) is reminiscent of a certain brand like Mercedes-Benz. Consumer-based brand equity arises when the consumer has a high level of awareness and familiarity with a brand and also has unique, desirable, and powerful brand associations in his or her mind [1].

Keller (2003) stated that brand awareness plays an important role in consumers' purchasing decisions and is associated with learning, attention, and choice advantages. A brand that has traditionally been used by families creates high awareness in the minds of consumers and this is because of the long-term usage of brands in the family and is considered as a kind of learning in the home environment. This awareness may greatly boost the consumers' learning in identification of a brand in their product category, to the extent that the brand may also be seen on the shopping list of their children [13].

Studies have indicated that, repeated representation of a given brand is effective in development of brand awareness, and the world's top brands have completely recognized this. However, this effect is more effective in terms of enhancing brand recognition. Nevertheless, improving brand recall requires establishment of a relationship between the brand and the needs and characteristics in the customer's mind [20]. Bumm & Gunkim (2005) have introduced four types of brand awareness:

- Top of mind awareness
- Brand recall
- Brand recognition
- Unawareness [7].

# 2.4. Brand association

In the definition provided by Aaker, brand awareness has a close relationship with brand association. Aaker (1991) defines brand associations as a mental relationship with a brand and believes that brand association can affect brand equity in 5 ways: 1) Contribution to data processing, 2) differentiated positioning, 3) reason to buy the brand, 4) development of motivation and positive feelings, and 5) Brand extension [1].

Brand association is anything related to the brand in the mind and can include consumer mentality, product characteristics, products uses, associations related to the organization, brand personality, and symbols [18]. The value of a brand is often based on dependencies and associations linked to it. This association is related to all aspects of brand in customer's mind and explains his or her beliefs and emotions towards the brand. In another word, brand image includes the general mind image of consumer with respect to brand and its exclusive aspects compared to other brands. In case the consumer has got a desired image from brand, brand messages compared to messages of competing brands make deeper influence. Hence, a desired image from brand in consumer's mind can have a good effect over his or her behavior with respect to increase of loyalty and creation of positive oral advertisement. Moreover, brand image can also affect brand value [6]. Consumers apply brand image to extract general perceptions of a particular product. Customers might perceive a stronger product or mind image as a more valuable product with higher quality [43]. Dependencies like McDonald name can create positive attitudes or feelings about the brand that has been attributed to it [26].

#### 2.5. Perceived quality

Perceived quality can be defined as the overall perception of customers about brilliance and quality of products or services in comparing with the rivalry offering [1]. Finally, perceived quality is the overall and subjective (intangible) feeling about the brand. However, perceived quality is usually based on some key dimensions, including product characteristics such as reliability and performance, and is somehow attached to the brand. Recognition and assessment of the main aspects of perceived quality can be effective and useful for understanding this phenomenon, however it should be noted that the perceived quality is a general perception [1]. Perceived quality from goods and services is comprised of three parts that are brought here:

- Elements within a product
- Elements hidden in a service
- Elements contributing in activities related to sale promotion of a product

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Zeithamel (1998) states perceived quality as customer's perception from superiority of a good or service quality compared to competitors, excluding technical aspect. He also determines that perceived quality is a part of particular value of a brand; thus, the high perceived quality leads consumer to selecting a brand rather than competing brands. Therefore, with increase in perceived quality by customer, special value of brand is also increased. Perceived quality of consumer is related to evaluation of information and loyalty toward a brand. It also greatly affects consumer in the buying stage [19].

### 2.6. Customer lifetime value

Customer lifetime value is the present value of the expected benefits (e.g., gross margins) less the burdens from customers [10]. Customer lifetime value is the net present value of the stream of contributions to profit that result from customer transactions and contacts with the company [15]. CLV is also defined as present value of all future profits generated from a customer. Knowledge of customer lifetime value enables decision-makers to classify customers and allocate marketing resources in terms of character [16, 22]. Therefore, CLV is the profit produced by all the steps taken by an enterprise to maintain a relationship with the same customer [44]. Customers are not equal and due to intense market competitions, retention of valuable customers is very important for companies. According to the principle of 20/80 (Pareto), 20 percent of customers of a company are accounted for 80 percent of its profits. Therefore, determination of this 20 such as loyalty, purchase intention, and purchasing amount [44].

