

# Factors Affecting Learners' Satisfaction and Loyalty to the Vietnamese American Training Center, Can Tho City

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## ABSTRACT

The objective of the study is to determine factors affecting the satisfaction and loyalty of learners to the quality of training services at the Vietnamese American Training Center (VATC) in Can Tho City. The research data were collected from 200 learners studying at VATC Can Tho. Applying structural equation modeling (SEM), the study has demonstrated four factors affecting learner satisfaction, including textbooks and materials; managerial and administrative procedures; facilities, and training programs. Besides, the study has pointed out that satisfaction positively affects learners' loyalty to VATC Can Tho. Some managerial implications to improve learners' satisfaction and loyalty to VATC Can Tho were suggested such as Develop training programs, Upgrade learning materials, Improve administrative procedures, and enhance the center's facilities.

**Keywords:** *satisfaction, loyalty, Vietnamese American Training Center*

## 1. INTRODUCTION

Can Tho is one of the five largest cities in Vietnam. In recent years, many foreign language centers have opened to serve the needs of people to learn English. Up to now, there are more than 20 foreign language centers with different learning levels and learners in Can Tho City. Thus, learners have plenty of options for the language center that suits their needs and goals. This has led to fierce competition among foreign language centers. These centers have developed strategies to attract

learners such as tuition incentives, unique study programs, gifts for early birds, and professional foreign teachers. Therefore, improving learners' satisfaction with the service quality is an urgent task of foreign language centers.

According to Harly and Green (1993), the quality of training is recognized in five aspects: excellence, perfection, fitness for purpose, valuation at cost, and quality transformation. Cheng and Tam (1997) have argued that training quality is a combination of inputs, processes, and outputs of education to provide services that satisfy both internal and external customers. It contributes to meet the current and potential expectations of customers. VATC Can Tho has been operating since 1999. Since its establishment, VATC Can Tho has continuously improved teaching methods and training quality to best meet the needs of learners. However, in recent years, due to the strong competition from new language centers, the number of learners at VATC tends to decrease. Therefore, it is necessary to identify the factors affecting the learners' satisfaction and loyalty to VATC Can Tho.

## 2. THEORETICAL FRAMEWORK AND RESEARCH HYPOTHESES

### 2.1 Theoretical framework

**Satisfaction:** Satisfaction is an emotional state that changes continuously during the use of a product and it is assessed after consumption (Mano and Oliver, 1993). Satisfaction or dissatisfaction is the

customer's response to the perceived evaluation that they have before purchasing the product and the actual perception of the product after consumption (Johnson et al., 1995). As presented by Hansemark and Albinsson (2004), customer satisfaction is the customer's overall attitude towards a service provider, oan emotional reacting to the difference between what they anticipate and what they receive after using a product. It may occur with the meet of certain needs, goals, or desires. Bowie and Chang (2005) stated that five factors affecting customer satisfaction include customer expectation, customer experience, customer attitude, unforgettable events, and customer perception.

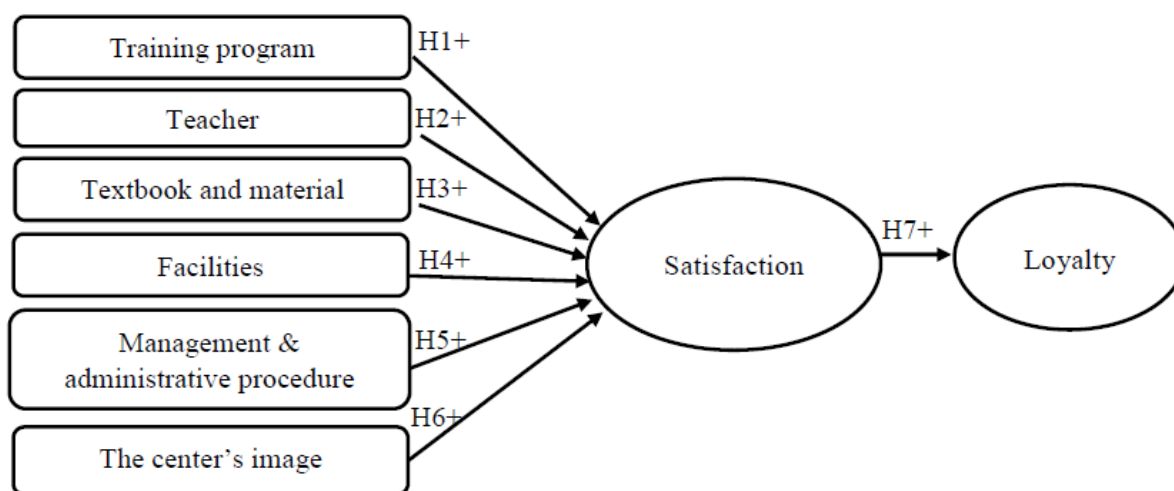
**Loyalty:** Loyalty is the customer's attitude and behavior towards one or some brands in a certain period (Engel et al., 1995). Loyalty is a deep commitment to consistently repurchase or re-patronize a preferred product/service in the future, thereby causing the purchasing of the same brand (Oliver, 1999). Loyalty demonstrates the attitude of customers, if they trust and have a good impression on a brand, they may prioritize products of that brand (Yoo et al., 2000). Loyalty behavior focuses on the customer's value to the brand (Schultz & Bailey, 2000). Loyalty attitude includes 3 components that are customer knowledge and belief, customer perception and

