

The effect of brand personality on trust, attachment and commitment in Irtoya brand

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Brand personality has always been considered by researchers as an important factor in branding studies. Therefore, the present study has been conducted to evaluate the effect of brand personality on factors related to the brand-customer relationship (brand commitment, attachment and trust). The research model is based on the data collected from 400 questionnaires that have been distributed and collected among the costumers of Irtoya brand - Toyota representative in Iran - in Tehran by sampling method. Its validity been confirmed by various methods including factor validity, content validity, and face validity, and its reliability by Cronbach's alpha method, test-retest, and split half method. It has been tested based on structural equation modeling (SEM). The results of this study show that brand personality affects brand trust and attachment directly and affects loyalty indirectly. Also, the results show that brand attachment and brand trust directly affect brand loyalty. However, in this study, the effect of brand trust on brand commitment, as well as the effect of brand commitment on brand loyalty, was not confirmed. The factors studied in this study are known as the main factors of customer relationship with the brand, so if marketers need to create this relationship, it is better to use these factors in a great way.

Keywords: brand personality, brand loyalty, branding factors, structural equation modeling

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1. Introduction

Today, the brand is one of the intangible assets of organizations that can play an important role in their growth and profitability in the long term. Brands are considered as one of the most important strategic assets of businesses and play an important role in consumer behavior. A brand is a summary of identity, originality, features and differences, and plays a special role in companies as a marketing tool, because strong brands increase trust in intangible products and enable customers to better understand the product. The brand not only demonstrates the organization's commitment to its promises to provide functional benefits to the customer, it also demonstrates the organization's commitment to providing emotional, social and self-presentation benefits to the customer. It can also be stated that; in marketing science, brand commitment is "the consumers' constant desire to continue their relationship with the brand" [1]; In a way that consumers usually tend to establish a close emotional connection with the brand which has created a sense of pleasure and happiness in them [2]. In fact, commitment is the provider of the highest degree of communication. The brand personality is one of the important factors that play a role in shaping customer commitment to

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products and services and in general to the brand of an organization. Brand personality is "a set of traits associated with a particular brand in the mind of the buyer that includes the dimensions of honesty, passion and excitement, competence, perfection and strength" [3]. Customers often give brands a human dimension by giving them personality, and marketers often create or reinforce these perceptions through positioning [4]. Brand personality traits provide a symbolic concept with emotional value that can lead to customer inference of the brand and are more lasting than task characteristics. Successful positioning of a brand personality in a product category requires models that can distinguish unique personality traits from traits that are common to all brands in that product category [5]. In general, this view states that a strong brand identity goes far beyond product characteristics. A brand, like a person, can look dynamic, responsible, and so on. Various studies have shown that brand personality can lead to a strong brand in several ways. Personality can create symbolic benefits for customers and can be used as a tool for self-presentation of customers and expressing their personality. Brand personality can also help convey product characteristics to customers. Brand personality is an attractive topic in marketing; personality draws a great position of the brand in the minds of consumers and expresses the attitudes, feelings and views of customers about the brand. Years ago, brand management was tactical and responsive, and the long-term vision for the brand was unimaginable. Branding needs years of work and building a legacy, so, it has been difficult to convince managers to reduce or maintain short-term profits. But in the new view, the role of brand management underwent a fundamental change and changed from a tactical and responsive state to a strategic and visionary state. In this view, building strong relationships connects customers to their favorite brands, and even forms emotional relationships such as brand love and praise [6]. Today, customers expect the brands or products they buy to satisfy them; but satisfaction is not a sufficient condition for a continuous relationship with the brand [7]. Customers are looking for relationships beyond satisfaction, relationships that are based on emotional attachment. A degree of this passionate emotional attachment that a satisfied customer has with a particular brand is brand love [8]. In other words, when a brand acts in a way that is able to satisfy real and tangible needs on the one hand and emotional and non-tangible needs on the other, it can create a strong emotional feeling in the consumer that can be interpreted as love; thus the concept of brand love in consumer research has been [9,10] extensively in comparison with human love. To build effective and long-term relationships, it is essential to recognize the underlying layers affecting consumer relationships, and an inadequate understanding of emotional connections wastes all of the company's marketing costs. Recent studies on BL in many fields show that expressing brand love through likes on social media reflects the personality traits of some consumers. [11,12,13,14]. Some studies show that creating emotional bonds turns customers into loyal guardians of the brand who become anxious and worried when they are separated from the brand and support the brand such as loyal defenders when they own the brand. These emotional bonds are created over time [7]. Along with creating passion, they can lead to loyalty and commitment [24]. Brand integration, long-term engagement, distress in the event of separation, strength in consumer attitudes, intimacy [6,15], passion for the brand, willingness to pay higher prices, positive word of mouth marketing and Creating an affectionate relationship between the brand and the customer makes the customers feel that the brand in question is so important and unique that they cannot replace it with other brands. This feeling will generate huge capital for the brand [7]. According to Moorman et al, brand trust refers to customers' belief in a brand's ability to perform its intended tasks. This definition challenges two main approaches. First, trust is a belief, desire or expectation of exchanging confidence with the other party which arises from their skill and credibility. Second, trust is a behavioral tendency that reflects reliance on the partner [16]. Zaltman & Moorman and some other researchers believe that the concept of trust is relevant only to uncertain situations. In particular, brand trust reduces uncertainty in an environment where consumers feel vulnerable. Brand trust leads to brand loyalty or commitment; trust creates relationships that are very valuable, and commitment is defined as a constant desire to maintain a valuable relationship. Loyalty and

commitment therefore provide the basis for maintaining a valuable and important relationship established by trust, in other words, trust and commitment must be related, because trust is important in communication exchanges and commitment is the result of such valuable communications. So, it can be concluded that brand trust helps both attitudinal loyalty and behavioral loyalty. Therefore, the objective of this study is to provide a model that includes the direct and indirect effects of brand personality on the factors of this structure, brand trust, brand attachment, brand commitment and loyalty, factors that can be used as emotional and relational factors. We know that in a very complex market with the products that are almost equal in all respects, customer loyalty towards companies with approved brand and familiar names is more and most of the consumers prefer an approved and trusted brand to companies with diverse products and lower prices. So companies with strong brands are also more successful in entering new markets. Therefore, this study is in line with the above three areas of research. In addition to the relationships between brand personality and brand trust, brand attachment, brand commitment, and loyalty, the interdependencies between these relational outcomes will also be examined. Although previous studies have focused on examining specific relationships such as loyalty- brand personality, trust-commitment, but this study examines all of these relationships simultaneously and hence presents an integrated model of relational outcomes of brand personality. In the following, using appropriate tools, we will collect the data needed for hypothesis testing and analyze the research hypothesis and questions using statistical techniques in accordance with the research method, the details of which are given in the following[17].

In the following, in section 2, the theoretical foundations and research literature are examined. Section 3 presents the research methodology, Section 4 presents the method of data analysis, and Section 5 presents conclusions and suggestions.