# 2.7. Loyalty

Many scholars have provided numerous definitions for loyalty, and considering the multi-dimensional and complex nature of loyalty, this multiplicity of definitions is quite acceptable. Lam et al. (2005) define loyalty as the intention to perform a variety of behaviors that lead to incentives to keep the trade relationship, such as repurchase, word of mouth, and toleration of high prices [25]. Pan et al. (2012) define loyalty as the power of customers' attachment to the brand (or service provider) and intention to repurchase a brand (or service provider) continuously in the future [31]. Loyalty occurs when customers of a given company feel that the company can meet their needs in the best possible way, such that the rival companies are excluded from the considerations of the customers and they exclusively purchase products from that given company [40].

#### 2.8. Purchase intention

Intention is a behavior showing the level of a person's animus for doing a behavior. The relationship between behavior intention with behavior show that individuals will to involve in behaviors that have the intention [47].

Ajzen and Fashbein (1980) regard intention as determinant of action in a certain direction. They define behavioral intentions as the mental probability of a particular behavior formation and regard it as a mediating variable between consumer attitudes

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towards the quality of a product and their actual purchase behavior [3]. For example, the intention of purchasing a particular product is recognized as a good predictor of actual behavior in purchasing the product [34]. The purchase intention scale is mainly used to identify the possibility of purchasing goods during a certain time period and voluntary scales could be more effective than behavioral scales in achieving the customer's decision, because customers may be forced to purchase a product. In his programed model, Ajzen suggests that behavioral intentions have motivational effects on behavior, thus, behavioral intentions are viewed as the closest predictor of behavior [29].

In a research conducted by Notani (1997), he measures purchase intention with three items; I will, I test, and I try. The first one means that the task will be certainly done and the second and third mean whether I definitely want or not. In other words, purchase intention show the possibility of consumers' plan and their will to purchase a product or service in the future. Consequently, increase in purchase intention means increase in the possibility of purchase by consumer. Researchers also apply purchase intention as an important index for estimation of consumer's behavior. When consumers have a positive purchase intention, this in a form of commitment named as positive commerce leads them to a real purchase intention [30].

#### 2.9. Purchasing amount

Amount of purchase can be regarded as the indicative of the strength and duration of relationship between the company and the customer, which covers the frequency of customer's usage of a brand [44]. This is an accepted belief that the long-lasting customers are more profitable for the company. This profitability of lasting customers who are also known as loyal customers is attributed to features such as additional purchases achieved by their references to others, as well as the benefits obtained from savings in many of expenses and additional purchases. The profitability of a customer is guaranteed if he or she makes long-term and repeated purchases from a company. Customer lifecycle value (CLV) is a number of exchanges between a company and customer in the entire period that the customer remains in contact with the company. Customer lifetime value differs from one businesses to another and depending on the type of business, customers and the type of relationship between customers and the company, can be long or short term. Three main phases are identified in customer relationship. In the first phase the company tries to attract customers. In The second phase which is called retention, the company tries gain as much profit as possible by retaining the customer. Finally, it is possible that the relationship with customers undergoes deterioration and eventually come to an end [44].

### 3. Research background

In a MA thesis entitled "investigation of the factors affecting the choice and loyalty of customers in the insurance: the case study of depositors in Mellat band" conducted by Fahimi in 2006, a triple model was used. In this model, brand equity was regarded as one of factors influencing the choice of customers. The findings indicated that only brand equity and deposit interest rates influence the customer's choice. Finally, it was suggested that these two factors should be investigated in a broader research with evaluation of all the component indexes.

In a research titled as "classification of customers according to their lifetime value using datamining of RFM model" Alizadeh (2012) presented a proper model for classification of customers according to their lifetime value. In the suggested procedure of this research conducted in Toos-Shargh Commercial firm, after determining values for indices of RFM model (recent trading, number of trading, and the amount of money traded) in 260 customers and weighing them by application of analytic hierarchy process (AHP), according to the number of optimum clusters with respect to input index, customers were clustered by k-mean method. Results of current research set the ground for analysis of customer traits in eight main sections. Key customers of the company are determined by classification of customers in pyramid of lifetime value of customer. Finally, some recommendations are presented to better customer relation management.

