A COMPREHENSIVE ANALYSIS OF INTER-RELATIONSHIPS AMONG OVERALL SERVICE QUALITY, TRUST, SATISFACTION AND LEARNER'S LOYALTY WITHIN THE SUPPORTIVE VOCATIONAL EDUCATION AND TRAINING

Figen Yıldırım, (PhD)

Istanbul Commerce University, Turkey

Özgür Çengel, (PhD)

Istanbul Commerce University, Turkey

Cihad Demirli, (PhD)

Istanbul Commerce University, Turkey

Ali Altuğ Biçer, (PhD)

Istanbul Commerce University, Turkey

Mehmet Sağlam, (PhD)

Istanbul Commerce University, Turkey

Abstract:

It is seen that education institutes use many techniques to increase the quality of the services being provided. However, as competition in the education sector has been rising dramatically, it is hard to differentiate the services offered. In this perspective, it is becoming hard to attract and keep loyal learners in education institutes. So, lifelong learning and continuing professional development are the two tools that enhance the level of loyalty to the education institutes. In this study, an attempt has been made to understand the factors that define learner's loyalty in the Vocational Education Institutes. In addition, the relation of trust to the Institute, satisfaction, and learner's loyalty variables to the service quality will be researched. In this sense, 184 questionnaires have been conducted to students who have attended the Public Oversight Board Education Program offered by Istanbul Commerce University's Lifelong Learning Center. Data has been analyzed by Structural Equation Modelling. According to the results of the study, education institutes who deal solely with the issue of trust, satisfaction, and learner's loyalty can have the potential to keep their learners on hand on a life-long basis thereby earning their loyalty to the fullest extent.

Keywords: *Lifelong learning, learner's loyalty, service quality, trust, satisfaction*

1. Introduction

One of the most important factors in a brand is the quality associated with the product. Especially service brands can be able to differentiate themselves in this manner. Education quality is defined as the level of meeting the functions and goals of the education. In cultural, social and political fields, education institutions have the power to attract and integrate with the society. In order to have qualified workforce, education institutes should perform in certain standards.

As competition is on the rise in recent periods, universities and complementary education institutions have generated strong marketing strategies. In order to differentiate their services from the competitor, education institutes should pay the most attention to perceived quality in services marketing.

Perceived quality has direct influence on the purchasing decision and loyalty. According Zeithaml et al (1996), in order to earn customer loyalty, companies try to exercise and keep a high level of service quality. This is why a company's overall success in the market is high related with wide and loyal customer portfolio and sustainability of such strategy is crucial in this sense. An important aspect of service quality is the level of customer satisfaction. The terminology of satisfaction is related with the concept of customer's choice as a means to satisfy his/her minimal needs or exceed such needs in the pre-purchase consideration. The dissatisfaction is the result of negative expectations. Based on the cause and effect relationship, the level of satisfaction is defined as the process that follows as result of revealing service quality as a result of post purchase dissonance. On the other side, satisfaction has roots in strong associations, images, preference and loyalty. Grönroos (1984) clarifies the concept of service quality in terms of perceived judgment that had emerged from customers comparing their expectations with the service they actually received in the context of their perception. In his study, the service quality is divided into two namely technical quality (what is done) and functional quality (how it is done). It is indicated that functional quality is more important when compared with the technical quality. Technical quality assures the guarantee of the quality in terms of assessing effective systems, procedures, and techniques. It is hard to measure and standardize the functional quality. Additionally, Grönroos (1984) identifies the service quality in two aspects which are listed as expected service and perceived service. Besides, Berry et al (1988) state that service quality is the major determining factor in brands and how brands compete within each other. Sasser et al (1978) reveals services performance in three aspects. These are listed as personnel level, facilities level, and material level. Parasuraman et al (1988) has done a research on four different services sector. Based on the research, 10 general items have been generated. These are tangibles, trust, responsiveness, competition, respect, credibility, security, accessibility, communication, and understanding. Afterwards, these items have been minimized into 5 by establishing the SERVQUAL. These 5 items are empathy, responsiveness, reliability, assurance, tangibles. In some studies, SERVQUAL scale is not sufficient in order to measure the total service quality considering scope and implementation.