2. Literature review

Song & Kim in a study, the effects of customers' perception of brand personality in casual theme restaurants, examined the relationship between brand brand personality perceptions, brand preference and attitudinal loyalty in Olive Garden and Chili's chain restaurants by selecting 336 people as a research sample. The results of their study showed that the perception of brand personality affects attitudinal loyalty. They also found that there was a direct relationship between brand preference and word of mouth advertisement in the restaurants studied[18]. Louis & Lombart evaluated the effect of brand personality on trust, attachment and commitment to the brand and found that 9 personality traits considered in their research on Coca-Cola brand have a direct impact on its consequences, namely trust, attachment and commitment to the brand[19]. Rauschnabel and Aaron examined anthropomorphism and brand love in their study. They considered the impact of anthropomorphism on brand love in defensive marketing and identified theoretical mechanisms through which anthropomorphism may influence brand love: category-level evaluation, cognitive fluency, cognitive consistency, self-extension and self-congruence. The results reveal that the level of quality and anthropomorphism are important antecedents of brand love[13]. Wallace et al. studied customer engagement with self-expressive brands. They surveyed customers who were engaged with brands through Facebook likes. The study identified a positive relationship between the self-expressive nature of brands "liked" and brand love[14]. In another study, Machado et al. examined brand gender and consumer-based brand equity on Facebook, consumer-brand engagement and brand love. Their purpose was to deepen understanding of the relationship between brand gender and CBBE by analyzing the mediating role of consumer-brand engagement and brand love on this relationship. This research was conducted on Facebook, the dominant global social media platform. The hypotheses were tested using structural equation modeling. Results supported 6 of the 9 hypotheses, with a significant relationship between analyzed constructs and showed that brand

gender has an indirect and relevant impact on CBBE through BL and CBE[12]. In another study, Aro et al. studied antecedents and consequences of destination brand love with a case study of Lapland, Finland. The main contribution of the study was the presentation of a framework of antecedents and consequences of destination brand love. Their case study was a large outdoor resort located in Lapland, Finland. The results demonstrated the importance of understanding the extreme emotions related to destinations[18]. In another study, Mantino et al. examined the impact of brand authenticity on creating brand love and its impact on memory and lifestyle. They used experimental data collected from 412 guests of different brands of luxury hotels. They showed that brand authenticity is an important and determining factor in memory and is a key factor that affects luxury hotel brands and business performance [20]. In another study, Song et al. examined the effect of image, satisfaction, trust, love and respect on brand loyalty of the name-brand coffee shops. A total of 401 data sets were analyzed using SPSS and Amos statistical software. It was found that customers' brand love and respect significantly moderated the relationship between trust and brand loyalty, suggesting that the theory of love marks is useful to explore the development of generating brand loyalty [21]. AjtSajtos et al. examined brand love on four continents. They assessed brand love in six cultural contexts in five countries (Australia, China, France, the United Kingdom and the United States) on four continents. They stated that, with the exception of Australia, the main structure of brand love must be reformed to achieve a proper and satisfying model [22]. Huang et al. In a study, they examined the effect of brand trust on the relationship between brand image and customer loyalty. They target Procter & Gamble as a target brand, using path analysis and bias as a theoretical model of brand image relationships, brand trust (e.g., cognitive and emotional), and customer loyalty. For example, repurchase and customer support intent) have been created and tested. These findings provided the basis for organizational marketing management to increase customer loyalty by shaping the brand image [25]. Zhang et al. examined The interaction effects of spokes-character dynamism and brand personality on consumers' evaluation. The purpose of this paper is to examine the interaction effects of spokes-character dynamism (high vs low) and brand personality (sincere vs competent) on consumers' evaluation and the mediating role of processing fluency. The studies considered only one method, "frozen motion," to evoke perceived movement. The results of Studies show that for sincere brands, spokes-characters with high dynamic imagery contribute to significantly higher consumer evaluation than the control group and the group of spokes-characters with low dynamic imagery [26].

3 .Research methodology

The present study aims to evaluate the effect of brand personality on factors related to the brand-customer relationship (commitment, attachment and trust in the brand). The present study is applied in terms of purpose, survey in terms of data collecting method, and correlational in terms of determining the relationships between variables. The current research model is based on the data collected from 400 questionnaires that have been distributed and collected among the consumers of Irtoya brand - Toyota representative in Iran - in the city of Tehran by availability sampling method and its validity has been confirmed by the methods such as factor validity, content validity, and face validity, and its reliability has been confirmed by Cronbach's alpha method, test-retest, and split half method. It has been tested based on structural equation modeling (SEM). Two types of data have been collected in the present study. Some of the data collected relate to the literature and background of the research and the others relate to statistical information and data. The questionnaires were used to collect data from the statistical population of the study. The present research questionnaire is based on standard questionnaires used in similar studies. Also, the statistical population of the present study is the customers of Iran Irtoya brand who have purchased Toyota products (passenger cars).

The questionnaire of the present study included the following sections:

Questions related to the respondent, (including age, gender, number of cars, occupation, etc.)

Questions (items) of the questionnaire: This section of the questionnaire consists of 2 parts:

Brand personality questions: The 42-trait model of Aaker was used after the translation test.

Special questions: This part contains 18 questions. In designing this part, we have tried to make the questions of the questionnaire as understandable as possible. To design this part, a five-point Likert scale has been used, which is one of the most common measurement scale. The general form and points of this scale for positive questions is as follows:

General form: Strongly disagree - Disagree - No comment - Agree - Strongly agree

Points: 1 2 3 4 5

The type of scale of the present study is sequential or ranking due to the use of Likert scale. At this stage, in addition to ranking according to the presence or absence of the studied trait, the variables are also determined according to the intensity and weakness of that trait or their preference. This intensity and weakness is expressed in the form of precedence, without knowing the extent of the difference in different ranks.

3.1. Conceptual model of research:

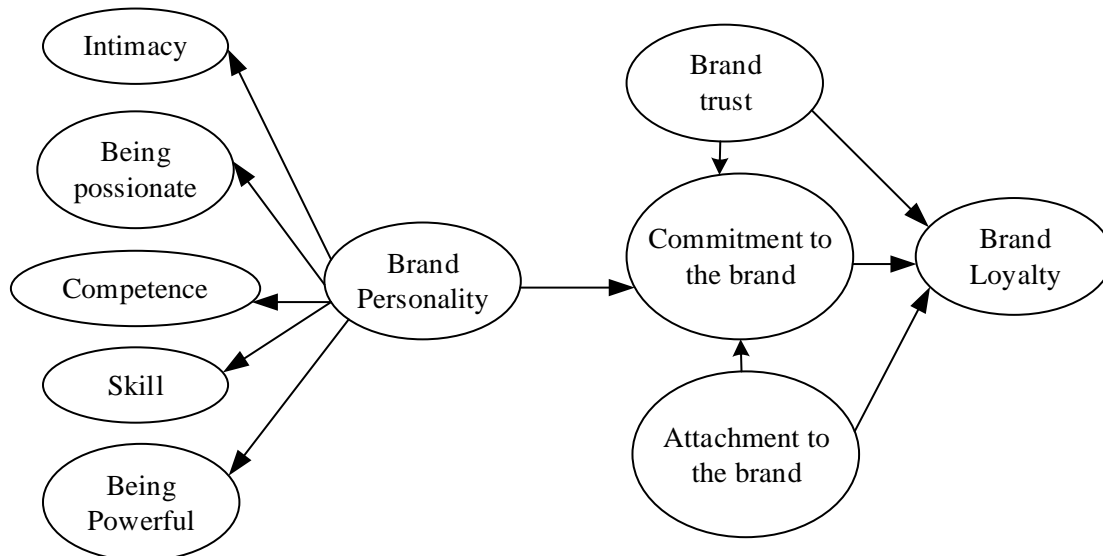


Figure 1: Conceptual model of research

In this study, in order to determine the reliability of the test, three methods have been used: 1. test-retest, 2. Cronbach's alpha method, and 3. split half method.