In another MA thesis entitled "The mediating Role of customer-based brand equity on successful customer relationship and brand image in 5-star hotels in Mashhad" conducted at the Faculty of Economic and Administrative Sciences in Ferdowsi University of Mashhad, Fatemi in 2011, concluded that successful customer relationship has a significant positive effect on brand equity and brand image, in addition, the significant positive impact of brand equity on brand image was confirmed in this study. It was also stated that the indirect effect of customer relationship on the brand image is higher than its direct effect. The mediating role of brand equity was also approved in this study. This means that the hotel management sector should take the effective role of brand equity into account and try to boost that in order to improve the brand image from the perspective of consumers [28].

In a study entitled "The relationships between CRM, RQ, and CLV based on different hotel preferences" which was conducted by Wu and Li (2011) on the customers of hotels and guesthouses, a population of 688 people were sampled. They used structural equation modeling to investigate the effect of customer relationship management on the customer lifetime value through the variable of relationship quality. The results of this study indicate that there is a significant positive relationship between customer relationship management and customer lifetime value through relationship quality variable [44].

Wang (2009) in china, studied repurchasing behavior of online consumers in their study titles as research in repurchasing behavior of online customers from the view of relational model. Variables in this research are quality of website, repurchasing, and relational variables (overall satisfaction, trust, and commitment). Results show that perceived quality of website has got a meaningful relationship with overall satisfaction and trust. Satisfaction and trust are the foreground of repurchasing. Therefore, high quality of the website is an important element affecting behavior of online consumers.

Also, positive relation between satisfaction and customer's trust with repurchasing is emphasized. Satisfaction has a direct influence on repurchasing and an indirect influence on repurchasing through trust. There is also a meaningful relationship between trust and commitment and repurchasing. It was also perceived that trust has a direct influence on repurchasing and an indirect influence on that through commitment. Generally, this study shows that perceived quality of website, overall satisfaction, and commitment have significant influence on repurchasing [42].

In an article titled "Consumer perceived value, satisfaction and loyalty on brands" conducted by Darak and Habib (2010) the population of people residing in Malaysia were sampled by email and 305 subjects were used to investigate the relationship between consumer perceived value, satisfaction and loyalty n in the food industry. The results showed a significant positive relationship between customer satisfaction and loyalty, and researchers inferred that the higher customer satisfaction with a given brand leads to higher brand loyalty [9].

#### 4. Hypotheses Development and Conceptual Model

Main hypothesis (H): brand equity has a positive and significant effect on customers' lifetime value.

Subsidiary hypotheses:

- H1: brand awareness has a positive and significant effect on customers' purchasing amount.
- **H2:** brand awareness has a positive and significant effect on customers' purchase intention.
- H3: brand awareness has a positive and significant effect on customers' loyalty.
- **H4:** brand association has a positive and significant effect on customers' purchasing amount.
- **H5:** brand association has a positive and significant effect on customers' purchase intention.
- H6: brand association has a positive and significant effect on customers' loyalty.
- **H7:** perceived quality has a positive and significant effect on customers' purchasing amount.
- **H8:** perceived quality has a positive and significant effect on customers' purchase intention.
- H9: perceived quality has a positive and significant effect on customers' loyalty.

According to what above mentioned, each of the model variables were defined and explained. In the following, the role of each of which are determined. The main variables of model are brand equity and customer's lifetime value. Based on conceptual model, the dimensions of brand equity including the brand awareness, brand association, and perceived quality are considered as independent variables, and dimensions of customer's lifetime value including the purchasing amount, purchase intention, and loyalty are considered as dependent variables [1, 2, 22, 26, 44]. According to what above mentioned, the concept of brand equity and its related dimensions is adopted from Aaker (1991) model and dimensions of customer's lifetime value are adopted from McDonald (2003), Wu and Li (2011), depicted as follows:

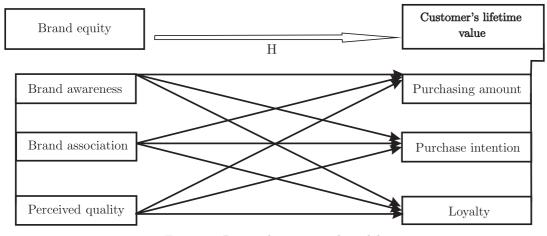


Figure 1: Research conceptual model.

