

Study of the Factors Affecting Customers' Loyalty for Gym Service at K.I.M Center, Vietnam

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Abstract: *This research aims to identify and measure the influence of factors affecting customers' loyalty for gym service at K.I.M Center by surveying 640 customers using the gym service at K.I.M Center. Cronbach's alpha, EFA, CFA and SEM analysis were used in the study. The results of the model tested with SEM supported 11 hypotheses out of a total of 12 hypotheses. The four factors are (i) Habits, (ii) Conversion cost, (iii) Relationship Marketing, and (iv) Satisfaction towards customers' loyalty at the center. Two factors (i) Intangible quality, (ii) Tangible quality have an impact on customers' satisfaction. In addition, other relationships in the model are also verified (1) the impact of relationship marketing on tangible and intangible quality, (2) the impact of tangible and intangible quality on the habit; (3) and the impact of tangible quality on customers' conversion cost. In it, the factor of Satisfaction expressed through tangible and intangible quality has the strongest impact on customers' loyalty.*

Keywords: Loyalty, Affecting factor, Gym service, K.I.M. Center

1. Introduction

Today, people are always looking for ways to make their lives better by reducing stress, eating healthy food and exercising regularly. The fitness centers have become fast-growing companies in recent years, especially in big cities like Hanoi and HoChiMinh City. The growth rate of fitness centers in HoChiMinh City has increased rapidly in the past five years with the appearance of major centers such as California WOW, Get Fit, Fit24, Elite, K.I.M Center ... When the competition between fitness centers become more and more intense, customer satisfaction has become an integral part of this business. Gyms have captured the mindset of customers about the need to provide the best possible service, thereby strengthening their trust and enhancing their competitive advantage with current competitors and potential competitors that are hiding in the future, K.I.M Center needs to learn the factors that affect the loyalty of customers as it is the urgent need at the moment.

2. Literature Review and Research Model

The relationship between quality of service and satisfaction

Quality of service and satisfaction were two different but closely related concepts in service research (Parasuraman et al, 1985). The results of the study by Parasuraman et al (1985) showed that the higher the perceived quality of service, the better the customer satisfaction. Study by Buttle (1998), Gilbert & Veloutsou (2007) also demonstrated that service quality leads to customer satisfaction. In order to achieve a high level of customer satisfaction, most researchers believe that a high level of service quality will be provided by the service providers because the quality of service is considered a premise of customer satisfaction.

As service quality improves, customer satisfaction increases. Quality is just one of many aspects that satisfaction is based on; Satisfaction is also a potential influence on future quality perception. Siddiqi (2011) described that all attributes of service quality that are positively related to customer satisfaction and customer satisfaction is positively related to customer loyalty in settings of retail banking. Moreover, Auka (2012) also said

that service quality will lead to high customer satisfaction and increased loyalty.

The relationship between satisfaction and loyalty

Service and market managers assume that there is a solid theoretical foundation for an empirical exploration of the relationship between customer satisfaction and loyalty. The study claims that there is a strong and positive relationship between customer satisfaction and loyalty.

Empirical study shows that satisfied customers tend to be more loyal than less satisfied ones, and is, therefore, important to the company's profitability (Reichheld & Sasser, 1990). In contrast, dissatisfaction can lead to customer leaving. Such satisfaction is associated with positive customer loyalty, and dissatisfaction can lead to customer defection.

A satisfied customer is more likely to buy a product and share his or her experience with five or six other people (Gronroos, 2007, Zairi, 2000). On the contrary, a dissatisfied customer can make him leave the organization even though the organization had nearly satisfied them (Mohsan et al, 2011). When customer satisfaction is higher, loyalty increases.

A number of other studies have actually found satisfaction as a leading factor in determining loyalty (He & Song, 2009; Mensah, 2010). Tee (2012) found a positive relationship between customer satisfaction and customer loyalty.

The relationship between conversion cost and loyalty

Some studies have shown a positive relationship between conversion cost and customer loyalty (Lee & Feick, 2001; Julander & Soderlund, 2003; Ranaweera & Prabhu, 2003). However, this also indicates that customers who reuse the services are not synonymous with customer loyalty. Customers may stop using the service for various reasons (Jones & Sasser, 1995).

Relating to the relationship between conversion cost and customer loyalty, other researchers have pointed to a positive relationship between conversion cost and customer loyalty (Julander & Soderlund, 2003; Ranaweera & Prabhu,

2003). Hirschman (1970) stated that customer loyalty increases as conversion cost are high and, especially, when conversion options are limited. However, Colwell & Scott (2004) argued that undesirable behavior undermines long-term customer relationships because customers will not use the service once they no longer feel the need for necessity of the relationship.

Related research models

Parasuraman et al. (1985) developed a conceptual model of service quality that they identified as having five distances that could affect consumers' assessment of service quality: (1) The gap between customers' expectation and managers' perception (2) The gap between managers' perception and service quality score, (3) The gap between the quality of service and the provision service, (4) The gap between the provision service and the external media, (5) The gap between the received service and the expected service.

