Developing a Conceptual Model of Customer Loyalty in the Mass Housing Industry: The Case of Housing Investment Group Company

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Abstract

The aim of this research was to develop a conceptual model of customer loyalty in the mass housing investment companies in Iran. The data for this research were gathered at the end of 2016 and the analysis was carried using an exploratory (qualitative - quantitative) approach. At first, the primary conceptual model was developed using theoretical foundations and literature review as well as using data from our initial exploratory study of building industry experts. Then in the qualitative section, the final model and the final questionnaire (for the quantitative stage) were indigenized by using content analysis and semi-structured interviews with 11 professional and university experts selected by judgment. In the quantitative stage, the final model was tested using structural equation modeling with 158 loyal customers of the Housing Investment Company, who were selected by using stratified random sampling method from all over the country. The findings of this research showed that factors of quality, economics, and customer relationship management affected satisfaction. In addition, the effects of satisfaction on trust, commitment to loyalty, and loyalty to word-of-mouth advertising were accepted.

Keywords: loyalty, satisfaction, word of mouth advertising, trust, commitment, mass housing industry

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Building construction, due to its relationship with a large number of other complementary industries, is a major contributor to employment and investment as one of the most influential industries in various economic and social sectors. In developing countries, including Iran, due to the almost constant demand for housing as well as inflation in the economy, the construction industry will boost as well as stimulate the domestic economy. In addition, it is welcomed by customers with both investment and usage view. All organizations seek to attract customers and increase their satisfaction for a stable presence in the market and continuous profitability. So, customers' behavior of products marketed in the region should be well understood (Hilal, 2019). This issue is especially important for house builders because housing is a permanent product for consumers. It should be explained that in the study of the important models in the developed countries with a stable economic structure, such as the American Customer Satisfaction Index Model (ACSI), the Swedish Customer Satisfaction Model (SCSB), the European Customer Satisfaction Model (ECSI), and the Norwegian Satisfaction

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Index Model (NCSB), only the price variable is considered as an economic factor affecting customer satisfaction and loyalty.

Due to the competitive nature of the building construction industry, providing optimal services is considered a top priority in this industry (Angelova & Zekiri, 2011; Atarodian, 2013). Research has shown that directly 5% and indirectly 12% to 13% of the gross domestic product of Iran is dependent on the housing sector (Moezi, 2014). Official statistics have also shown that the construction sector, due to its presence at the end of the production chain and its close relationship with other economic activities, plays an important role in influencing the value added of other related activities, and consequently, the value added of the whole economy. According to the national accounts of the Central bank, the construction sector has allocated 7% (as an average) of the country's gross domestic product to itself over the past 10 years (Office of Economic Studies, Deputy of Economic Research, Research Center of the Islamic Consultative Assembly, 2016). The existence of rivals and widespread construction by private, state, and even military sectors in the past decade has led to an increase in the supply of housing along with structural economic problems, which has lowered the average income level of the middle and weak classes of the society, which has reduced demand. In addition, the recession in the housing sector and the high cost of residential units, all in all, made the housing investment group company implement some short - term and long - term measures to guarantee itself sustainable life and to maintain the current market share as otherwise, it would quickly enter the crisis phase in the coming years after the recession. Firms operating in a dynamic environment are likely to be benefited more from the pursuit of proactiveness. Managers adopt forward - looking and opportunity - seeking perspectives to achieve robust business performance (Bedi, 2018).

By performing exploratory interviews and inspecting available figures, it became clear that the housing investment group company faced issues such as:

- ♥ Decreasing loyal customers.
- \$\triangle\$ Decreasing sales and consequently, decreasing company financial and earnings resources.
- ♥ Increasing customer complaints about product quality.
- \$ Increasing prices due to the inappropriateness of production amount with company overhead costs.
- \$\text{ Conditions of recession and proximity to the stage of entering a crisis in the life cycle of the company.}

Therefore, considering the raised issues, the main objective of the present study is to help mass - builders and construction companies by developing a customer loyalty model to identify the factors influencing customers' loyalty in this industry, and also take advantage of the probable consequences of customer loyalty. Therefore, this paper tries to answer this question: Which factors and variables affect the loyalty of customers in the building construction industry and what is their relationship with each other?