### 5. Methodology

This study is an applied research in terms of purpose and is a descriptive research in terms of data gathering method. The method of conducting the research is also survey because describes the variables status and their relationships.

# 5.1. Data gathering tool

General questions were comprised of four items including gender, age, educational level, and marital status. Specialized questions were comprised of 27 items; 15 items were related to brand equity [1, 2, 8, 32, 33]. Also 12 items were related to customer's lifetime value [44]. The variable of brand equity has three dimensions of perceived quality, brand association, and brand awareness which were respectively measured by 5, 6, and 4 items. Customer's lifetime value also has three dimensions of purchasing amount, puchase intention, and loyalty each of which were measured by 4 items. All the items were measured on a 5-point likert scale.

### 5.2. Validity and reliability

The content validity of the questionnaire was evaluated and confirmed through adopting the opinions of some management professors and experts. The construct validity was also evaluated by conducting confirmatory factor analysis in Amos software. As it can be seen in Table 1, the value of skewness and kurtosis for all the items is within the range of -2 and +2 indicating the data normality. Furthermore, the factor loading of items are all significant at confidence level of .95 and none of them were eliminated from the analyses. The basis for significance was that their p-value should be less than .05. The questionnaire's reliability was evaluated by Cronbach's alpha coefficients in SPSS software. Since all the alpha coefficients were greater than .70 (see Table 2), it can be said that the questionnaire's reliability is acceptable.

Variable	Component	Item	Kurtosis	Skewness	Factor loading	P-value	Result
	Perceived quality	Q1	1.372	1.073	.891	.001	Significant
		Q2	.106	.592	.921	.001	Significant
		Q3	.392	.637	.915	.001	Significant
		Q4	1.206	1.233	.682	.001	Significant
		Q5	.051	.072	.704	.001	Significant
		Q6	454	.110	.792	.001	Significant
		Q7	068	.525	.921	.001	Significant
Brand	Brand	Q8	.299	.834	.782	.001	Significant
equity	association	Q9	1.175	1.322	.441	.001	Significant
		Q10	248	049	.671	.001	Significant
		Q11	1.566	1.209	.841	.001	Significant
	Brand	Q12	1.432	1.816	.841	.001	Significant
	awareness	Q13	1.734	1.651	.765	.001	Significant
		Q14	1.106	1.112	.820	.001	Significant
		Q15	1.369	1.003	.801	.001	Significant
	Purchasing	Q16	260	.402	.833	.001	Significant
		Q17	.650	.911	.344	.001	Significant
	amount	Q18	179	.404	.886	.001	Significant
		Q19	.240	.725	.586	.001	Significant
		Q20	.320	.394	.733	.001	Significant
Customer's lifetime value	Purchase	Q21	.302	.671	.838	.001	Significant
	intention	Q22	189	.439	.793	.001	Significant
		Q23	1.206	1.149	.848	.001	Significant
		Q24	518	.078	.754	.001	Significant
	Loyalty	Q25	762	037	.700	.001	Significant
		Q26	.175	.661	.917	.001	Significant
		Q27	.967	1.026	.864	.001	Significant

Table 1: Results of CFA for the items of questionnaire.

Table 2: Cronbach's alpha coefficients.

Variable	Component	Alpha (dimension)	Total alpha
	Prceived quality	.911	
Brand equity	Brand association	.879	.707
	Brand awareness	.882	
Customer's	Purchasing amount	.780	
lifetime	Purchase intention	.879	.916
value	Loyalty	.880	

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# 5.3. Statistical population and sample

The number of certified stores of LG household goods in Mashhad city is 24 referring to the Goldiran website which is the official representative of LG Company for aftersales services in Iran. The questionnaires were randomly completed by customers who were referred to Goldiran Company for receiving aftersales services. By acting in this way, we gathered the opinions of customers who have purchased the LG goods at least one time. The sample size of 400 was calculated by Cochran's formula in which the standard deviation of .51 (obtained from pre-test) was pasted.