A study by Dagger et al (2012) on the practical impact of conversion cost and the relationship between customer satisfaction and loyalty with customer commitment and customer benefits when participating in the UK for 9 service sectors, the results show that the negative impact of conversion cost on the relation of satisfaction - loyalty will decrease as the relationship between customers and services increase.

In Yang & Chao's (2017) study on relationship marketing, conversion cost and service quality affect customer satisfaction and loyalty in the Taiwan aviation logistics industry, research results show that relationship marketing has had a significant positive impact on the quality of customer service and loyalty; Quality of service has a significant positive impact on cost and customer satisfaction; conversion cost and customer satisfaction are key determinants of customer loyalty; Research indicates that relationship marketing does not directly affect conversion cost and customer satisfaction or transform the cost of the relationship between quality of service and customer loyalty as well as customer satisfaction and loyalty.

The Beerl, Martin and Quintana loyalty model (2004) showed that factors influencing customer loyalty are perceived quality, satisfaction, and conversion cost.

The study by Saeednia & Abdollahi (2008) created a model of customer loyalty in Iran's banking industry, resulting in Habitat, Choice, Transition Cost, Tangible Quality, Intangible Quality, and Satisfaction influencing Loyalty. These factors have a completely more different relationship than before, and there are also factors that are added to the main model of Beerli et al., 2004.

The study by Nguyen Thi An Binh (2016) on the factors affecting customer loyalty in the retail sector of Vietnamese joint stock commercial banks provides a link between conversion cost and customer loyalty; the relationship between price and customer loyalty; the relationship between social responsibility and customer loyalty;

The research conducted by Nguyen Thi Mai Trang (2006) on service quality, satisfaction and customer loyalty to the supermarket chain of Ho Chi Minh City showed that the quality of the supermarket service was the factor affecting the satisfaction and loyalty of customers.

Table 1: Summary of the factors that affect loyalty

No.	Factors	Source
1	Conversion cost	Fornel (1992); Aydin & Ozer (2005); Burnham et al (2003)
2	Service quality	Parasuraman et al(1985) Anderson, Fornell & Lehman (1994) Zeithaml et al.(1988)
3	Tangible quality	Parasuraman et al.(1985); Hsu (2006); Wang et al (2007)
4	Intangible quality	Parasuraman et al. (1985); Hsu et al.(2005); Wang et al (2004)
5	Habit	Lin and Wang (2006); Triandis (1971)
6	Relationship Marketing	Berry & Parasuraman (1991); Berry (1983); Yang & Chao (2017)
7	Price	Mavri & Loanou (2008)
8	Social responsibility	Rujrutana & Yaowalak (2011)
9	Satisfaction	Hallowell (1996); Lin & Wang (2006)

Source: Summary of the author

Research model and hypothesis

From theoretical study and previous studies, the group of authors who inherited the research model of Yang & Chao (2017) with habit, tangible quality, intangible quality, relationship marketing, conversion cost, satisfaction impact on loyalty. In addition, through group discussions, in-depth surveys, proposed research models are shown in Figure 1.

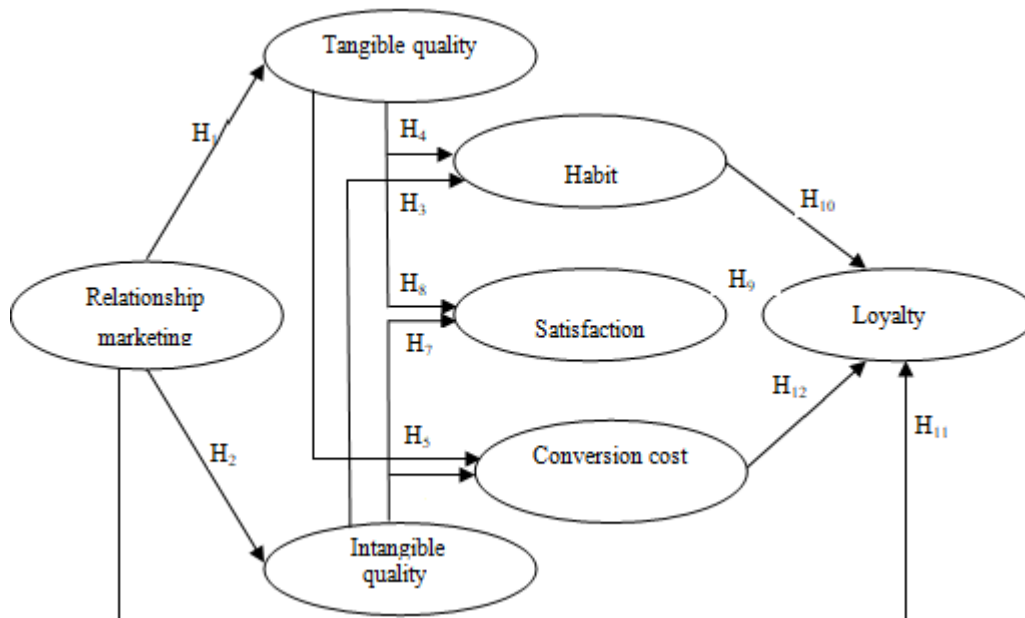


Figure 1: The proposed research model

Research hypotheses

- H₁: Relationship Marketing affects Intangible Quality
- H₂: Relationship Marketing affects Intangible Quality
- H₃: Intangible Quality affects Habit
- H₄: Tangible Quality affects Habit
- H₅: Tangible Quality affects Conversion cost
- H₆: Intangible quality affects Conversion cost
- H₇: Tangible Quality Affects Satisfaction
- H₈: Intangible quality affects Satisfaction
- H₉: Satisfaction affects loyalty
- H₁₀: Habit affects Loyalty
- H₁₁: Relationship Marketing affects Loyalty
- H₁₂: Conversion cost affect loyalty