3.2. Reliability of internal consistency

In this study, the technique of calculating Cronbach's alpha coefficient has been used to estimate the reliability of internal consistency.

Several pre-test steps have been used to determine the reliability of the questionnaire. In the present study, 36 questionnaires were distributed among some sample members to perform the pre-test. Details about Cronbach's alpha in the final pre-test showed that all coefficients are above 0.7 which indicates the high reliability of the questionnaire used.

3.3. Split half method:

In this method, we divide the questions of the questionnaire into two equal halves. Then we calculate the correlation coefficient between the two halves. The higher the correlation between the two halves is, the greater the measurement accuracy of the test will be. Finally, we calculate the test reliability using the following formula:

$$r'_{11} = \frac{2r_{11}}{1 + r_{11}} \quad (1)$$

= r'_{11} Reliability coefficient in the whole test

= r_{11} Correlation coefficient between the two halves of the questions

3.4. Composite reliability (CR)

This index is actually the ratio of the sum of the loading factors of the latent variables to the sum of the loading factors plus the variance of the error. The value of this index should not be less than 0.6.

Table 1: Internal consistency calculation table

Variables	CR
Brand personality	0.849
Brand trust	0.901
Commitment to the brand	0.897
Attachment to the brand	0.912
Brand loyalty	0.876

3.5. Test-retest method

The test- retest reliability indicates the similarity of the test among the different performances and wants to know whether the performances of a similar tool will have the same or likely similar

results. To calculate the test-retest reliability, we perform the tool twice on similar subjects and then calculate the correlation coefficient between the two performances. In the present study, the test-retest method was performed in such a way that at first, the questionnaire was distributed among 23 subjects and after a week, the questionnaire was redistributed among these subjects and then collected. Pearson correlation coefficient was calculated between the points obtained from the first and second rounds. The calculated coefficient was 0.831, which indicates a high reliability and shows that the test does not change much over time.

3.6. Data analysis method

Descriptive and inferential statistical methods have been used for data analysis. Descriptive method has been used to express statistical measures, especially the two main measures, namely the measures of central tendency and measures of variability. These measures describe the data obtained from the sample group. Using inferential statistics, research hypotheses have been calculated with probability theory and decisions have been made about research hypotheses. The following measures have been used for descriptive analysis: frequency, frequency percentage, mean, median, and mode; and following statistical tests have been used for inference and answering research hypotheses and questions.

4. Analysis of research data and findings

In the following, according to the collected data, we examine the research questions and try to achieve the research objectives. Finally, any research may reach findings that have not been of its objectives, but they may help the researcher or other researchers for future studies or identify possible causes of events and phenomena, so we examine other findings of the research. The software packages used to analyze the data were SPSS software package version 19 and LISREL software package version 8.72 under Windows.

4.1. Descriptive review of observations

Descriptive statistics are a set of criteria that can provide a general description of the data collected for the researcher. In the present study, we have made a descriptive study of the observations by presenting the relevant tables and graphs; the results of which are as follows. Descriptive results show that men had the highest level of participation so that more than 70% of the participation was related to men. In terms of age, almost 72% of people were under 30 years old, which indicates the fact that the majority of users of this brand are young people. In terms of education, more than 60% of people had a bachelor's degree or higher, which indicates the high level of education of the respondents. In terms of income, 44.3% of people had less than one million tomans and the rest of the people had more than 1 million tomans. More than 55% of people have used this brand for more than 5 years, and more than 55% of people have used this brand more than 20 times, which itself can show the satisfaction of people from this brand.

4.2. Normality test of model components

Another common classification of statistics is its division into parametric statistics and non-parametric statistics. Parametric statistics require assumptions about the sample population. As the most important assumption in parametric statistics, it is assumed that the distribution of population is normal, but non-parametric statistics do not require any assumptions about distribution. Parametric statistical techniques are strongly influenced by the scale of measuring variables and the statistical distribution of society. If the variables are nominal and ordinal, non-parametric methods must be used. If the variables are of interval and ratio type, if it is assumed that the statistical

distribution of the population is normal, parametric methods are used; otherwise, non-parametric methods are used. Kolmogorov-Smirnov test was used to check the normality of the components of the model scale and in all tests; the statistical hypothesis is as follows.

H0: Data is normal (data came from normal population)

H1: Data is not normal (data did not come from normal population)

Table 2: Results of Kolmogorov-Smirnov test for research variables

Variables	significance level	result of hypothesis
Brand personality	0.096	Normal
Brand trust	0.158	Normal
Commitment to the brand	0.147	Normal
Attachment to the brand	0.063	Normal
Brand loyalty	0.264	Normal

As can be seen in Table 5, because the value of the significance level in all components is higher than the error value of 0.05, so we conclude that the null hypothesis is confirmed or the research components are all normal.

4.3. Validation of research model using confirmatory factor analysis and structural equations

To answer this question, statistics and other fit criteria of the model should be examined.