# 5.4. Data analysis method

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Both the descriptive and inferential statistics have been used in this study. Descriptive statistics calculated by SPSS software was comprised of central and dispersion indices and reliability coefficients. In order to test the hypotheses, structural equation modeling was used, which is a strong technique from the family of multi-variable regression. In addition, the main concepts were considered as latent variables and the items as observed variables.

Demographic variables	Status	Frequency percentage		
Gender	Female	71.1		
Gender	Male	28.9		
	Less than 20	10.6		
	From $21$ to $30$	44		
Age	From $31$ to $40$	24		
Age	From $41$ to $50$	11.4		
	From $51$ to $60$	7.7		
	Higher than 60	2.5		
	Diploma and lower	20.5		
	Associate degree	16		
Educational level	Bachelor degree	42.7		
	Master degree	12.1		
	Doctorate	8.7		
Marital status	Single	50.4		
Warnar Status	Married	49.6		

Table 3: Demographic information.

#### 6. Research results

# 6.1. Respondents demography

Respondents' characteristics were studied using four demographic variables of age, gender, educational level, and marital status, only with the purpose of reporting the respondents' portrait. Table 3 shows the summary of these results. As it can be seen, the number of women (71.1 %) was more than men (28.9 %), the age of most of the respondents was in the range of 21-30 (44 %), and most of the respondents were single (50.4 %) and had the bachelor degree (42.7 %).

# 6.2. Hypotheses testing

Before testing the hypotheses, we should confirm the validity of fitness of the structural model. Following tables shows the existing and desirable values of fitness indices. Research hypotheses were tested using two structural models, standardized path coefficients, and their corresponding p-values. First Structural model is provided to test the main hypothesis which is shown in Table 4 and Figure 2, and the second structural model is provided in Table 5 and Figure 3 is testing other hypotheses. Total hypotheses testing summary are in Table 6.

Index	Desirable value	Model value	
Degree of freedom (df)	—	8	
$\chi^2$	$2 df = \chi^2 = 3 df$	17.907	
$\chi^2$ significance	Non-significant	.062	
$\mathrm{df}/\chi^2$	Lower than 3	2.238	
GFI	Greater than .80	.940	
RMR	Lower than .09	.026	
CFI	Greater than .90	.975	
RMSEA	Lower than .08	.061	
PGFI	.60 = PGFI = 1	.671	
PNFI	.60 = PNFI = 1	.610	

Table 4: Fitness indices of structural model 1.

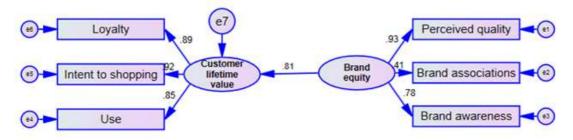


Figure 2: Structural equation model 1 for main hypothesis.

Index	Desirable value	Model value
Degree of freedom (df)	—	312
$\chi^2$	$2 df = \chi^2 = 3 df$	634.548
$\chi^2$ significance	Non-significant	.087
$df/\chi^2$	Lower than 3	2.034
GFI	Greater than .80	.845
RMR	Lower than .09	.074
CFI	Greater than .90	.901
RMSEA	Lower than .08	.071
PCFI	.60 = PGFI = 1	.745
PNFI	.60 = PNFI = 1	.648

Table 5: Fitness indices of structural model 2.

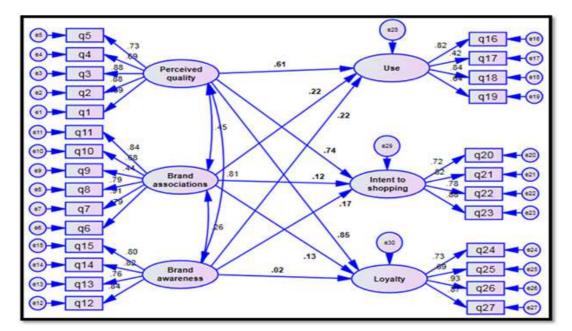


Figure 3: Structural equation model 2 subordinate hypothesis.