In loyalty studies, trust is the main focus of interest. Moorman et al (1992) state the terminology trust as "a willingness to rely on an exchange partner in whom one has confidence, as the belief that a partner's word or promise is reliable and a party will fulfill his or her obligations in the relationship. According to Grönroos (1984), trust is built with the customer. This establishes a relationship with the customer. Especially in services sector, as employees engage in the "share of heart" of the customers, meeting the customer needs and ability solve customer problems honestly and skillfully are the two primary factors. Customer trust can solely be developed with the aid of offering detailed product merchandise availability along with the fashion knowledge. As positive service interaction with the company is being inferred and benefits arise from this interaction, trust starts to be developed. However, the factors of service quality need to be indexed extensively in this sequence.

In services marketing, customer loyalty is the overall target. The major concern of interest that is related with the terminology of loyalty is associated with the emergence of favorable attitudes towards a particular brand while customer end up purchasing repeatedly. In education institutions, learner's loyalty is defined as the learner's level of loyalty to the education institution and the loyalty to the services being offered. The loyalty in the education institutes depends upon keeping the loyal students and earning new students. In education institutions, learner's interactiveness process with the institution brings a high level of loyalty to the education institute. Learner's loyalty depends on the student's level of satisfaction it is being inferred from a certain institution. There are three points of interest that end up in the loyalty in the education institutes. These are listed as the level of belonging to the institution, the quality of the education, and the will to reselect the same institution.

Recently, many studies have been generated on the scope of life-long learning. Specifically, education institutions put the main effort in establishing a continuous relationship with the learner on the concept of customer orientation. Supportive vocational education is an additional education that has been offered to the students in addition to sufficient education that the students already have. So the students already have a level of proficiency in a certain field. In this terminology, the major aim to update the knowledge and skills as means to offer continuous vocational advancement.

The major goal of today's society is to offer more qualified goods and services thereby increasing economic output and the quality of the humans. This is why the qualifications of the workforce resources should be strengthened on a life-long basis. In this sense, vocational training serves the needs of meeting such goals. The needs to vocational

training can be classified in individual, social, economic, and national aspects. Among the many individual needs, it is shown that there is a need for development in the occupations that adults hold, putting the main focus on the issue of continuous enhancement in knowledge and skills. Thus, there is a need on behalf of such groups to attend vocational training programs. In terms of social aspects, vocational training helps people to be involved in social activities to the highest extent, share the social work among the society, and engage in the production activities thereby contributing to the overall sustainability of the society. Society's natural resources, workforce, and the level of benefits attained thereof eventually increase the welfare of the society. Thus, the vocational training serves to meet the needs of the workforce, increase the efficiency and quality in production, and use the resources based upon effectiveness, efficiency, and rationalization priorities. In this perspective, a great economic value is offered through vocational training. In the context of national aspects and concern that are related with the needs of vocational training, it can be said that it increases the individual's production capacity and efficiency of the national workforce, and promotes the economic and social importance of the activity performed (Alkan et al, 1996).

In practice, vocational training can vary in terms of serving different goals, training period, level, and types. One of the major vocational training is what is called "non-formal vocational education and training" where it is conducted on a life-long basis including all the activities such as training, production, consulting, and implementation. This type of vocational training aims to help individuals develop their qualifications and themselves through offering short term and additional training programs. Especially, supportive extensive vocational training targets to provide current up-to-date information or to renew information to individuals who already have a certain level of expertise and prior qualification earned on this field. In this globe, the other aspect of these programs is to offer continuous development to individuals. In the implementation phase of these programs, several approaches can be initiated. Certificate programs that are offered in higher education institutions can be studied in this perspective.

In such consumer services namely legal services, accounting services, and healthcare services, the concept of life-long learning and continuing development of professional competence is crucial. Especially, in accounting services, international education standards are being implemented (IES). The scope and goal of this standard is to promote the concept of life-long learning to the accounting professionals. However, it should be cited that life-long learning responsibility depends upon the learner's involvement to the process. According to Framework for International Education Standards for Professional Accountants, it is stated that "Continuing professional development refers to learning and development that develops and maintains capabilities to enable professional accountants to perform their roles competently". Professional Associations that are motivated to offer benefits to their shareholders (employees, companies etc.) should promote the concept of life-long learning as well. There is a direct relationship between continuing development of professional competence and high service quality (in terms of outcome). The process of life-long learning process starts at early ages. Then the individual attends the education program to become qualified as a professional accountant followed by advancement in individual's career. The continuous education still continues as a life-long basis even though the individual has received his/her license to actively take part in the work force.