Theoretical Fundamentals and Literature Review

Until the 1970s, researchers focused only on the behavioral aspect of loyalty, which considered loyalty only as a customer continuous purchase process. This limitation led to the creation of new approaches describing loyalty behavioral backgrounds, and later customer loyalty psychology views were expanded. In 1999, Oliver made a definition of loyalty that, in his opinion, loyalty was a systematic commitment to repurchase a product continuously from a particular company and brand (Dias, Schuster, Talamini, & Révillion, 2016). Brown (2006) also stated that customer loyalty means continuous and constant use of company services and products. In addition, customer loyalty has a close relationship with the sustainability and survival of a business and can lead to more profitability for businesses (Lee, 2017). In the last few decades, several studies have been conducted about studying the relationship between loyalty, customer satisfaction (Castañeda, 2011; Miquel - Romero,

Caplliure - Giner, & Adame - Sánchez, 2014), trust, and other structures in different sectors and among different types of customers (Hultman, Skarmeas, Oghazi, Beheshti, 2015; Lee, 2017). Despite numerous research studies on the concept of loyalty in different sectors and identifying its benefits, measurement scales and its effective factors in different sectors may be limited (Dias et al., 2016).

Trust is defined as a belief in relation to the intention of the other party in a communication process (Chattananon & Trimetsoontorn, 2009). Trust is one of the most important requirements in the field of services affairs (DeWitt, Nguyen, & Marshall, 2008). Trust is important for the success of a relationship, and trust is one of the principles of customer loyalty (Sin, Alan, Yau, Chow, Lee, & Lau, 2005). The quality of services increases customer confidence. When a client trusts the company's goods and services, this trust increases his/her loyalty to the organization. Many factors cause customer loyalty, but the role of customer trust is critical. In addition, the quality of services is a potential factor and, conversely, perceived value by the customer is an actual factor in creating customer confidence (Harris & Goode, 2004). In the literature, this concept of customer trust is the precondition for customer loyalty, and customer trust is obtained when customer satisfaction is created (Chaudhuri & Holbrook, 2001).

Morgan and Hunt (1994) argued that commitment stems from customer trust, perceived values, and the belief that finding an option that can provide the same product with the same specifications and cause to continue a relationship with the customer to maintain the interests of the parties is difficult.

By reviewing the literature, two approaches are specified to define satisfaction (Kavousi & Saghaei, 2005). The first approach believes that satisfaction is the state of the customer after consuming a product or using a service. In the second approach, satisfaction is defined as the process of customer perception and assessment of the experience of product consumption or the use of services. Satisfaction is obtained from a different understanding between customer expectations and the actual performance of a product or organization. Previous customer experiences of product consumption as well as his/her experiences of interacting with the provider organization play a crucial role in shaping his/her expectations (Mousavi, Nonejad, & Ghaedi, 2009).

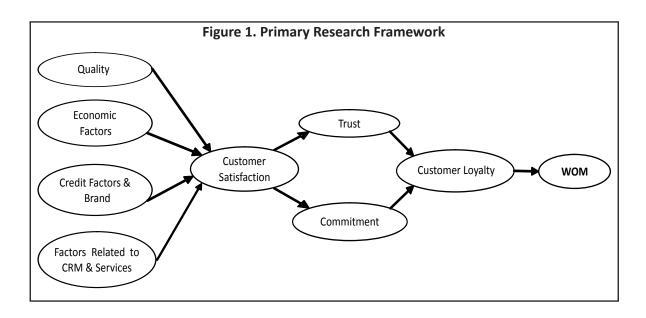
Customer satisfaction is one of the factors influencing loyalty. Satisfaction is the happiness of shoppers when they feel that the amount that they have paid for the purchase is suitable for their need, and it is worth it. However, dissatisfaction occurs when the surface performance is lower than the standard. Generally, satisfaction is the degree of customer contentment after shopping (Zamzuri, Mohamed, & Hussein, 2008).