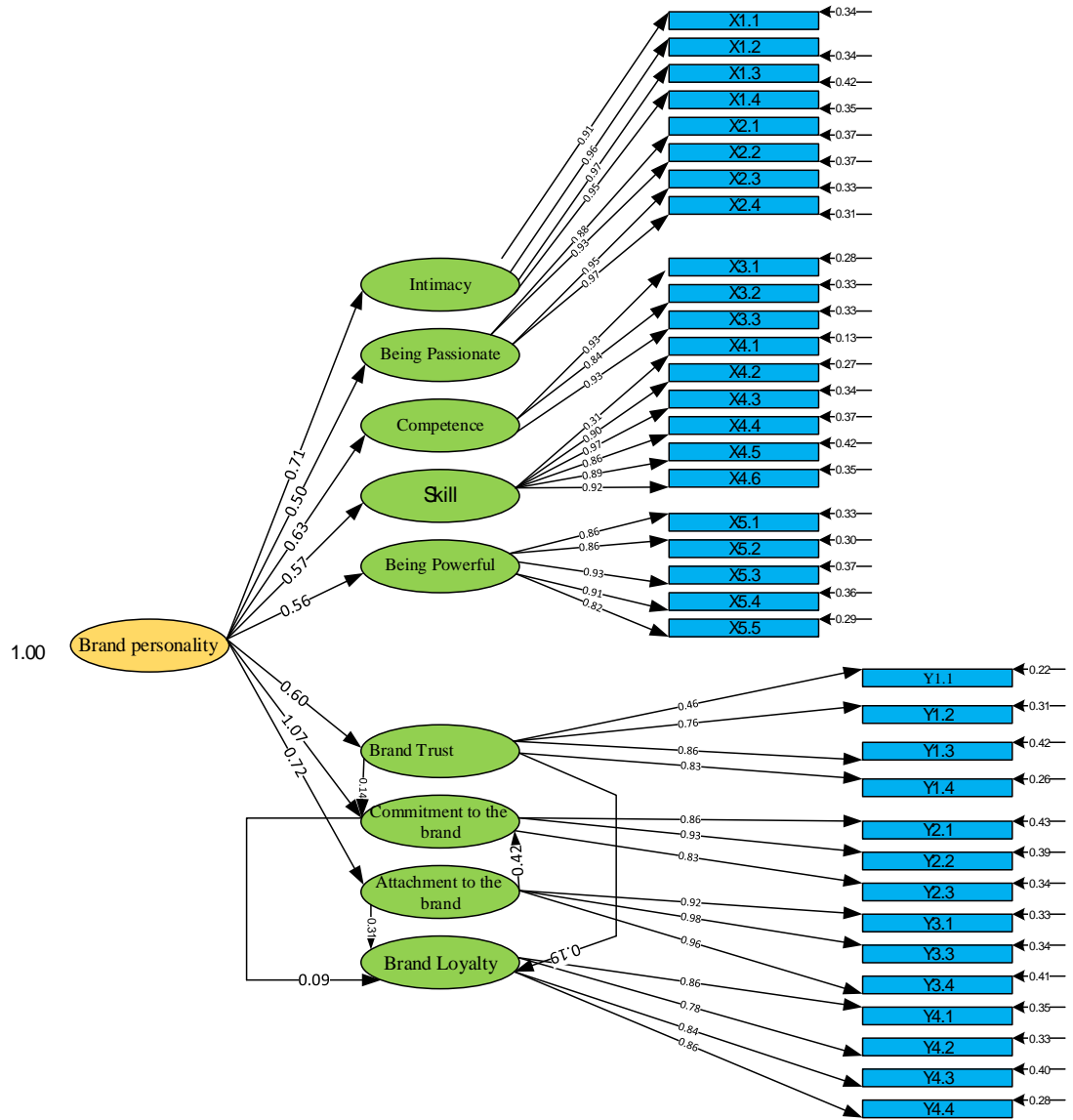


Figure 2: Structural equation model in non-standard coefficient estimation mode

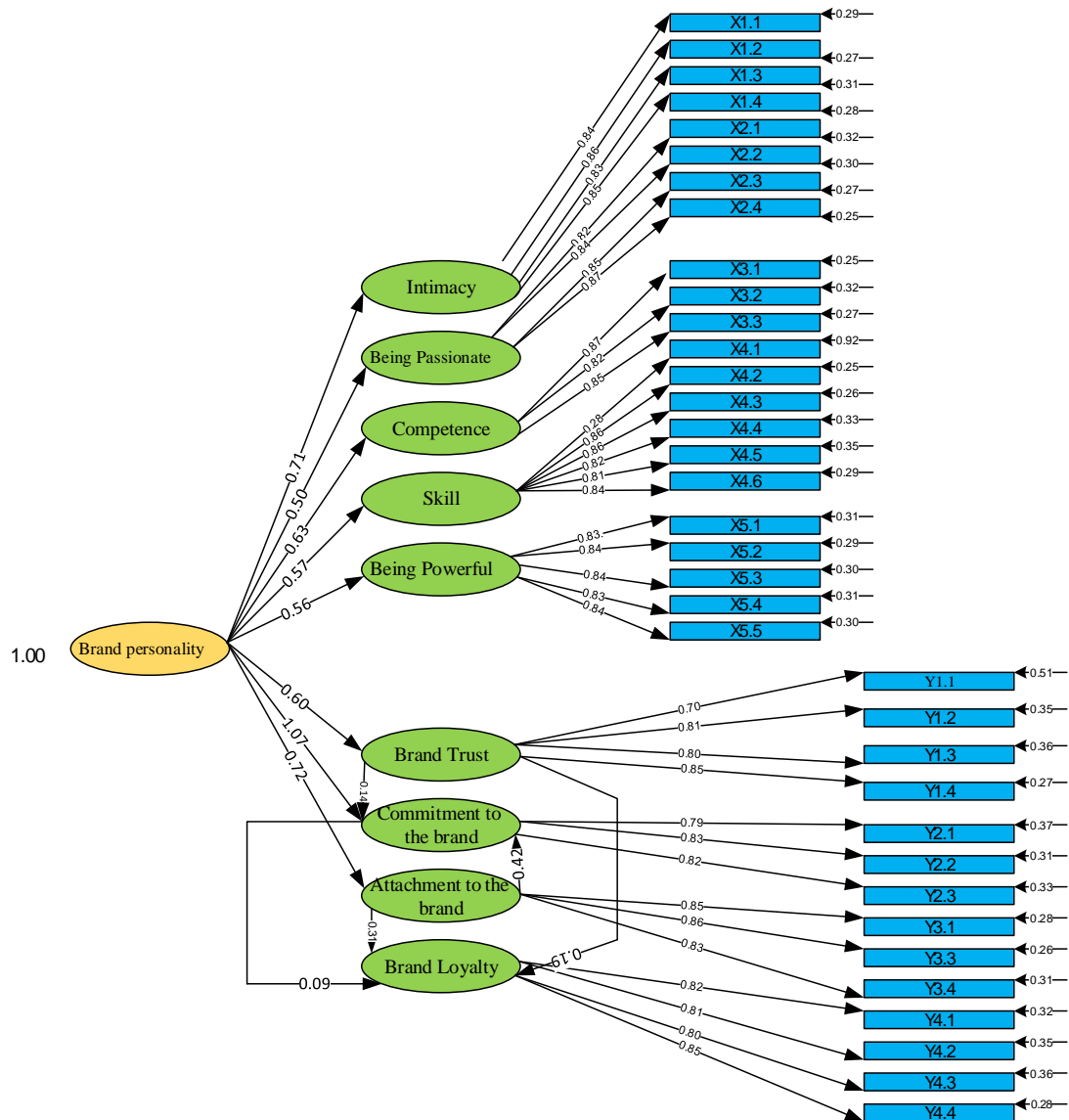


Figure 3: Structural equation model in standard coefficient estimation mode

Figures 2 and 3 show the structural equation model of the research in the cases of estimating standard (not depending on the unit of measurement) and non-standard (depending on the unit of measurement) coefficients. In these figures, numbers or coefficients are divided into two categories. The first category is called measurement equations, which are the relationships between latent (elliptical) variables and observed (rectangular) variables. These equations are called loading factors. The second category is structural equations, which are the relationships between latent and observed variables and are used to test hypotheses. These coefficients are called path coefficients. Based on loading factors, the index with the highest loading factor has a greater share in measuring the relevant variable and the index with smaller coefficients has a smaller share in measuring the relevant construct.