Table 2: Survey information

Sample information		Number	Ratio %
Gender	Male	336	52.5
	Female	304	47.5
Total		640	100
Age	Under 25	162	25.3
	25 - 35	211	33.0
	35 - 50	135	21.1
	Over 50	132	20.6
Total		640	100
Income	Under 10 million	216	33.8
	10 – 15 million	265	41.4
	Over 15 million	159	24.8
Total		640	100

Source: Measured by the author

3. Result and Discussion

Characteristics of survey samples

The study was conducted using a direct sampling technique. The subjects were those who used to use the gym and yoga classes at K.I.M. Center, 650 surveys were sent, 640 valid samples were collected and were used for processing. Sample characteristics are shown in Table 2.

Assessing the reliability of the scale

The results of the Cronbach's Alpha scales (Table 2) show that the scales meet Cronbach's Alpha reliability score of over 0.6 and the item total correlation is > 0.3 (Nunnally and Burnstein, 1994). All observed variables of the scales satisfy the conditions for EFA.

Table 3: Cronbach's Alpha result of the scales

No.	Scales	Vietnamese text	Notation	No. of observed variables	Cronbach's Alpha Coefficient	Smallest Item total correlation
1	Relationship marketing	Marketing quan he	HA	5	0.810	0.460
2	Conversion cost	Chi phi chuyen doi	CP	6	0.870	0.430
3	Tangible quality	Chat luong huu hinh	CLHH	6	0.777	0.332
4	Intangible quality	Chat luong vo hinh	CLVH	4	0.870	0.550
5	Habit	Thoi quen	PRC	4	0.876	0.578
6	Satisfaction	Hai long	HL	3	0.828	0.649
7	Loyalty	Trung thanh	TT	3	0.895	0.784

Source: Measured by the author

Exploratory Factor Analysis (EFA) of independent variables

The results of EFA for independent variables (Habits, Relationship Marketing, Intangible Quality, Tangible Quality, Conversion cost) show that KMO = 0.878 > 0.5 and Sig = 0.000, thus concluding that the observed variables

included in the analysis are statistically significant and EFA is appropriate to be uses in this study. The results of the factor analysis also show that the total variance is 55.613% (greater than 50%), meaning that the five factors explain 55.613% of the variance. Therefore, the extracted variance is satisfactory. The stop point when extracting the factors at the

fifth factor with the eigenvalue is 1.068. The results of factor analysis are appropriate.

Table 4: Exploratory factor analysis results (second time)

Variables	Factors				
	1	2	3	4	5
TQ ₃	0.825				
TQ ₂	0.799				
TQ ₆	0.752				
TQ ₅	0.696				
TQ ₄	0.687				
TQ ₁	0.662				
CLVH ₂		0.814			
CLVH ₄		0.798			
CLVH ₃		0.796			
CLVH ₆		0.716			
CLVH ₁		0.642			
CLVH ₅		0.622			
CP ₂			0.863		
CP ₅			0.823		
CP ₁			0.792		
CP ₆			0.774		
CP ₃			0.702		
HA ₃				0.832	
HA ₂				0.679	
HA ₁				0.643	
HA ₄				0.637	
HA ₅				0.596	
CLHH ₁					0.737
CLHH ₃					0.683
CLHH ₆					0.647
CLHH ₂					0.631
CLHH ₄					0.575

Source: Data processing from SPSS

Exploratory factor analysis - Satisfaction

The Satisfaction scale consists of 3 observed variables. Bartlett's test result with sig = 0.000 shows that the variables must be correlated. KMO = 0.700 > 0.5 indicates that factor analysis is appropriate. At the Eigenvalues of 1.871, the factor analysis extracts one factor from three observed variables with a variance of 62.382% (> 50%) which is satisfactory. All factor loadings of the variables are satisfactorily greater than 0.5. The Transform / Compute Variable is used to group HL₁, HL₂, HL₃ into the Satisfaction variable denoting as HL (Table 5).

Table 5: Results of factor analysis of Satisfaction

	Factor
	1
HL ₂	0.894
HL ₁	0.740
HL ₃	0.725

Source: Data processing from SPSS

Exploratory factor analysis - Loyalty

The loyalty scale consists of 3 observed variables. At the Eigenvalues of 2.248, factor analysis analysis extracts one factor from three observed variables with an extracted variance of 74.937% (> 50%) which is satisfactory. All factor loadings of the variables are greater than 0.5 which is satisfactory.