Word-of-mouth advertising is informal communication that guides other consumers about ownership and other features of goods and services and other sales (Ranjbaran, Mahmoudi, Jafarizadeh, & Houshmand, 2013). In a research, the authors argued that loyalty will lead to word-of-mouth advertising (Zamzuri et al., 2008). The concept of word-of-mouth advertising has always been used by professional marketers to achieve two goals: measuring the effectiveness of market instruments such as advertising and at the same time, obtaining sufficient information about the goods and services in question (Li & Zhan, 2011). Cultural values of individuals are also important in this process. Research has shown that individuals who have deep personal values showed more inclination towards positive word-of-mouth advertising (Lam, Lee, & Mizerski, 2009). The results of Maxham and Netemeyer's research indicated that customer satisfaction from complaints & specialty management and general customer satisfaction from the organization will have a positive and significant effect on word-of-mouth relationship (Maxham, 2001). Sweeney and Swait in their research in 2008 concluded that commitment and satisfaction had a positive and significant effect on the customers' word-of-mouth relationship (Sweeney & Swait, 2008).

A lot of research has been done in the area of customer loyalty, but no comprehensive template about the loyalty of customers has been provided, especially for the building industry that has attracted the attention of researchers in the last decade. The results of a number of previous literature related to this research are summarized in the Table 1.

Table 1. Previous Literature

Item	Name of	Time of	Theme	Research	Results
	Researchers	Research		Method	
1	Renganathan, Srinivasakumar, & Balachandran	2015	The relationship between customer buying behavior and buying intention.	Descriptive statistics, Freeman test, and correlation tests	The re-buy intention by the customer had a direct relationship with things such as prices, amenities (pool, security cameras, amusement park, car park space, building security and elevators, and lighting).
2	Al-Nahdi	2015	Customer buying behavior	Correlation statistical tests, multivariate regression, and factor analysis	There was a positive relationship between customer buying behavior and the effect of others & environmental and cultural factors on construction conditions, and the control of shopping behavior was not related to customer buying behavior.
3	Krishnakumary & Thampi	2015	Customer loyalty relationship with relationship marketing in building construction financial firms	Descriptive statistics, Pearson coefficient, correlation tests, and multivariate regression	Commitment to customer and the competitiveness of financial institutions were the two factors affecting customer loyalty and relationship marketing as well as increasing customer satisfaction.
4	Kaiman & Zani	2013	Effect of price and quality of services on customer satisfaction in apartment construction	Inferential statistics, correlation tests, multivariate regression, and structural model development	The prices and quality of services had a great influence on selling apartments and satisfaction of the customers.
5	Zamzuri et al.	2008	The relationship between customer satisfaction and colored loyalty and its effect on word-of-mouth advertising	Descriptive statistics, correlation, and multivariate regression tests	Satisfaction with loyalty had a positive effect, but there was no relationship between satisfaction and word-of-mouth advertising.
6	Zadkarim & Emari	2011	Presented the empirical model in two low income and high income groups of customer satisfaction	Correlation tests, regression and structural equations, and factor analysis	Customer satisfaction was strongly dependent on the level of purchasers' income and the quality of residential units. Customer satisfaction in the low income group was associated with an increase in word-of-mouth advertising and in the high income group, customers' willingness to buy had no significant relationship with word-of-mouth advertising; the quality of the residential unit and the quality of service of the manufacturer company was related to the buyers' satisfaction. Satisfaction was not related to loyalty.



Based on the study of previous research and semi - structured interviews, the initial research model was prepared (as shown in the Figure 1):

The primary research hypotheses and their related resources are shown in the Table 2.

Table 2. Summary of Supporting Research of the Primary Extended Model

Hypothesis No.	Hypothesis	Dimensions	Source		
H1	Quality factors (design & architecture, equipments & materials, observing	Design & Architecture	Amole (2009), Primary exploratory interviews		
	construction standards, situation) have a positive and significant effect on customer satisfaction.	Materials & Equipments	Renganathan et al. (2015); Sweis, Nahmens & Ikuma (2009); Primary exploratory interviews Imam, Kassab, & Sweis (2013);		
		Observing Construction Standards	Primary exploratory interviews		
		Situation	Phillips, Siu, Yeh, & Cheng (2005)		
H2	Economic factors (price, ways of payment, investment motives) have a positive and significant effect on customer satisfaction.	Price	Renganathan et al. (2015), Sweis et al. (2013), Zadkarim & Emari (2011), Primary exploratory interviews		
		Ways of Payment	Primary exploratory interviews		
		Investment Motives	Primary exploratory interviews		
Н3	Credit factors, brand, and reputation have a positive and significant effect on customer satisfaction.	Primary exploratory	yinterviews		
H4	Factors associated with CRM and providing services have a positive and significant effect on customer satisfaction.	Nahmens & Ikuma (2009), Primary exploratory	, Zadkarim & Emari (2011), rinterviews		
H5	Customer satisfaction has a positive and significant effect on customer trust.	Chaudhuri & Holbrook (200	01) ; Dwyer, Schurr, & Oh (1987)		