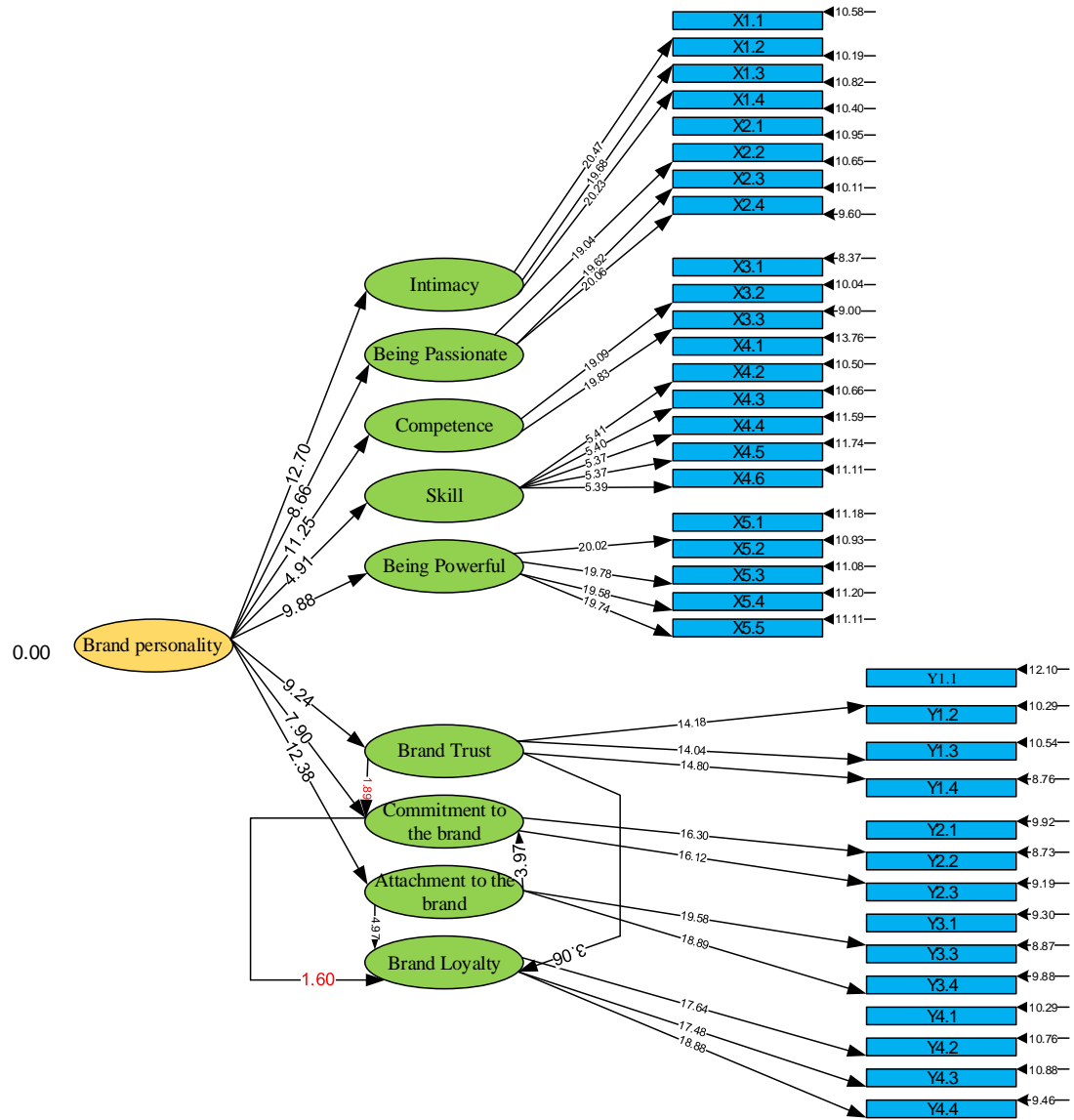


Figure 4: Structural equation model in terms of t-value

Figure 4 shows the structural equation model of the research in the significance mode of coefficients (t-value). This model actually tests all measurement equations (loading factors) and structural equations using t-statistic. According to this model, the path coefficient and loading factor are significant at the 95% confidence interval if the value of t-statistic is outside the range of -1.96 to +1.96. The model in the significance state shows that all loading factors are significant at the 95% confidence interval. The calculated values of t for each of the loading factors of each marker with its latent variable or construct are above 1.96. Therefore, it is possible to validate the consistency of questions of the questionnaire to measure the concepts at this stage. In order to show to what extent these values correspond to the realities in the model, the fit indices should be studied.

Table 3: Model fit indices

Indices	Original model estimates	Limit
K ²	1.608	Less than 3
GFI	0.92	More than 0.9
RMSEA	0.04	Less than 0.09
CFI	0.98	More than 0.9
NFI	0.96	More than 0.9
NNFI	0.98	More than 0.9
IFI	0.98	More than 0.9
AGFI	0.89	More than 0.8

In this study to evaluate the confirmatory factor analysis model, chi-squared (χ^2), root mean square residual (RMR), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), normed fit index (NFI), non-normed fit index (NNFI) incremental fit index (IFI), comparative fit index (CFI) and the very important index of root mean square error of approximation (RMSEA) have been used. There is no certainty about the ratio of chi-square (χ^2) to the degree of freedom. The value below 3 has been acceptable in studies, which in the present model it was calculated to be 1.608. The GFI criterion represents a measure of the relative amount of variance and covariance that are explained by the model. This criterion varies between zero and one that the closer to one, the better the goodness of fit of the model with the observed data will be. The reported GFI value for this model is equal to 0.92. To investigate how the model combines fit and cost-effectiveness, the highly powerful root mean square error of approximation (RMSEA) index has been used. The RMSEA index is the root mean square error of approximation. This index is 0.05 and less for good models. The closer the RMSEA is to zero, the better the fit of the model will be. The low value of RMSEA in this model (0.04) indicates an appropriate explanation of the covariance. When the mean of the variance-covariance matrix of the data is known, this index is a valuable index. Its evaluation is difficult when non-standard variance-covariance matrix is used. To evaluate how well a model works in terms of explaining a set of observed data, especially compared to other possible models, the values of normed fit index (NFI), non-normed fit index (NNFI), incremental fit index (IFI) and comparative fit index (CFI) are used. Values above 0.9 of these indices indicate a very good fit of the designed model in comparison with other possible models. As the fit characteristics written at the bottom of the models and the table below show, the data of this study fit well with the factor structure and theoretical basis of the research, and this indicates that the questions are consistent with theoretical constructs.

Table 4: Results of first and second time of confirmatory factor analysis for brand personality construct (loading factor)

Result	Significance level	t-statistic	Factor	Observed variables	
significant	<0.01	-	0.91	x1.1	Intimacy
significant	<0.01	47.20	0.96	x1.2	
significant	<0.01	68.19	0.97	x1.3	
significant	<0.05	23.20	0.95	x1.4	
significant	<0.01	-	0.88	x2.1	Being Passionate
significant	<0.01	4.19	0.93	x2.2	
significant	<0.01	62.19	0.95	x2.3	
significant	<0.01	6.20	0.97	x2.4	
significant	<0.01	-	0.93	x3.1	Competence
significant	<0.01	9.19	0.84	x3.2	
significant	<0.01	83.19	0.93	x3.3	
significant	<0.01	-	0.31	X4.1	Skill
significant	<0.01	41.5	0.90	X4.2	
significant	<0.01	40.5	0.97	X4.3	
significant	<0.01	37.5	0.86	X4.4	
significant	<0.01	37.5	0.89	X4.5	
significant	<0.01	39.5	0.92	X4.6	
significant	<0.01	-	0.86	x5.1	Being Powering
significant	<0.01	2.20	0.86	x5.2	
significant	<0.01	78.19	0.93	x5.3	
significant	<0.01	58.19	0.91	x5.4	
significant	<0.01	74.19	0.82	x5.5	
significant	<0.01	70.12	0.71	Intimacy	Brand Personality
significant	<0.01	66.8	0.50	Being Passionate	
significant	<0.01	25.11	0.63	Competence	
significant	<0.01	91.4	0.57	Skill	
significant	<0.01	88.9	0.56	Being Powering	

First-order factor loads

Second-order factor loads

In order to analyze the structure of the questionnaire and discover the factors that form each construct, confirmatory factor analysis has been used. The results of confirmatory factor analysis are summarized in the table above. The loading factors of first and second time related to the research variables were tested at two levels of error of 5% and 1%. All factor loads of this variable were significant at the 95% confidence interval (t-statistic ranged from -1.96 to + 1.96) and have been able to make a significant contribution to the measurement of the relevant construct. An index with a higher loading factor has played a greater role in measuring the relevant construct. The

calculated values of t for each of the loading factors of each marker with its latent variable or construct are above 1.96. Therefore, it is possible to validate the consistency of questions of the questionnaire to measure the concepts at this stage.