Hypotheses	Direct path	Path coefficient	p-value	t-value	Result
Main(H)	Brand equity $\rightarrow$ Customer lifetime value	.81	.000	5.722	confirmed
1	Brand awareness $\rightarrow$ purchasing amount	.46	.000	8.437	confirmed
2	Brand awareness $\rightarrow$ purchase intention	.17	.032	2.320	confirmed
3	Brand awareness $\rightarrow$ loyalty	.02	.868	.166	rejected
4	Brand association $\rightarrow$ purchasing amount	.22	.024	2.502	confirmed
5	Brand association $\rightarrow$ purchase intention	.17	.032	2.320	confirmed
6	Brand association $\rightarrow$ loyalty	.13	.040	2.168	confirmed
7	Perceived quality $\rightarrow$ purchasing amount	.61	.000	3.904	confirmed
8	Perceived quality $\rightarrow$ purchase intention	.74	.000	4.798	confirmed
9	Perceived quality $\rightarrow$ loyalty	.13	.040	2.168	confirmed

Table 6: Coefficients and Regression p-values.

# 7. Conclusion

As mentioned before, the present study is an attempt to investigate the influence of brand equity on the lifetime value of customers using the imported LG appliances in the city of Mashhad. The concept of special value of brand has got a practical importance for managers and marketers of LG corporation, as well as sale representatives. Doing activities in line with boosting strength of brand for consumers is invaluable because it reduces risk in using goods made by this company and making decision economically becomes more reasonable for consumers. Strong brand name also attracts customers which goes back to the application of brand name in giving awareness to people. This can also play a pivotal role in long-lasting relationship with customers and creation of the sense of loyalty and consequently in increase of customers' lifetime period that results in profitability for the company. No capital may become more applicable for a company than a strong, authentic, valuable brand. Creating a lovely image in heart of visitors going to LG sale representatives is certainly much harder than being in their mind and thought. They would be absorbed more by being in their hearts.

It should be noted that, the hypothesis of the brand awareness influence the customers' usage quantity is quite consistent with the results of McDonald and Sharp in 2003 [26]. LG can introduce new products through phone calls, video calls, email or SMS once in a while. Considering the specific characteristics of services, branding is also especially important in after-sales services. A well-known brand for the customer acts as an information provider for decision-making when purchasing a product, and reduces the risks. Such a brand would ultimately facilitate the decision-making process. As a matter of fact, the results showed that brand awareness has a positive impact on consumers' intention to purchase LG household goods and this is consistent with the results of studies conducted by Chang and Chen in 2008 and Senthilnathan and Tharmi in 2012 [37]. Awareness of a brand and using its product doesn't always lead to loyalty. Therefore, it is the frequent and continuous use of a brand and recognition of all service aspects that will gradually lead to customer loyalty. Awareness of the quality and services of the products is a necessary condition for customers' usage of products by a specific brand, but of course not a sufficient condition for that. These results indicate that brand awareness has no effect on loyalty of customers using LG household goods. Results are also quite consistent with the results of Sardari et al. in 2014 [35]. In addition, the marketing managers of LG sales representatives should consider policies so that customers can get a successful association of LG brand along with changes and fluctuations in market conditions as well as changes in their behavior as consumers. Continuous advertising and offering special discounts can be effective in association of the LG brand compared to other competing brands and can improve the purchasing decisions. This confirms the impact of brand associations on the purchase intentions of the LG household goods, which is also consistent with the results of Senthilnathan and Tharmi in 2012 [34]. LG Company should promote good mental images in the minds of customers to build customer loyalty. Thus, this company can also provide loyal customers with special benefits such as gifts and appreciations in order to gain their trust and loyalty. Furthermore, Greater emphasis on television advertising for LG household goods, and using a variety of pricing strategies such as special discounts can be effective in this regard. This confirms the effect of brand association on the loyalty of customers using LG household goods and is consistent with the results of Filo and Funk in 2008; Ebrahimi et al. in 2008; and Shams in 2007 [11, 12, 39]. There is a strong relationship between perceived