H6	Customer satisfaction has a positive and significant effect on customer commitment.	Sweeney & Swait (2008), Primary exploratory interviews
H7	Customer trust has a positive and significant effect on customer loyalty.	Kotler (2011), Sin et al. (2005), Harris & Goode (2004)
Н8	Customer commitment has a positive and significant effect on customer loyalty.	Krishnakumary & Thampi (2015), Kotler (2011)
Н9	Customer loyalty has a positive and significant effect on word-of-mouth advertising.	Sweeney & Swait (2008), Zamzuri et al. (2008), Al-Nahdi (2015), Primary exploratory interviews

Research Methodology

This research is applied - developmental research and from the nature of research, it is a sequential exploratory mixture (qualitative - quantitative). The data for this research were gathered at the end of 2016. In the first stage of the research, using extensive and deep study of theoretical foundations and the experimental background of the research topic as well as initial exploratory interviews with experts and practitioners in the field of housing, building, and mass housing, the initial conceptual model was formed, which is shown in the Figure 1.

The second stage of this research is of qualitative nature. At this stage, the statistical population was building industry experts including academic and professional experts who (a) had an effective experience (at least of 10 years) in the field of mass housing - marketing jobs and their sale and (b) had a master's degree or higher. The data collection method was through semi-structured interviews and by using the judgment sampling method. The interviews continued until theoretical saturation, where eventually, the sample size was 11 people. Content analysis was used to analyze the data. All interviews were recorded and converted to text and summarized after coding in Table 3. The Table 4 also shows the main concepts identified in the interview text.

Table 3. Category (Variable), Concept & Codes, and the Number of Repetitions

Item	Category (Variable)	Concept	Codes (Taken from the Concepts Extracted from	Repetitions
1.	Qualitative Factors	Architecture	the Content of the Interviews with the Experts) Inside residential units.	
	Qualitative ractors	Architecture	Kitchen in residential units.	11
2.			Kitchen in residential units.	11
3.			Toilets in residential units.	11
4.			Design of windows in residential complexes	11
5.			Design of units' floors in residential complexes	11
6.			Design of lighting of units	11
7.			Design of public spaces	11
8.			Exterior design	11
9.		Materials &	Using standard materials and equipments	11
10.		Equipments	Construction high shelf life	7
11.			Constructing criteria and standards	11
12.	Obs	erving Construction	Building strength	6
13.		Standards	Strongerthanrivals	3
14.			Higher quality than rivals	4
15.			Quality of electrical and mechanical installations	11
16.			Quality of finishing work	11

17. 18.				
18.			Quality of public places	11
			Quality of equipment inside the units	11
19.			Exterior quality	11
20.		Situation	Situation of complexes to urban facilities	9
21.			More land share	3
22.			Proportion of the number of units and their arrangement order	7
23.	Economic Factors	Price	An appropriate partnership between the client and	5
			the company in the pre-purchase / sale	
24.			Appropriate price	5
25.			Higher price rather than the average price in the region	4
26.		Ways of Payment	The privilege of having facilities of Bank Maskan (loan)	8
27.			Good conditions for pre-sales of units	8
28.			Type of payment schedule of the buyer on pre-sales contracts	7
29.			Seller guarantee for obtaining and submitting documents	6
30.			Delay crimes in performing company commitments	7
31.			Delay crimes in buyer payments	7
32.			Fair terms of termination in contracts	8
33.	li	nvestment Motives	Low risk of investment in the housing sector	4
34.			Comparison of investment in housing sector	6
			versus depositing in banks	
35.			Comparison of investment in housing sector	6
			versus investment in stock exchange	
36.			Comparison of investment in housing sector	6
			versus investing in speculative activities	
37.	Credit Factors		The credibility of the company is due to the bank Maskan	11
	& Brand		as a major founder and shareholder	
38.			Company's 25-year experience	4
39.			Company capital and assets	9
40.			Company activity in most provinces	5
41.			The position of the company as a valid mass	3
			builder in the building industry	
42.			More credibility of the company than rivals	3
43.			Familiarity with company logo	3
44.			Feeling safe and relaxed in the interior of the units	3
45.			The name of the company is associated with quality building	3
			The motto "good house makes life beautiful"	2
46.			Feeling safe and relaxed in the public sectors of the complex	5
47.				
47.	ctors Relevant to CR	M	Sincere communication of the company's responsible authorities with the client after transferring the unit	8
47.	ctors Relevant to CR	M	• • • •	10