Table 5: Results of first and second time of confirmatory factor analysis for endogenous variables (loading factor)

	Observed variables	Factor	t-statistic	Significance level	Result	
First-order factor loads	Brand trust	Y1.1	0.46	-	<0.01	significant
		Y1.2	0.76	18.14	<0.01	significant
		Y1.3	0.86	4.14	<0.01	significant
		Y1.4	0.83	80.14	<0.01	significant
	Commitment	Y2.1	0.86	-	<0.01	significant
		Y2.2	0.93	30.16	<0.01	significant
		Y2.3	0.83	12.16	<0.01	significant
	Attachment to the brand	Y3.1	0.92	-	<0.01	significant
		Y3.2	0.98	58.19	<0.01	significant
		Y3.3	0.96	89.18	<0.01	significant
	Brand Loyalty	Y4.1	-	-	<0.01	significant
		Y4.2	0.86	64.17	<0.01	significant
Y4.3		0.78	48.17	<0.01	significant	
Y4.4		0.86	88018	<0.01	significant	

The calculated values of t for each of the loading factors of each marker with its latent variable or construct are above 1.96. Therefore, it is possible to validate the consistency of questions of the questionnaire to measure the concepts at this stage.

4.4. Investigation of validity, descriptive and correlation coefficients

Table 6 shows the Pearson correlation coefficients for examining the relationship between latent variables pairwise. The number 1 is located on the main diagonal of this matrix so that each variable is completely correlated with itself. Some correlation coefficients are significant at 99% confidence interval (significance interval is less than 1% and marked with **). Others are significant at 95% confidence interval (significance interval value is less than 5% and marked with *). The positive coefficient indicates a positive and direct relationship between the two variables and the negative coefficient indicates a negative and significant relationship between the two variables. In addition to construct validity, which is used to examine the importance of selected markers for measuring

constructs, discriminant validity is also considered in the present study which means that the markers of each construct ultimately provide a good discrimination in terms of measurement relative to other constructs of the model. With the help of the average variance extracted index, it was found that all the studied constructs have the average variance extracted (AVE) higher than 0.5.

Table 6: Pearson correlation coefficients between latent variables

Hidden variables	1	2	3	4	5	6	7	8	9
Intimacy	1								
Being Passionate	.295*	1							
Competence	.423*	.271*	1						
Skill	.393*	.273*	.404*	1					
Being powerful	.375*	.241*	.314*	.295*	1				
Brand trust	.391*	.288*	.397*	.398*	.276*	1			
Commitment to the brand	.384*	.282*	.348*	.412*	.357*	.307*	1		
Attachment to the brand	.482*	.353*	.399*	.414*	.358*	.282*	.255*	1	
Brand Loyalty	.363*	.316*	.292*	.365*	.371*	.279*	.200*	.324*	1
Average variance explained	0.93	0.90	0.88	0.78	0.83	0.79	0.81	0.90	0.81
Average	3.109	3.142	3.448	3.042	3.526	3.873	3.471	3.389	3.733
Standard deviation	0.993	0.978	0.956	0.851	0.913	0.777	0.941	1.013	0.881

** Significance at 99% confidence interval * Significance at 95% confidence interval

The last two rows of this table examine the descriptive status of variables in population. According to this table, variables that have an average of more than 3 can be said to be in a favorable position and indices that have an average of less than 3 are undesirable.

4.5. Analysis of research hypotheses

Another type of relationships between latent variables in the structural equation model is the direct effect type. The direct effect, which is in fact one of the components of structural equation models, shows the directional relation between the two variables. This type of effect actually represents the linear causal effect of one variable on another. Within a model, each direct effect identifies and expresses a relationship between a dependent variable and an independent variable. However, a dependent variable can be an independent variable in another direct effect and vice versa. The results of this method are as follows:

Table 7: Path coefficients, determination coefficients, t-statistic and the result of the research hypothesis

The main assumptions	Path coefficients β	t-statistic	determination coefficients	Significance level	research hypotheses
Brand Personality \leftarrow Brand trust	0.60	9.24	0.36	<0.01	Confirmation
Brand Personality \leftarrow Attachment to the brand	0.72	12.38	0.52	<0.01	Confirmation
Brand Personality \leftarrow Commitment to the brand	1.07	7.90		<0.01	Confirmation
Brand trust \leftarrow Commitment to the brand	0.14	1.89	0.56	<0.1	Rejected
Attachment to the brand \leftarrow Commitment to the brand	0.42	3.97		<0.01	Confirmation
Brand trust \leftarrow Brand loyalty	0.19	3.06		<0.01	Confirmation
Commitment to the brand \leftarrow Brand loyalty	0.09	1.60	0.22	>0.05	Rejected
Attachment to the brand \leftarrow Brand loyalty	0.31	4.97		<0.01	Confirmation

5. Discussion and Conclusion

According to the performed analyzes (S.E.M), we explain each of the hypotheses.

Hypothesis 1: Brand personality affects brand trust.

H0: Brand personality does not have a significant effect on brand trust.

H1: Brand personality has a significant effect on brand trust.

According to Table 7, the effect of brand personality on brand trust has a path coefficient of 0.60, which has a t-value of 9.24. The t-value for this parameter (according to the rule of five percent error in the area of rejection of the null hypothesis for the values out of range of -1.96 to 1.96 for each model parameter) is calculated to be greater than 1.96. Therefore, it can be stated that the null hypothesis is rejected with 95% confidence, in other words, brand personality has a statistically significant effect on brand trust and if more attention is paid to brand personality, brand trust will increase in a positive direction. These results show that brand personality is directly and significantly related to brand trust and brand personality plays an important role in increasing brand trust and any growth in relation to brand personality will lead to further increase in brand trust. Therefore, this research hypothesis is accepted. This result is also consistent with Fournier's study in 2008. It was also confirmed in the research of Song and Kim in 2010. Given the impact of brand personality on trust and the importance of trust in a relationship [23], it is recommended that marketers use brand personality to gain more customer trust.

Hypothesis 2: Brand personality affects brand commitment.

H0: Brand personality does not have a significant effect on brand commitment.

H1: Brand personality has a significant impact on brand commitment.

According to Table 7, the effect of brand personality on brand commitment has a path coefficient of 1.07, which has a t-value of 7.90. The t-value for this parameter (according to the rule of five percent error in the area of rejection of the null hypothesis for the values out of range of -1.96 to 1.96 for each model parameter), is calculated to be greater than 1.96. Therefore, it can be stated that the null hypothesis is rejected with 95% confidence. In other words, brand personality has a statistically significant effect on brand commitment and if more attention is paid to brand personality, brand commitment will increase in a positive direction. These results show that brand personality is directly and significantly related to brand commitment and brand personality has an important role in increasing brand commitment and any growth in relation to brand personality will lead to a further increase in brand commitment. Therefore, this research hypothesis is accepted. This relationship was also assessed and confirmed in a study by Didier Louis and Cindy Lombart in 2010. Attachment factors seem to influence commitment, so it is suggested that marketers use brand personality to build and strengthen commitment.

Hypothesis 3: Brand personality affects brand attachment.

H0: Brand personality does not have a significant effect on brand attachment.

H1: Brand personality has a significant effect on brand attachment.