Table 6: Factor analysis result - Loyalty

	Factors
	1
TT ₂	0.867
TT ₁	0.864
TT ₃	0.848

Source: Data processing from SPSS

Thus, based on the results of the analysis of the EFA (after eliminating the two observed variables CP4 and CLHH5), the loyalty scale and the eight factors affecting loyalty are converging, or observed variables represent the measured concepts.

Confirmatory factor analysis (CFA)

Comprehensive assessment of indicators in CFA

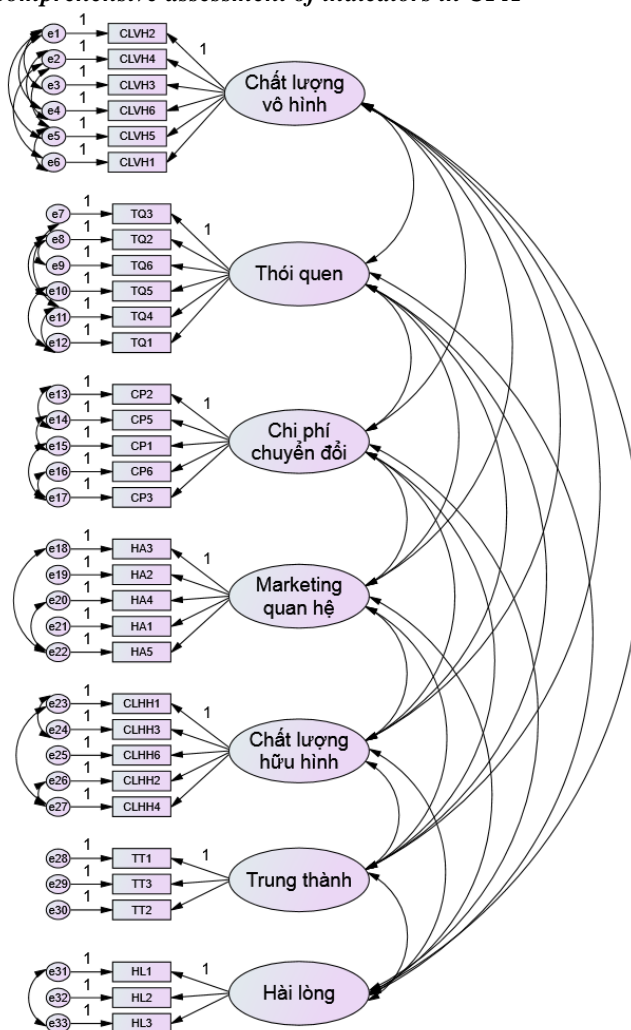


Figure 2: Result model of CFA

Source: Data processing

Table 7: CFA results

Indicator	Calculated value from the model	Value required by Hair at al. (2010)
CMIN/DF	2.804	< 3
CFI	0.933	> 0.9
GFI	0.896	~ 0.9
AGFI	0.871	> 0.8
RMSEA	0.053	< 0.10

Source: Data processing

Therefore, from the CFA result we can conclude that the general theoretical model is consistent with the survey data.

The results of the analysis of reliability, convergence value and discrimination of factors are shown in Table 8.

Testing the reliability, convergence value and discrimination of the factors

Table 8: Results of analysis of reliability, convergence value and discrimination

	CR	AVE	MSV	ASV	TT	CLVH	TQ	CP	HA	CLHH	HL
TT	0.831	0.622	0.531	0.467	0.689						
CLVH	0.868	0.525	0.462	0.198	0.680	0.724					
TQ	0.864	0.517	0.314	0.173	0.560	0.369	0.719				
CP	0.866	0.567	0.291	0.159	0.539	0.136	0.324	0.753			
HA	0.826	0.594	0.449	0.259	0.640	0.376	0.344	0.412	0.703		
CLHH	0.801	0.550	0.449	0.260	0.628	0.315	0.403	0.436	0.670	0.671	
HL	0.894	0.739	0.631	0.363	0.965	0.577	0.448	0.423	0.518	0.516	0.759

Source: Data processing

Note: Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV), and Average Shared Variance (ASV)

+ Composite Reliability: CR values of all factors are > 0.7: all factors are reliable. The model gains composite reliability.

+ Convergent validity: All factors meet two criteria: - CR > AVE and AVE > 0.5. The standardized weight of the scale is > 0.5. Standardized weights are statistically significant at P < 0.05. The model gains convergent validity.

+ Discriminant validity: All of them satisfy two conditions: MSV < AVE, ASV < AVE, the coefficient of correlation between concepts on the whole is different from one with

statistically significant (P ≤ 0.05). So all scales gain discriminant validity.

+ Nomological validity: The correlation between the factors presented in the table above shows that 6 factors are positively correlated with Loyalty and statistically significant at 5%. The measurement model is consistent with the theory.

Correlation analysis after CFA

The research factors have the same relationship and are statistically significant with customer loyalty at a 5% level significance. The Satisfaction factor has the highest correlation of 0.837. The Conversion cost factor has the lowest correlation coefficient of 0.373 (Table 9).