evaluation, customer orientation of action or passivity. Customer loyalty is also measured as an attitude (brand preference, purchase intention, or commitment).

## 2.2 Research hypotheses

The authors have a review of domestic and foreign researches related to the satisfaction and loyalty of learners. Besides, applying group discussions (qualitative research) with education experts and learners at VATC Can Tho, the study proposes a model of six groups of factors (facilities, teachers, textbooks and materials, management and administrative procedures, center's image) that impact learners' satisfaction and loyalty to VATC Can Tho. The research hypotheses are as follows: H1: The training program positively affects the satisfaction of learners. H2: Teachers have a positive influence on learners' satisfaction. H3: Textbooks and materials positively affect learners' satisfaction. H4: Facilities have a beneficial impact on learners' satisfaction. H5: Management and administrative procedures positively influence learners' satisfaction. H6: The center's image positively affects learners' satisfaction. H7: Learners' satisfaction positively affects their loyalty.

Based on the research hypotheses, the research model of factors affecting the satisfaction and loyalty of learners to VATC Can Tho is as below.



Source: Auhrrors' proposal, 2021

Figure 1: Research model of factors affecting learners' satisfaction and loyalty to VATC Can Tho

**Table 1: Interpretation of observed variables in the research model**

Factor	Sign	Description	Reference resources
Training program	TP1	The capacity of the training program is appropriate.	Nghì (2012), Vrana et al. (2015)
	TP2	The content of the training program is appropriate.	
	TP3	The learning evaluation method is appropriate.	
	TP4	Learners can choose learning time, class, and teacher.	
Teacher	TE1	Teachers are well-qualified.	Thao (2008), Nghì (2012), Vrana et al. (2015)
	TE2	Teachers have good communication skills and teaching methods.	
	TE3	Teachers ensure class time and reasonable teaching plan.	
	TE4	Teachers are enthusiastic in answering questions and giving feedback.	
	TE5	Teachers evaluate learning outcomes fairly.	
	TE6	Teachers encourage students to develop abilities.	
Textbooks and materials	TM1	The material for each subject is provided accurately and updated regularly.	Nghì (2012), Giao and Phuc (2015)
	TM2	Lectures and textbooks are designed concisely while ensuring full training content.	
	TM3	Teachers recommend domestic and foreign websites and reference resources for students.	
	TM4	Learners easily access reference materials.	
	TM5	The materials are suitable for the actual needs of the learners.	
Facilities	FA1	Facilities for teaching meet students' needs.	Vrana et al. (2015), Giao and Phuc (2015)
	FA2	Classrooms are fully equipped.	
	FA3	Toilets are clean and well arranged.	
	FA4	The parking area is safe and wide.	
	FA5	The location of the center is convenient.	
Management and administrative procedures	MA1	Appropriate tuition fee.	Aldemir and Gulcan (2004), Thao (2008)
	MA2	Information on teaching plans and periodical evaluations is fully communicated to learners.	
	MA3	The information on the center's website is clear and diverse.	
	MA4	Simple and quick administrative procedures.	
	MA5	The staff is always enthusiastic and supportive.	
The center's image	CI1	The center has many contributions to education and human resource development activities.	Giao and Phuc (2015), Gruber et al. (2010)
	CI2	The reputation of the center has a great influence on the value of its training certificates.	
	CI3	The training certificates of the center are recognized by many organizations.	
Satisfaction	SA1	The quality of training courses meets the expectations.	Nghì (2012), Vrana et al. (2015), Giao and Phuc (2015)
	SA2	Teachers are professional and enthusiastic, meeting the needs of learners.	
	SA3	Good sources of textbooks and materials, meeting the expectations.	
	SA4	Learners are satisfied with the center's facilities.	
	SA5	Learners are satisfied with the management and administrative procedures of the center.	
	SA6	Learners are satisfied with the experience of the center's image.	
Loyalty	LO1	VATC Can Tho is my first choice.	Oliver (1999), Yoo et al. (2000), Schultz and Bailey (2000)
	LO2	I will recommend my friends and relatives to study at VATC Can Tho.	
	LO3	I will always say good things about VATC Can Tho.	
	LO4	I am willing to share positive information about VATC Can Tho.	