According to Table 7, the effect of brand personality on brand attachment has a path coefficient of 0.72, which has a t-value of 12.38. The t-value for this parameter (according to the rule of five percent error in the area of rejection of the null hypothesis for the values out of range of -1.96 to 1.96 for each model parameter) is calculated to be greater than 1.96. Therefore, it can be stated that the null hypothesis is rejected with 95% confidence. In other words, brand personality has a statistically significant effect on brand attachment and if more attention is paid to brand personality, brand attachment will increase in a positive direction. These results show that brand personality is directly and significantly related to brand attachment and brand personality has an important role in

increasing brand attachment and any growth in relation to brand personality will lead to a further increase in brand attachment. Therefore, this research hypothesis is accepted. This relationship was also confirmed in a study by Song and Kim in 2010. Considering the effect of brand personality on brand attachment and the evidence presented by Song and Kim, it is better to try to strengthen brand attachment due to its effect on customer choice and also customer loyalty. Song recommended that factors such as competence and being powerful can affect brand attachment, although in our research the honesty factor has the strongest correlation with brand attachment.

Hypothesis 4: Brand trust affects brand commitment.

H0: Brand trust does not have a significant effect on brand commitment.

H1: Brand trust has a significant impact on brand commitment.

According to Table 7, the effect of brand trust on brand commitment has a path coefficient of 0.14, which has a t-value of 1.89. The t-value for this parameter (according to the rule of five percent error in the area of rejection of the null hypothesis for the values out of range of -1.96 to 1.96 for each model parameter), is calculated to be less than 1.96. Therefore, it can be stated that the null hypothesis is not rejected with 95% confidence, in other words, brand trust does not have a statistically significant effect on brand commitment at the 95% confidence interval. But if we reduce the confidence interval to 90%, it can be said that brand trust has a statistically significant effect on brand commitment. At the 90% confidence interval, if brand trust increases, the brand commitment will increase in a positive direction. Brand trust is directly and significantly related to brand commitment and brand trust has an important role in increasing brand commitment and any growth in relation to brand trust will lead to a further increase in brand commitment. Therefore, this research hypothesis is rejected at the 95% confidence interval and accepted at the 90% confidence interval.

Although this relationship has been confirmed in many studies, such as the study of Chaudhuri and Holbrook in 2002, this has not confirmed in this study which the reason may be found in the product category. Given that this hypothesis has been rejected, it is likely that in this product category, the commitment path does not play an important role in customer decision-making and loyalty. However, both theoretically and practically, this hypothesis has been confirmed in other product categories.

Hypothesis 5: Brand attachment affects brand commitment.

H0: Brand attachment does not have a significant effect on brand commitment.

H1: Brand attachment has a significant effect on brand commitment.

According to Table 7, the effect of brand attachment on brand commitment has a path coefficient of 0.42, which has a t-value of 3.97. The t-value for this parameter (according to the rule of five percent error in the area of rejection of the null hypothesis for the values out of range of -1.96 to 1.96 for each model parameter) is calculated to be greater than 1.96. Therefore, it can be stated that the null hypothesis is rejected with 95% confidence. In other words, brand attachment has a statistically significant effect on brand commitment, and if more attention is paid to brand attachment, brand commitment will increase in positive direction. These results show that brand attachment is directly and significantly related to brand commitment and brand attachment has an important role in increasing brand commitment and any growth in relation to brand attachment will lead to a further increase in brand commitment. Therefore, this research hypothesis is accepted. This relationship was also examined and confirmed in the study of Chaudhuri and Holbrook in

2002. Given that attachment factors can affect commitment, it is important to use attachment factors to help strengthen commitment. Although the effect of commitment on loyalty has not been confirmed in this study, many studies have confirmed this relationship.

Hypothesis 6: Brand trust affects brand loyalty.

H0: Brand trust does not have a significant effect on brand loyalty.

H1: Brand trust has a significant effect on brand loyalty.

According to Table 7, the effect of brand trust on brand loyalty has a path coefficient of 0.19, which has a t-value of 3.06. The t-value for this parameter (according to the rule of five percent error in the area of rejection of the null hypothesis for the values out of range of -1.96 to 1.96 for each model parameter) is calculated to be greater than 1.96. Therefore, it can be stated that the null hypothesis is rejected with 95% confidence, in other words, brand trust has a statistically significant effect on brand loyalty at the 95% confidence interval, and if brand trust increases, brand loyalty will increase in a positive direction. Brand trust is directly and significantly related to brand loyalty and brand trust plays an important role in increasing brand loyalty and any growth in brand will lead to a further increase in brand loyalty. Therefore, this research hypothesis is accepted at the 95% confidence interval. This result was also confirmed in the study of Moolla and Bischoff in 2012. Given the great importance of trust in a relationship and its impact on decision-making and loyalty of customers, marketers should do their best to strengthen it in order to achieve real customer loyalty. It should be noted that due to the nature of this research, strengthening the brand personality is a very good way to strengthen it. On the other hand, factors such as commitment to organization's promises such as timely and flawless delivery are likely to make customers to trust more in the brand.

Hypothesis 7: Brand commitment affects brand loyalty.

H0: Brand commitment does not have a significant effect on brand loyalty.

H1: Brand commitment has a significant effect on brand loyalty.

According to Table 7, the effect of brand commitment on brand loyalty has a path coefficient of 0.09, which has a t-value of 1.60. The t-value for this parameter (according to the rule of five percent error in the area of rejection of the null hypothesis for the values out of range of -1.96 to 1.96 for each model parameter) is calculated to be less than 1.96. Therefore, it can be stated that the null hypothesis is not rejected with 95% confidence, in other words, brand commitment has no statistically significant effect on brand loyalty at the 95% confidence interval, so this research hypothesis is not accepted at the 95% confidence interval. This relationship was identified as one of the most important factors in the study of Moolla and Bischoff in 2012, which has been rejected in this study. Perhaps the reason for this can be the type of product and its category. As mentioned above, it is possible that in a product category and according to the type of customers, commitment does not have a special meaning because it is very easy for customers to access similar brands. On the other hand, in many studies, commitment has been considered as a factor affecting loyalty. Even Moolla and Bischoff identified commitment as the first effective factor in customer loyalty for consumer goods or fast-moving consumer goods.

Hypothesis 8: Brand attachment affects brand loyalty.

H0: Brand attachment does not have a significant effect on brand loyalty.

H1: Brand attachment has a significant effect on brand loyalty.

According to Table 7, the effect of brand attachment on brand loyalty has a path coefficient of 0.31, which has a t-value of 4.97. The t-value for this parameter (according to the rule of five percent error in the area of rejection of the null hypothesis for the values out of range of -1.96 to 1.96 for each model parameter) is calculated to be greater than 1.96. Therefore, it can be stated that the null hypothesis is rejected with 95% confidence, in other words, brand attachment has a statistically significant effect on brand loyalty at the 95% confidence interval, and if brand attachment increases, brand loyalty increases will increase in a positive direction. Brand attachment is directly and significantly related to brand loyalty, and brand attachment plays an important role in increasing brand loyalty, and any growth in brand attachment will lead to a further increase in brand loyalty. Therefore, this research hypothesis is accepted at the 95% confidence interval. This relationship was identified in the study of Moollala and Bischoff as the second factor affecting loyalty, which has been confirmed in this study. Attachment, as mentioned above, is one of the most important factors in customers' decision-making. It is recommended that marketers try to instill attachment in customers when consuming a product. As mentioned, Lazuri says brand attachment can affect the intention of customers to buy and even affect the image of the store in the minds of customers.