51.		Way of introducing the projects under construction	3
52.		Advertisement	8
53.		Accompanying company in establishment of culture of the management and maintenance of the complex	3
54.		Responding to the customer as soon as possible	9
55.		Quality of after-sales services	11
56.	Customer Satisfaction	Customer satisfaction of the company	7
57.		Customer satisfaction of establishing culture of apartment residence in the complex in order to satisfy the customer	4
58.		Technical and executive activities of the company	11
59.		Activities of customer related departments in order to satisfy customers	11
60. 61.	Trust	The customer's trust in buying a residential unit from the company in the shape of pre-purchase	7
		Trust company if you need to buy company shares	3
62.		The customer's trust in the authenticity of the complex land	1
63.		More trust in participating in small towns in the country	3
64.		Company performance for getting customer's trust	11
65.	Commitment	The commitment of the company to the promises made	11
66.		The culture of adherence to the fulfillment of obligations to achieve the final result	11
67.		Accountability over agreed commitments in assignment contracts	9
68.	Customer Loyalty	Purchasing from the company, an experience leading to customer loyalty	3
69.		Customers' preference to buy on an equal footing with other rivals	3
70.		Customer loyalty after buying a unit from the company	6
71.		Shopping for the future of children	1
72.	WOM	Verbal advertisement by friends and relatives	6
73.		Verbal advertisement by non-familiar people	6
74.		Verbal advertisement by the inhabitants	6
75.		Encourage others to buy from the company by loyal customers	6

In the final and quantitative phase of the research, the initial questionnaire of the research (before the reliability test) was prepared using Table 3. The statistical population at this stage was 515 loyal customers of the housing investment group company. The sample size was determined as 158 customers using Cochran, and they were selected by random sampling method. Approximately 260 questionnaires were sent to customers, and enough advice was provided to them by telephone to complete the questionnaire. Finally, the same 158 questionnaires were collected. The collected data were analyzed by SPSS and PLS software using structural equation modeling (SEM). For the pre-test, the initial questionnaire consisted of seven demographic questions and 75 specific questions were prepared and distributed among 50 members of the statistical population. In order to have a Cronbach's alpha higher than 0.7 for all variables and the total questionnaire, Questions 63 and 65 of the trust variable and Question 74 of word-of-mouth advertising variable were removed. Therefore, the final questionnaire was distributed with 72 specific questions and seven demographic questions among the statistical population.

Table 4. The Main Concepts Identified from the Text of the Interviews

Concept	Concep	t	Cor	ncepts	Iden	tifie	d fro	m th	e Text	of t	he		Total
	Code		Interviews (Number of Interviewees)		s)								
		1	2	3	4	5	6	7	8	9	10	11	
Quality Factors (design & architecture, equipments & materials, observing construction standards, situation)	1	5	10	11	3	4	7	8	5	8	11	12	84
Economic Factors (price, ways of payment, investment motives	5) 2	5	2	8	0	2	2	3	7	3	5	6	43
Credit & Brand	3	5	5	7	4	1	8	3	2	7	14	4	60
Factors Relevant to CRM	4	4	3	2	4	2	3	2	4	3	7	5	39
Customer Satisfaction	5	1	3	1	1	1	1	1	0	0	5	6	20
Trust	6	0	2	2	0	1	1	2	0	1	1	1	11
Commitment	7	1	1	1	0	1	0	3	0	2	3	2	14
Customer Loyalty	8	0	1	0	0	0	0	0	0	0	4	1	6
WOM	9	1	1	0	0	1	1	0	1	0	1	1	7
Total		22	28	32	12	13	23	22	19	24	51	38	284

The validity of the questionnaire was also accepted according to the extraction from interviews and qualitative analysis.

Empirical Analysis and Results

The final model of the research in standard mode, which is based on the recommendations of the Lisrel Software shows that the fit indices of the model are in a good position so that the calculated chi - square is 584.71, which is an acceptable value in this model and the ratio is about 1.87. The low level of this indicator shows a slight difference between the conceptual model of the research and the observed data of the research. Also, the RMSEA is 0.074. As the RMSEA index is lower, the model has a better fit. The Table 5 depicts the results of factor loadings, convergent validity, and composite reliability separately for each variable.