Table 9: Correlation coefficient matrix between factors after CFA

		TT	CLVH	HA	TQ	HL	CP	CLHH
TT	Pearson	1	.511**	.429**	.396**	.837**	.373**	.417**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
CLVH	Pearson	.511**	1	.327**	.315**	.585**	.132**	.269**
	Sig. (2-tailed)	.000		.000	.000	.000	.001	.000
HA	Pearson	.429**	.327**	1	.280**	.505**	.312**	.503**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
TQ	Pearson	.396**	.315**	.280**	1	.485**	.286**	.300**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
HL	Pearson	.837**	.585**	.505**	.485**	1	.468**	.486**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
CP	Pearson	.373**	.132**	.312**	.286**	.468**	1	.348**
	Sig. (2-tailed)	.000	.001	.000	.000	.000		.000
CLHH	Pearson	.417**	.269**	.503**	.300**	.486**	.348**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	

Source: Data processing

Testing the general suitability of the model

Linear analysis result shows that the model has Chi-Square coefficient of 1362,483 with 461 degrees of freedom and p = 0.000. In addition, when considering the relative Chi-Square / df this value is 2,955 which is less than 3, indicating that the model is appropriate for the survey data. Examination of other relevant indicators shows that: CFI is 0.926 > 0.9; TLI is 0.916 > 0.9; GFI is 0.887, equivalent to 0.9; RMSEA is 0.055 < 0.08 and RMR = 0.034 < 0.05. All of them meet the general suitability assessment criteria of the model. Thus, the research model is appropriate for the survey data.

The results of the theoretical model test

Table 10 presents the linear relationship between (i) Relationship Marketing (ii) Tangible Quality, (iii) Intangible Quality, (iv) Conversion Cost, (v) Habit, Customer Satisfaction and (vii) Customer loyalty to Gym services at K.I.M. Center. The empirical data indicate that the estimated standardized estimates of the parameters β₁ = 0.699, β₂ = 0.393, β₃ = 0.288, β₄ = 0.346, β₅ = 0.487, β₇ = 0.415, β₈ = 0.504, β₉ = 0.817, β₁₀ = 0.133, β₁₁ = 0.140 and β₁₂ = 0.130 have level of significance of 1% corresponding to the hypotheses H₁, H₂, H₃, H₄, H₅, H₇, H₈, H₉, H₁₀, H₁₁, H₁₂. Parameter β₆ = 0.023 was not statistically significant at 10%, corresponding to hypothesis H₆.

Table 10: Test results of factors affecting customer loyalty to K.I.M. Center

Research hypotheses	Expected sign	Standardized Coefficient of β	p value	Level of significance (%)	Accreditation result
HA—>CLHH	Postive	0.699	0.000	1	Rejected H_0
HA—>CLVH	Postive	0.393	0.000	1	Rejected H_0
CLVH—>TQ	Postive	0.288	0.000	1	Rejected H_0
CLHH—>TQ	Postive	0.346	0.000	1	Rejected H_0
CLHH—>CP	Postive	0.487	0.000	1	Rejected H_0
CLVH—>CP	Postive	0.023	0.590	1	Not rejected H_0
CLHH—>HL	Postive	0.415	0.000	1	Rejected H_0
CLVH—>HL	Postive	0.504	0.000	1	Rejected H_0
HL—>TT	Postive	0.817	0.000	1	Rejected H_0
TQ—>TT	Postive	0.133	0.000	1	Rejected H_0
HA—>TT	Postive	0.140	0.000	1	Rejected H_0
CP—>TT	Postive	0.130	0.000	1	Rejected H_0

Model indicators

Degree of freedom: 461

Chi-square/df (p_value) 2.955 (0.000)

CFI: 0.926

TLI: 0.916

GFI: 0.887

RMR: 0.034

RMSEA: 0.055

Source: Calculated from survey data

SEM model results

From the SEM analysis, the estimated results of the impact of the factors on customer loyalty to Gym services at K.I.M. Center are shown in Figure 3.

Bootstrap verification

Testing the Bootstrap with a sample of 200 bootstrap for test results is shown in Table 11. The Estimate column shows normal estimation with the Maximum Likelihood method, with the remaining columns computed from the Bootstrap method, while the column Mean gives an average of Bootstrap estimates; Bias (Meaning) with Mean - Estimate column. The CR column is calculated by the formula: CR = Bias / SE - Bias. Absolute value of CR is very small compared to 2 so it can be said that the variance between the two types of estimation is very small, not statistically significant at 95%.