quality and usage quantity of the LG household goods customers. Customer increase their loyalty to a given brand based on their perceptions of the product's quality and thereby provide the ground for word of mouth advertising. In addition, observance of quality standards in all household goods causes the customers to purchase the products of other brands as well, even if they are satisfied with the quality of one given brand. Using up-to-date and efficient services, proper behavior of staff in the after-sales service sectors, meeting the customers' needs and problems not only help the LG brand achieve its quality goals, but create a powerful image of the brand in the minds of customers. The results of this study are consistent with the results of Yu et al in 2001 and Shams et al in 2007 [39]. Finally, according to the results, the impact of perceived quality on loyalty and purchase intentions of customers was confirmed and they are consistent with the result of Sardari et al in 2014 and Kim and Hyun in 2011 [24, 35].

# 7.1. Suggestions & future studies

In general, the findings suggest the need for increasing attention to the issue of brand equity and customer lifetime value. Some suggestions in line with these findings are provided in the following part that can be of great use for active institutions such as the importers of various products, in general, and the LG household goods Company, in particular. Therefore, managers of these companies are suggested to pay increasing attention to advertising in order to raise the awareness of their customers because advertising is one of the most important factors influencing the awareness of customers. To survive in today's competitive market, LG should provide customers with special products in order to satisfy the customers and make them loyal. When customers are satisfied, the possibility of their returning to the place where they have gained satisfaction would be higher while, dissatisfied customers usually join the rivals. to increase the perceived quality, the marketing directors of LG are suggested to take the necessary measures to increase the satisfaction of customers, increase profitability of their company and maintain the loyal customers through careful planning and establishing a comprehensive system of quality control, as well as the websites through which they can ask the consumer about the quality of their products. Loyalty is a rather biased behavioral reaction in the purchasing process or suggestions which a customer may develop towards the LG brand during his or her lifetime and causes the customer to have a special inclination towards a given Brand (among other brands he/she may have in mind) in the process of decision-making and evaluation of brands. LG managers can create an image of quality in the minds of consumers by changing the product prices, that is, when the price of the product increases, consumers attribute it to increased quality of the product. They can also provide their loval customers with special benefits such as gifts and appreciations; and thereby, gain their trust and their loyalty. Finally, with respect to the relationships in the model of the study and the results obtained, the following suggestions are provided for further studies. Given that this study is designed to investigate the household goods with foreign brands, this model is recommended to be used for domestic household goods so that useful measures may be provided for promoting the marketing of these products

as well. In addition, given that in this study the concept of customer lifetime value was evaluated from the perspective of consumers' behavior, this concept should also be investigated from the financial and accounting aspects in order to account for the classification of customers using LG household goods in terms of profitability. Finally, variables such as relationship quality is recommended to be used as a mediator variable and customer relationship management (CRM) rather than brand equity as an independent variable in the future studies. Their comprehensiveness be accounted for as well.

# 7.2. Limitations:

- Of limitations governing this research, application of measurement tools could be mentioned. Fundamentally, questionnaire inherently has some limitations that cannot enter into opinions and tastes of customers; then, another tool such as interview must be applied for collection of data.
- This study is situational with respect to research time horizon. Actually, the obtained views of individuals depend on particular time of research whereas more credit is found for findings of research by conducting it continuously and receiving opinions of individuals in different time spans.
- Limited access to foreign databases, websites, articles, and dissertations
- Lack of enough time and cooperation by some customers in allotting a part of their time to complete the questionnaire.
- Women are most frequent users of home appliances, hence the proportion of women to men would not be equal in descriptive statistics

### 7.3. Future Research

- Since this study is compiled for studying home appliances that are foreign brands, it is suggested to study this model for home appliances that have domestic brands in order to present beneficial solutions to develop marketing process for these products.
- Due to the fact that customer's lifetime value was studied in view of consumer's behavior, it is recommended to study this concept from accounting and financial aspects to pay attention to customer classification for LG home appliances with respect to profitability.
- It is suggested to study variables such as communication quality as a mediator and customer relation management (CRM) as an independent variable instead of special of value of brand in our model. Comprehensiveness be studied, too.

It is recommended to benefit this research plan for other domestic or foreign brands of cellphones, audiovisual equipment, and etc.

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