Table 5. Validation Test of Indices by Cronbach's Test and Factor Loadings

Variable	Component/Indices (Retrieved from Table 3)	Factor Loading	AVE	CR
Brand	Brand 1	0.81	0.64	0.76
	Brand 2	0.92	0.71	0.81
Economic Factors	Price	1.15	0.59	0.77
	Payment	0.92	0.53	0.72
	Investment	0.54	0.61	0.78
Quality Factors	Standard	0.79	0.73	0.89
	Conditions	0.56	0.62	0.79
	Architecture	0.32	0.66	0.71
WOM	Verbal advertisement by friends and relatives	0.81	0.74	0.84
	Verbal advertisement by non-familiar people	0.93		
	Verbal advertisements by the inhabitants	0.76		
Trust	The customer's trust in buying a residential unit	0.90	0.71	0.88

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	from the company in the shape of pre - purchase			
	Trust company if you need to buy company shares	0.40		
	The customer's trust in the authenticity of the complex land	0.45		
Commitment	The commitment of the company to the promises made	0.77	0.77	0.86
	The culture of adherence to the fulfillment of obligations to achieve the final result	0.78		
	Accountability over agreed commitments in assignment contracts	0.64		
Loyalty	Purchasing from the company , an experience leading to customer loyalty	0.74	0.79	0.92
	Customers' preference to buy on an equal footing with other rivals	0.91		
	Customer loyalty after buying a unit from the company	0.61		
Satisfaction	Customer satisfaction from the company	0.64	0.75	0.77
	Customer satisfaction of establishing culture of apartment residence in the complex	0.56		
	Technical and executive activities of the company	0.87		
	Activities of customer related departments in order to satisfy the customers	0.78		
Management of Customer	Sincere communication by the company's responsible authorities with the client after transferring the unit	0.81	0.81	0.86
Relationship	Responsible relationship of the company's employees with the client while transferring the unit.	0.90		
	Honest communication of the company's authorities with the client before transferring the unit	0.83		
	Way of introducing the projects under construction	0.84		
	Advertisement	0.40		

Table 6. The Results of Research Hypotheses

Hypothesis No. t-Statistics Path Coefficient Results of the Hypother H1 2.89 0.36 Accepted H2 2.16 0.21 Accepted H3 0.97 - Rejected H4 5.22 0.51 Accepted H5 5.42 0.46 Accepted H6 9.16 0.97 Accepted H7 1.2 - Rejected H8 7.93 0.93 Accepted H9 4.68 0.44 Accepted				
H2 2.16 0.21 Accepted H3 0.97 - Rejected H4 5.22 0.51 Accepted H5 5.42 0.46 Accepted H6 9.16 0.97 Accepted H7 1.2 - Rejected H8 7.93 0.93 Accepted	Hypothesis No.	t - Statistics	Path Coefficient	Results of the Hypothesis
H3 0.97 - Rejected H4 5.22 0.51 Accepted H5 5.42 0.46 Accepted H6 9.16 0.97 Accepted H7 1.2 - Rejected H8 7.93 0.93 Accepted	H1	2.89	0.36	Accepted
H4 5.22 0.51 Accepted H5 5.42 0.46 Accepted H6 9.16 0.97 Accepted H7 1.2 - Rejected H8 7.93 0.93 Accepted	H2	2.16	0.21	Accepted
H5 5.42 0.46 Accepted H6 9.16 0.97 Accepted H7 1.2 - Rejected H8 7.93 0.93 Accepted	H3	0.97	-	Rejected
H6 9.16 0.97 Accepted H7 1.2 - Rejected H8 7.93 0.93 Accepted	H4	5.22	0.51	Accepted
H7 1.2 - Rejected H8 7.93 0.93 Accepted	H5	5.42	0.46	Accepted
H8 7.93 0.93 Accepted	H6	9.16	0.97	Accepted
1.4	H7	1.2	-	Rejected
H9 4.68 0.44 Accepted	H8	7.93	0.93	Accepted
	Н9	4.68	0.44	Accepted

The results of the hypothesis testing of the research are declared in the Table 6.