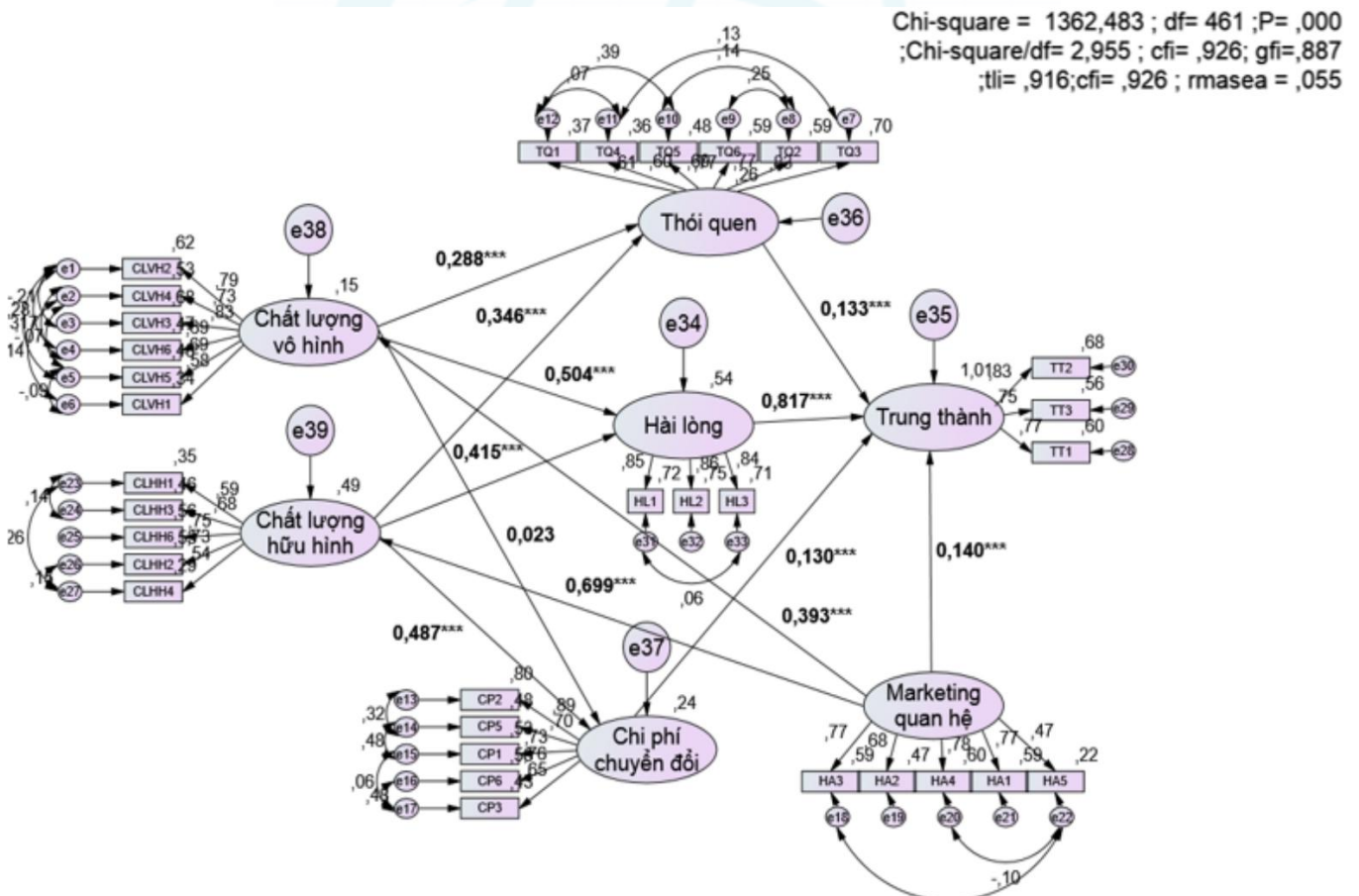


Figure 3: The relationship between the factors that influence the customer loyalty to the center

Source: Data processing

Note: * indicator P < 10%, ** indicator P < 5%, *** indicator P < 1%.

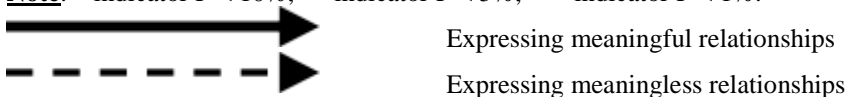


Table 11: Bootstrap test results

Parameters	Estimates	SE	SE-SE	Average	Bias	SE-Bias	CR = Bias/SE-Bias
CLHH <--- HA	0.583	0.031	0.002	0.701	0.001	0.002	0.500
CLVH <--- HA	0.439	0.047	0.002	0.394	0.001	0.003	0.333
HL <--- CLVH	0.560	0.036	0.002	0.504	0.000	0.003	0.000
TQ <--- CLVH	0.331	0.045	0.002	0.289	0.000	0.003	0.000
TQ <--- CLHH	0.534	0.040	0.002	0.346	0.000	0.003	0.000
HL <--- CLHH	0.619	0.043	0.002	0.415	0.000	0.003	0.000
CP <--- CLHH	0.672	0.044	0.002	0.485	-0.003	0.003	-1.000
CP <--- CLVH	0.024	0.048	0.002	0.027	0.004	0.003	1.333
TT <--- HL	0.795	0.027	0.001	0.818	0.001	0.002	0.500
TT <--- TQ	0.125	0.028	0.001	0.130	-0.002	0.002	-1.000
TT <--- HA	0.169	0.031	0.002	0.139	-0.001	0.002	-0.500
TT <--- CP	0.137	0.026	0.001	0.129	0.000	0.002	0.000