Source: Authors' proposal, 2021

### 3. DATA AND ANALYTICAL METHOD

To test the research hypotheses, the analytical methods used include testing the reliability of the scales by Cronbach's Alpha, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modeling (SEM). So, the research sample size has to meet the

requirements for these methods. Hair et al. (1998) suggested that to use EFA, the sample size should be at least 50, preferably 100. The number of observations per one measurement variable should be 5:1. That is, for every measurement variable, a minimum of 5 observations is required. To meet the reliability in testing the SEM model, a sample size from 100 to 200 is satisfactory

(Hoyle, 1995). Also, Hoelter (1983) said that the ideal sample size limit in the linear structure is 200. The actual sample size achieved is 200, so the data is suitable for reliability and research hypothesis tests.

## 4. RESEARCH RESULTS AND DISCUSSION

### 4.1 Test the scale's reliability

To test the reliability of the scales, the study uses Cronbach's Alpha coefficient to test the internal correlation between observed variables. The test result in table 2 shows that all scales have Cronbach's Alpha values greater than 0.7. After eliminating the FA5 variable in the "Facilities" scale due to its low item-total correlation (0.257), the item-total correlation values of remaining observed variables are greater than 0.4 (Nunnally, 1978; Peterson, 1994; Slater, 1995).

Table 2: Scale reliability test result

Factor	Number of observations	Min corrected item -total correlation	Cronbach's Alpha
Training program	4	0.498	0.806
Teachers	6	0.458	0.876
Textbooks and materials	5	0.622	0.835
Facilities	4	0.491	0.766
Management and administrative procedures	5	0.555	0.844
The center's image	3	0.714	0.866
Satisfaction	6	0.568	0.840
Loyalty	4	0.574	0.812

Source: Survey data, 2021

### 4.2 Exploratory factor analysis (EFA)

The research model requires the EFA to be performed twice independent factors and dependent variable. The second time EFA result of independent scales (after removing the variable TE1 due to its low factor loading value) achieves the following numbers: (1) Reliability of observed variables (Factor loading) > 0,5. (2) Testing the suitability of the model ( $0.5 < KMO = 0.832 < 1.0$ ). (3) Bartlett's test on correlation of observed variables (Sig. =  $0.00 < 0.05$ ). (4) Total variance explained =  $60.15\% > 50\%$ . The observed variables achieved

discriminant and convergent validity (Hair et al., 1998). Thereby, 6 independent factors are formed from 25 observed variables, there is no disturbance among variables, so the names of the factors retain. Similarly, the EFA for satisfaction and loyalty scales achieved the following indicators: (1) Reliability of observed variables (Factor loading) > 0.5. (2) Testing the suitability of the model ( $0.5 < KMO = 0.821 < 1.0$ ). (3) Bartlett's test on correlation of observed variables (Sig. =  $0.00 < 0.05$ ). (4) Total variance explained =  $50.19\% > 50\%$ . The observed variables acquire discriminant and convergent validity (Hair et al., 1998). The satisfaction and loyalty factors have no variable disturbance, so the factors' names are unchanged.