The value of the coefficient of determination (R Square) also shows what percentage of the changes in the dependent variable can be explained by independent variables. For the brand trust variable, this value was estimated as 36% and proves that brand personality alone explains 36% of the changes in brand trust. For the brand attachment variable, this value was estimated as 52% and proves that the brand personality alone explains 52% of the changes to the brand attachment. For the brand commitment variable, this value was estimated as 56% and proves that the variables of brand trust, brand attachment and brand personality together accounted for 56% of the changes in brand commitment. Considering the value of the standard path coefficient (standard coefficients are independent of the unit of measurement), the effect share of above three variables can be determined; so it can be said that the most important factor in increasing brand commitment is the brand personality variable (it had the highest standard path coefficient) and brand trust had the lowest effect (it had the lowest standard path coefficient). Finally, for the brand loyalty variable, this value was estimated as 22% and proves that the variables of brand trust, brand attachment and brand commitment together could explain 22% of the changes in brand loyalty. Considering the value of standard path coefficient, it can be said that the most effective in increasing brand loyalty was the brand attachment variable (it had the highest standard path coefficient) brand commitment was the least effective (it had the lowest standard path coefficient).

As it has been observed, brand personality is a very important factor affecting loyalty that can be considered as a key factor in the customer-brand relationship. On the other hand, this study shows the effect of these relationships on customer loyalty (except for the commitment factor). Therefore, marketers, brand managers and executives of the organization are advised to try to build a brand personality as appropriate and consistent with the organization's marketing goals. They can use brand personality resources (direct and indirect) correctly and powerfully. Also, as it was explained, the brand personality causes the inherent distinction of the brand from other brands. So, special attention should be paid to it because the desired results cannot be achieved with the wrong planning. Finally, it should be noted that the factors studied in this research are known as the main factors of the customer-brand relationship, so if marketers need to establish this relationship, it is better to use these factors in an excellent way. It is also suggested that: 1- Considering the rejection of the hypotheses of the commitment path - trust to commitment and commitment to loyalty - it seems that commitment does not respond to customer behavior to achieve loyalty in this type of products. Perhaps one of the key factors is that there are no transportation costs for consumers, so it

is recommended that this research be done in another category of products to determine the effect of commitment. 2- Some relationships may have been neglected in this research due to the lack of theoretical support for these relationships; it is hoped that they will also be examined by identifying these relationships by researchers. 3- Factors such as ethnicity or patriotism of customers, brand satisfaction, perceived quality and value can help enrich this model.

6. References

- [1]. Erciş, A., Unal, S., Candan, F.B., & Yildirim, H. (2012), The effect of brand satisfaction, trust and brand commitment on loyalty and repurchase intentions. *Procedia - Social and Behavioral Sciences*, 58, 1395-1404.
- [2]. Keh, H.T., Pang, J., & Peng, S. (2007), Understanding and measuring brand love. *Advertising and Consumer Psychology, New Frontiers in Branding: Attitudes, Attachments, and Relationships*. Santa Monica, CA.
- [3]. Aaker, J.L. (1997), Dimensions of brand personality. *Journal of Marketing Research*, 34 (3), 347-356.
- [4]. Waytz A., Morewedge C. K. (2010) "Making sense by making sentient: Effectance motivation increases anthropomorphism", *Journal of Personality and Social Psychology*, 3: 410-435.
- [5]. Rajagopal (2008) "Measuring brand performance through metrics application", *MEASURING BUSINESS EXCELLENCE*, 12(1): 2938.
- [6]. Albert ,N.; Merunka, D. and Valette-Florence, P.(2013). Brand passion: Antecedents and consequences, *Journal of Business Research*, 7(66), 904–909.
- [7]. Unala, S. and Aydn, H.(2013). An Investigation on the Evaluation of the Factors Affecting Brand Love, *Procedia - Social and Behavioral Sciences*, 8(92), 76 – 85.
- [8]. Carroll, B.A. and Ahuvia, A.C. (2006).Some antecedents and outcomes of brand love, *Marketing Letters*, 17(2), 79-89.
- [9]. Langner, T.; Bruns, D.; Fischer, A. and Rossiter, J.(2014). Falling in love with brands: a dynamic analysis of the trajectories of brand love , *Marketing Letters*, 27(1),15-26.
- [10]. Maxian ,W.; Bradley ,S.; Wise,W. and Toulouse, E.(2013). Brand Love is in the Heart:Physiological Responding to Advertised Brands, *Psychology and Marketing*, 30(6), 469–478 .
- [11]. Aro, K., Suomi, K., & Saraniemi, S. (2018). Antecedents and consequences of destination brand love – A case study from Finnish Lapland. *Tourism Management*, 67, 71–81.
- [12]. Machado, J. C., Vacas-de-Carvalho, L., Azar, S. L., Andrea, A. R., & Pires dos Santos, B.(2019). Brand gender and consumer-based brand equity on Facebook: The mediating role of consumer-brand engagement and brand love. *Journal of Business Research*, 96, 376–385.
- [13]. Rauschnabel, P. A., & Ahuvia, A. C. (2014). You're so lovable: Anthropomorphism and brand love. *Journal of Brand Management*, 21(5), 372–395.
- [14]. Wallace, E., Buil, I., & de Chernatony, L. (2014). Consumer engagement with self-expressive brands: Brand love and WOM outcomes. *Journal of Product & Brand Management*, 23(1), 33–42.
- [15]. Bagozzi, R. P.; Batra, R. and Ahuvia, A. C. (2016). Brand love: development and validation of a practical scale, *Marketing Letters*, 1(28), 1-14.
- [16]. Moorman C., R. Deshpande, Zaltman G. (1993) "Factors affecting trust in market research relationships", *Journal of Marketing*, 57 (January): 81-101.
- [17]. Zaltman G., Moorman C. (1988) "The importance of personal trust in the use of research", *Journal of Advertising Research*, October / November, 16-24.
- [18]. Sung, Y., & Kim, J. (2010). Effects of brand personality on brand trust and brand affect. *Psychology & Marketing*, 27(7), 639-661.
- [19]. Louis, D., & Lombart, C. (2010). Impact of brand personality on three major relational consequences (trust, attachment, and commitment to the brand). *Journal of Product & Brand Management*, 19(2), 114-130.
- [20]. Manthiou, A, Kang, J., Sean Hyun, S., Xiao Fu., X. (2018). The impact of brand authenticity on building brand love: An investigation of impression in memory and lifestyle-congruence. *International Journal of Hospitality Management*, 75, 38–47.

- [21]. Song, H., Wang, J., Han, H. (2019). Effect of image, satisfaction, trust, love, and respect on loyalty formation for name-brand coffee shops, *International Journal of Hospitality Management*, 79, 50–59.
- [22]. Sajtos, L., Cao, J., Espinosa, J., Phau, I., Rossi, P., Sung, B., Voyer, B. (2020), Brand love: Corroborating evidence across four continents, *Journal of Business Research*.
- [23]. Bouhlel, olfa., et al.,2011, Brand personality's influence on the purchase intention: A mobile marketing case, *internatoinal journal of business and management*, vol. 6, no.9, p210-227.
- [24]. Roy. S.; Eshghi,A. and Sarkar, A.(2012). Antecedents and consequences of brand love, *Journal of Brand Management*, 20(4), 1-8.
- [25]. Huang, L., Wang, M., Chen, Z., Deng, B., & Huang, W. (2020). Brand image and customer loyalty: Transmitting roles of cognitive and affective brand trust. *Social Behavior and Personality: an international journal*, 48(5), 1-12.
- [26]. Zhang, N., Yu, L., Tsang, A.S.L. and Zhou, N. (2021), "Should spokes-characters be dynamic? The interaction effects of spokes-character dynamism and brand personality on consumers' evaluation", *European Journal of Marketing*, Vol. 55 No. 5, pp. 1516-1538.