Source: Calculated from survey data

Analysis of multi-group structure

Tables 12, 13, and 14 show that the results of multi-group structure analysis of gender, age, and income all allow for the invariant model, meaning that there is no difference between the groups in the weak Factors affecting customer loyalty to KIM Center

Table 12: Analysis of multi-gende structure

	Chi square	df	Different	P_Value	Conclusion
MH variable	3415.162	1756	16.634	0.055	Accepted MH invariant
MH invariant	3431.796	1765	9		

Source: Measured by the author

Table 13: Analysis of multi-age structure

	Chi square	df	Different	P_Value	Conclusion
MH variable	6366.992	3512	39.383	0.058	Accepted MH invariant
MH invariant	6406.375	3539	27		

Source: Measured by the author

Table 14: Analysis of multi-income structure

	Chi square	df	Different	P_Value	Conclusion
MH variable	6168.191	3512	20.68	0.801	Accepted MH invariant
MH invariant	6188.871	3539	27		

Source: Measured by the author

Testing theoretical model

Hypothesis H₇: Tangible Quality and Customer Satisfaction

In building and improving the quality of gym services at K.I.M. Center, tangible quality factors have a positive impact on customer satisfaction when using the service at the center. The test result of the relationship in this model gives expected results ($\beta_7 = 0.415$ and $p = 0.000$). This result is consistent with the results of Oliver (1997, 1999), Caruana (2002), Zeithaml (1988), Caruana (2002), Chumpitaz (2004), Abdollahi (2008).

Hypothesis H₈: Intangible Quality and Satisfaction of Customers

The quality of the intangible quality has a positive impact on the satisfaction of customers when using the service at the center. The test result of the relationship in this model gives expected results ($\beta_8 = 0.504$ and $p = 0.000$). This result is consistent with the results of Oliver (1999), Zeithaml (1981) and Abdollahi (2008).

Hypothesis H₉: Satisfaction and Loyalty of customers

Satisfaction factor has a positive impact on the loyalty of customers when using the service at the center. The test result of the relationship in this model gives expected results ($\beta_9 = 0.817$ and $p = 0.000$). This result is consistent with the results of Lin (2003), Liang et al (2013), Abdollahi (2008).

Hypothesis H₁₀: Habit and Customer Loyalty

Habit factor has a positive impact on customer loyalty when using the service at the center. The test result of the relationship in this model gives expected results ($\beta_{10} = 0.133$ and $p = 0.000$). This result is consistent with the results of Lin and Wang (2006), Triandis (1971).

Hypothesis H₁₁: Relationship Marketing and Customer Loyalty

Relationship marketing has a positive impact on customer loyalty when using services at the center. The test result of the relationship in this model gives expected results ($\beta_{11} = 0.140$ and $p = 0.000$). This result is consistent with the results of Beerli et al (2004), Abdollahi (2008).

Hypothesis H₁₂: Conversion Cost and Customer Loyalty

Conversion cost factor has a positive impact on customer loyalty when using the service at the center. The test result of the relationship in this model gives expected results ($\beta_{12} = 0.130$ and $p = 0.000$). This result is consistent with the results of Fornel (1992); Aydin & Ozer (2005); Burnham et al (2003); Nguyen Thi An Binh (2016), Abdollahi (2008).

With four factors affecting loyalty and two factors affecting customer satisfaction using the center's services built from theoretical models, the hypotheses from the research model are confirmed. , whereby all four factors in the model have a positive influence on the customer loyalty to the Center and two factors affect the satisfaction of customers using Gym services at K.I.M. Center. In particular, customer satisfaction has the strongest influence in promoting customer loyalty with the Center. This satisfaction depends entirely on the capacity of the center expressed through the service quality of the center. In addition, the Habit factors, Relationship marketing, Conversion cost proven from the model have a good effect on the loyalty of individual customers with the Center.

4. Conclusion and Managerial Suggestions

Conclusion

Study of “the factors affecting customers’ loyalty for gym service at K.I.M. Center” has solved the research objectives set out to clarify the impact of factors to the loyalty of the customers.

From theories and research related studies, the research team has designed, developed, tested the scale, tested the model and the research hypotheses. With Cronbach's Alpha large enough and via EFA, the scales have been tested for reliability and suitability. Subsequently, confirmatory factor analysis (CFA) and model testing using SEM analysis show the entire model is suitable. Four factors include (i) Habit, (ii) Conversion cost, (iii) Relationship marketing, and (iv) Customer loyalty to the Center. Two factors: (i) Intangible quality, (ii) Tangible quality that affects customer satisfaction. In addition, other relationships in the model are also verified (1) the effect of relationship marketing on tangible and intangible quality, (2) the effect of tangible quality and intangible quality to habit; (3) and the effect of tangible quality on the customers’ conversion cost.

The result of the model tested with SEM analysis support 11 hypotheses out of a total of 12 hypotheses. In particular, the six main hypotheses of the model are statistically significant. All 11 statistically significant factors have a positive effect on customer loyalty. In it, the factor of satisfaction expressed through the tangible quality and intangible quality of the center has the strongest impact on customer loyalty.