Findings and Discussion

This research, with the development of the customer loyalty model, would help mass builders and construction companies to identify the factors affecting customer satisfaction and loyalty in the industry as well as the potential consequences of customer loyalty. The findings of the research show that, except for H3 and H7 that are not accepted, the remaining hypotheses are accepted.

Based on the results, the H1 is accepted. This result is consistent with the findings of previous research. Uncles, Dowling, and Hammond (2003) and Sweis et al. (2013) showed that building design, building facilities, maintenance systems performance, outside environment of the building, planning management, and problem-solving in order to optimize the performance of a building had a positive relationship with the satisfaction of residents. Perceived service quality is the most reliable indicator of brand equity (Singh, 2018). Quality and customer perceived value with a mediating effect of satisfaction lead to loyalty (Shetty, Bhandary, Chandra, & Shetty, 2018). The conditions of construction quality and price have a direct effect on customer satisfaction (Nahmens & Ikuma, 2009; Zadkarim & Emari, 2011). Planning for sustainable development in building construction reduces the risk of accidents and has a positive effect on residents' satisfaction (Amole, 2009). Morphological characteristics are related to the levels of satisfaction and residents' dissatisfaction with the physical conditions of the apartment are directly related. The existence of moderating factors such as the conditions of adjacent apartments, the context of urban communication, satisfaction with the management functions of construction repair, and participation of tenants are effective in satisfaction (Phillips et al., 2005). Housing conditions have the role of causing stress and are the most important factor in satisfying older people and have a crucial role in their mental health (Fauzi & Abidin, 2012).

Based on the obtained results, H2 is accepted. This result is consistent with the findings of previous research. According to Renganathan et al. (2015), the intention to re-buy by the customer is directly related to things such as price (Sweis et al., 2013). The conditions of construction quality and price have a direct effect on customer satisfaction. Price strongly affects sales and customer satisfaction (Zadkarim & Emari, 2011). Customer satisfaction is heavily dependent on the purchasers' income. According to the economic conditions of the country as well as the results obtained from the present research, the following two factors result in the satisfaction of the customers from investments in the housing sector: (a) ways of payment for residential units and (b) the existence of investment motives due to a reliable experience in investing in relation to other capital markets and the ability to earn from the leased place during market recession. Based on the results of this research, these two factors have been added to the price factor in the economic variable.

Based on the obtained results, H3 is not found to be significant for customer satisfaction and is rejected. In the previous research also (in the construction industry), the results did not credit the factors - brand and reputation to have a significant effect on customer satisfaction; although this hypothesis in other industries such as automotive manufacturing may have a direct and significant relationship. However, according to Choi, Park, Lee, and Hwang (2013), loyalty to the brand in the South Korean construction industry was found to be directly related to managerial factors. Despite the unreasonableness of not having a positive and significant effect of credit factors, brand, and reputation on customer satisfaction in this research, which is solely related to residential buildings of the Housing Investment Group, it seems that lack of competition between mass housing builders and the constant demand in this industry, at least in recent decades, as well as due to the profitability of investment in the housing sector at a level equal to or even above the inflation rate over periods of more than 4 years, has led to the reduction in weight and importance of this very important factor. Of course, due to changing market conditions and decreasing demand as well as the competitiveness of this industry like other industries and the entry of foreign mass builder companies, the effect of credit factors, brand, and reputation on customer satisfaction will definitely happen.

Based on the results, H4 is accepted. This result is consistent with the findings of previous research. According to Salleh (2008), customer satisfaction had a positive relationship with construction conditions and after-sales services. The factors - the existence of moderating factors such as the condition of adjacent apartments, the context of urban communication, satisfaction with the management functions of construction repairs, and the participation

of tenants in satisfaction - have an effect on customer satisfaction. Despite the importance of providing after-sales services and its effects on the customers, these issues are usually not considered in the Iranian construction industry.

Based on the results, H5 is accepted. Many research studies have emphasized the fundamental role of trust in customer relations. Trust and trust building is one of the preconditions for a two-way relationship between loyalty and customer satisfaction. The centrality of this factor is evident in many studies and widely available in the literature review of the relationship between loyalty and satisfaction (Dwyer et al., 1987).

Based on the results, H6 is accepted. This result is consistent with the findings of previous research. Sweeney and Swait (2008) in their research among bank customers concluded that commitment and satisfaction had a positive and significant effect on the customers' word - of -mouth relationship. The results reveal that there is a significant relationship between residents' satisfaction and loyalty.