Table 3: Factors created from the EFA result

Sign	Observed variables	Factor
TP	4 variables: TP1, TP2, TP3, TP4	Training program
TE	5 variables: TE1, TE2, TE3, TE4, TE5	Teachers
TM	5 variables: TM1, TM2, TM3, TM4, TM5	Textbooks and materials
FA	4 variables: FA1, FA2, FA3, FA4	Facilities
MA	5 variables: MA1, MA2, MA3, MA4, MA5	Management and administrative procedures
CI	3 variables: CI1, CI2, CI3	The center's image
SA	6 variables: SA1, SA2, SA3, SA4, SA5, SA6	Satisfaction
LO	4 variables: LO1, LO2, LO3, LO4	Loyalty

Source: Survey data, 2021

### 4.3 Confirmatory factor analysis (CFA)

The test result shows that the model is consistent with the market data because the results all meet the following conditions: Chi-square = 819,513; P-value = 0.000 and Chi-square (CMIN/df =  $1,759 < 2$ ), according to Carmines and McIver (1981). Besides, TLI = 0.883, CFI = 0.896, and RMSEA =  $0.056 \leq 0.08$  (Bentler and Bonett, 1980). The CFA result indicates that the correlation coefficients between errors are all less than 1, so the model achieves unidimensionality. The standardized regression weights are all greater than 0.5 and the unstandardized regression weights are statistically significant, so the factors reach the convergent validity. Also, the correlation coefficient and standard

deviation are all < 0.9, so the research model achieves discriminant validity. The analysis of  $P_c$  and  $P_{vc}$  shows that both values of  $P_c$  (minimum 0.81) and  $P_{vc}$  (minimum 0.47) are satisfactory (Fornell and Larcker, 1981). Also, the  $\alpha$  value of all

factors is accepted (higher than 0.6) (Nunnally and Bernstein, 1994). Thus, the research data is consistent with the market data, achieving convergent validity, unidimensionality, discriminant validity, and reliability.

**Table 4: Evaluate scale reliability**

Factor	Number of observations	Composite reliability - $P_c$	The average variance extracted - $P_{vc}$	Conclusion
Training program (TP)	4	0.84	0.57	Accepted $P_c > 0,6$ & $P_{vc} > 0,4$
Textbooks and materials (TM)	5	0.84	0.52	
Teachers (TE)	5	0.90	0.64	
Management and administrative procedures (MA)	4	0.80	0.51	
Facilities (FA)	3	0.81	0.60	
The center's image (CI)	3	0.87	0.69	
Satisfaction (SA)	6	0.84	0.47	
Loyalty (LO)	3	0.81	0.58	

Source: Survey data, 2021

#### 4.4 Structural equation modeling (SEM)

Structural equation modeling (SEM) is used to test the research hypotheses. After

eliminating two factors TE and CI because of the unsatisfactory statistical value, the final test results are as follows:

**Table 5: Test the relationships among factors**

Relationship			Standardized estimation value	Unstandardized			
				Estimation value	Standard error S.E.	Critical ratio C.R.	P-value
SA	<---	TP	0.132	0.139	0.083	1.676	0.004
SA	<---	TM	0.336	0.409	0.093	4.410	***
SA	<---	FA	0.211	0.196	0.075	2.623	0.009
SA	<---	MA	0.302	0.341	0.113	3.029	0.002
LO	<---	SA	0.455	0.511	0.106	4.805	***

Source: Survey data, 2021

The test results in table 5 point out four factors affecting learners' satisfaction with VATC Can Tho, including textbooks and materials, management and administrative procedures, facilities, and training program. In which, textbooks and materials are the most essential factors putting the strongest influence on learners' satisfaction with VATC Can Tho. Also, the factors of management and administrative procedures, facilities, and training program positively affect learners' satisfaction with VATC Can Tho. Most importantly, the study has demonstrated a positive relationship between learners' satisfaction and loyalty to VATC Can Tho. This shows that satisfaction plays a significant role in retaining learners and improving their loyalty to VATC Can Tho.

## 5. CONCLUSION

The research model proposes six factors affecting learners' satisfaction with

VATC Can Tho. The analysis result accepts four impacting factors in descending order: textbooks and materials, management and administrative procedures, facilities, and training program. Besides, the study has confirmed a positive influence of learners' satisfaction on their loyalty to VATC Can Tho. Based on the above findings, several managerial implications are proposed to improve learners' satisfaction and loyalty as follows: develop training programs; upgrade textbooks and materials; improve management and administrative procedures; and enhance the center's facilities.

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