Managerial suggestions

Satisfaction

Table 15: Mean of satisfaction scale

Factors	Mean
HL ₁ In general, you are satisfied with the effectiveness of your current training with the services provided by the center.	3.39
HL ₂ You are more satisfied with your current center than you are with other centers.	3.32
HL ₃ You are satisfied with the tangible or intangible value that you receive compared to the price and cost you paid.	3.39
HL Satisfaction	3.3677

Source: Data processing from SPSS

Table 15 shows that the variables in the satisfaction component are rated above average (Mean > 3), the lowest of which is HL₂ "You are more satisfied with your current center than you are with other centers". In this study, the Satisfaction component has a coefficient of $\beta_9 = 0.817$. To increase the mean value of "Satisfaction", K.I.M. Center should:

- Regular clean the training rooms; Change facilities, old equipment.
- Raise the level of expertise and skills for the staff, especially the personal trainers.
- Deliver customer service information, prices quickly
- Have a regular training plan for staff to improve service, guidance, and solving problem for customers as new machines and equipment will change on a daily basis because the needs of customers will always change.

Relationship marketing

Table 16: Mean of Relationship marketing scale

Factors	Mean
HA ₁ K.I.M. Center provides you with better prices for group registration	3.07
HA ₂ K.I.M. Center provides better prices for you in the long term	3.37
HA ₃ K.I.M. Center offers flexible payment services	3.57
HA ₄ K.I.M. Center provides training information for you	3.48
HA ₅ K.I.M. Center provides new services according to your needs	3.31
HA Relationship Marketing	3.3600

Source: Data processing from SPSS

Table 16 shows that the variables in the Marketing Relationship component are rated above average (Mean > 3), the worst of which is HA₁. "K.I.M. Center provides you with better prices for group registration". In this study, the relationship marketing component has a coefficient $\beta_{11} = 0.140$. To increase the mean value of "Relationship Marketing", K.I.M. Center should:

- Provide better prices for regular clients in the center.
- Expand payment methods, reasonable payment policies for customers.
- Update, transfer the latest service packages of the center, as well as the needs of customers.
- Have preferential policies when registering groups, policies for referrals.

Habit

Table 17: Average value of Habit scale

Factors	Average value
TQ ₁ You use services of K.I.M. Center because your friends and family use them	3.38
TQ ₂ You use services of K.I.M. Center because you are recognized as a member	3.43
TQ ₃ You use services of K.I.M. Center because the center is close to your home / office.	3.30
TQ ₄ You use services of K.I.M. Center because it has many services to choose from	3.31
TQ ₅ You use services of K.I.M. Center because it is the first service center you use.	3.42
TQ ₅ You use services of K.I.M. Center regularly	3.38
TQ Habit	3.3701

Source: Data processing from SPSS

Table 17 shows that variables in the Habit component are rated above average (Mean > 3), the lowest of which is TQ₃. "You use services of K.I.M. Center because the center is close to your home / office". In this study, Habit has a coefficient $\beta_{10} = 0.133$. To increase the mean value of "Habit", K.I.M. Center should:

- Have the right strategies to understand the customer's habit who has been using competitors' services, thereby developing services that can attract customers and create similar habits for them.
- Understand the consumer's habit as it gives the center the opportunity to win the competition, so the center must invest in staff and technology to understand the habit of consumers about the center's current services.
- Have plans to expand a number of branches in the neighborhood to reach new customers and meet their training needs.

- Have policies, provide more packages to customers to choose from.

Conversion cost

Table 18: Mean of Conversion cost scale

Factors		Mean
CP ₁	You need to spend more time looking for other centers to re-evaluate the services	3,28
CP ₂	You need to spend more time rebuilding your relationship with the new Center	3,44
CP ₃	You need to spend a lot of time reading and understanding new services	3,28
CP ₄	You may no longer enjoy better prices offered by K.I.M Center	3,03
CP ₅	You think that the cost of the new Center for the same service will be higher	3,34
CP ₆	You will need to pay an additional cost to transfer to the new center	3,38
CP	Conversion cost	3,3431

Source: Data processing from SPSS

Table 18 shows that the variables in the Conversion cost are rated above average (Mean > 3), the lowest of which is CP₄ "You may no longer enjoy better prices offered by K.I.M Center". In this study, the Conversion cost has a coefficient $\beta_{12} = 0.130$. To increase the mean value of the "Conversion cost", K.I.M Center should:

- Increases fees when customers switch to another center
- Have preferential policies on VIP customers, accumulation points
- Preferential finance, promotion

5. Limitations of Research and Suggestion for Futher Research

There are a number of limitations to this research: (1) There are few sources of references and research papers in the field of influencing the loyalty of customers using Gym services, so it is mostly based on investigative literature and theoretical models from abroad, detailed qualitative research has not yet been done, so there may be some new factors affecting customer satisfaction and loyalty that need to be added. Theoretical model, (2) The study focused only on customers at K.I.M. Center, but has not collected information in other training rooms in HoChiMinh City as well as expanding the scope of research into many different areas over the country. These are also the suggestions for further researchs.

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