Based on the results, H7 is not significant and is rejected. In previous research in the building industry, the same research was not seen about this hypothesis that customer trust has a significant effect on customer loyalty. However, there are also different opinions about trust in the relationship between these two variables. Some of them are multidimensional and some one-dimensional, emphasizing that trust is undoubtedly the precondition factor of the behavioral relationship between these two variables (behavioral dimension of customer loyalty). However, studying the present research data confirms that there is no significant relationship between customer trust and customer loyalty at the level of the Housing Investment Group Company. This can be attributed to the low weight of trust variables in comparison with the other variables. It also seems that the successive changes in management and applying various interests of people in the group companies, in particular, in the customer contact points with the company reduced trust.

Based on the results, H8 is accepted. In previous research in the construction industry, exactly the same as the hypothesis that customer trust has a significant effect on customer loyalty, was not seen. However, Krishnakumary and Thampi (2015) showed that commitment to customers and the ability of financial institutions to compete are two of the most influential factors in customer loyalty and marketing as well as for also attracting loyal customers in raising the level of customer satisfaction and loyalty (Zamzuri et al., 2008). Satisfaction is positively correlated with loyalty.

Based on the results, H9 is accepted. This result is consistent with the findings of previous research. Zamzuri et al. (2008) showed that satisfaction had a positive relationship with loyalty, but there was not necessarily a relationship between satisfaction and word-of-mouth advertising. Research has shown that more than 50% of the loyal customers were acquainted with the Housing Investment Group Company through friends and relatives and it led to consecutive purchases and loyalty.

Managerial Implications

In general, the present study - by adding two variables of ways of payment and investment motives to similar models in other countries - shows that due to some reasons such as: high and constant inflation rates; the existence of demand (so far); cultural factors; the assurance of investment in the housing sector due to low risk than other markets, such as investment in stock exchange and other types of investment in Iran; the possibility of getting revenue from the house (lease) in the absence of customers for purchasing the houses; and need no special expertise for housing deals - all and all cause this section of the industry to be attractive for investors. In the case of pre - purchase of a house, from a customer's perspective, suitable payment conditions will strengthen the investment motives. As a customer pays the related installments during the agreed period in the future while fixing the purchase price at the time of concluding the contract, therefore, it is possible for the customer to take the profit from the funds related to future installments. From the builder's point of view, pre-sales are also attractive. In fact, pre-sales will eliminate the risk of a customer's absence at the end of the construction process, nor does it require the constructor to spend all his investment capital, and by specifying the terms of payment, the two parties of the contract actually benefit from the transaction. Finally, it should be noted that the severity of housing demand in the country will be reduced in the near future. Therefore, the survival of mass housing companies depends on adopting basic measures such as comprehensive measures in the fields of technology and manufacturing, cost reduction, quality enhancement, moving towards identity and branding companies, as well as focusing on the development of attractive methods to create investment motives in terms of payment terms tailored to the budgets of target customers.

Limitations of the Study and the Way Forward

The present study is confronted with limitations, and based on it, some suggestions are given to other researchers for future research, which are as follows:

- \$\text{\$\\$}\$ This research is cross sectional and answers were taken at one time. According to the cross sectional nature of data, it is likely that the cause-and-effect relationship is not properly represented. Therefore, it is likely that the observed data is not related to the research variables. For this reason, longitudinal studies can lead to better results in cause and effect relationships between variables.
- \$\\$ As this research focuses on loyal customers of the Housing Investment Group Company, and as housing is not considered to be a substantial consumer good with a short and medium lifespan, therefore, it is suggested that future researchers study the behavior of non-loyal customers, that is, customers who once purchased a residential unit from the company, and compare the results with the results of this research.
- According to the results of this research, there is a need to examine the importance of customer contact points as an effective factor in attracting or disposing of potential customers, and it is recommended that interested researchers study this factor specifically.
- ♦ In line with customer satisfaction, it is recommended that researchers study the optimal area of the desired customers at different levels of income, increasing the number of building floors versus reducing the level of occupation and, consequently, increasing the green spaces and common places of the complexes.
- Use It is suggested that in future research, the effects of successive and short-term changes in the management of semi-state companies and their effect on loyal customers will be studied.

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