In the supportive vocational education marketing in the scope of education institutes, trust, service quality, satisfaction, and loyalty formation policies are important to analyze. In order to keep sustainability, education's scope, content, service provider, and physical environment are the main considerations to take into account. Provided that such initiatives are taken into account, repeated sales would occur in the long run. It should also be noted that education lasts a long time and in terms of strategy formation, the purpose of the education institute as an attempt to set its positioning among the customers is to be the first brand recalled when a learner searches for an education institute to meet his/her needs and wants.

2. Method

Research Design

As data collection tool, a questionnaire was made based on theoretical framework driven by Wong & Sohal (2006)'s study which was done in retail environment. Overall service quality was adopted from Dabholkar et al. (2000) study, "it has an excellent overall service"; "has a service of very high quality"; "provides a high standard of service", and "delivers superior service in every way".

Trust was measured with three items studied by Morgan and Hunt (1994): "the employees of this institution can be trusted at all times"; "the institution can be counted on to do what is right", and "the employees of the institution have high integrity".

Four items for learner's loyalty were adopted from the Reconfigured Behavioral Intentions. Battery (Parasuraman et al., 1994): "I say positive things about this course to other people"; "I recommend this course to someone who seeks my advice"; "I encourage friends and relatives to get this course", and "I consider this institution as my first choice in the next few years".

Different than Wong & Sohal (2006)'s study, satisfaction was measured with 3 items following Brady et. al.(2001)."I am satisfied with my decision", "I made a wise judgment to join to this course", "When I finish the course, I thought I did the right thing".

The questionnaire contained 19 items in which 14 items were assigned to 4 latent variables (customer loyalty, service quality, trust, satisfaction,) and 5 items to demographics variables. The questionnaire design included two parts. The first section consisted of 14 items measuring learner's loyalty, service quality, trust, satisfaction. Items that had a standardized factor loadings below the 0,3 was deleted and not included to the further analysis (Joreskog, 1993). Then the measurement structure was comprised of 12 items. All items in the questionnaire section 1 were measured by Likert's five-point scale on a 5-point Likert type scale ranging from disagree strongly (1) to agree strongly (5). The second part of the questionnaire asked participants to complete 5 demographic questions regarding gender, age, educational status, professional title and professional seniority.

Sample and Data Collection

184 questionnaires have been conducted to students who have attended the Public Oversight Board Education Program offered by Istanbul Commerce University's Lifelong Learning Center. The sample of the study was consisted of students who have attended the Public Oversight Board Education Program offered by Istanbul Commerce University's Lifelong Learning Center. Employing convenience sampling, a total of 248 students participated to study and questionnaires were mailed to 248 students. One month later a second mailing was sent out and the data collection completed during a two-month period. A total of 192 completed questionnaires were obtained-response rate of 87,5 percent. From the total sample collected 184 questionnaires were valid and used for the final analysis.

Description of the Sample

Of the 184 participants, (learner) 69,3% were female while 30,7% were male. Ages of the respondents were 31 age to 40 age (17,2%), 41 age to 50 age (36,5%),51 age to 60 age (36,1%), over 60 age (10,3%). 77,7% of respondents were college graduate, 22,3% were postgraduate. While 62,7% of professional names of the respondents were Certified Public Accountant (CPA),37,3% were Sworn in Certified Public Accountant (Sworn-in CPA). Finally, distributions of the professional seniorities were as follows: 15,9% is under 15 years, 30% is 15 to 20 years, 18,5% is 21 to 25 years, 15% is 26 to 30 years and 20,6% is over 30 years. Table 1 more detailed address the demographic characteristics of the sample.

Table 1.
Demographic Results

		Frequency	Percentage (%)
Gender	Female	128	69,30
	Male	56	30,70
Age	31 age to 40 age	32	17,20
	41 age to 50 age	67	36,50
	51 age to 60 age	66	36,10
	Over 60 age	19	10,30
Employment Status	College Graduate	143	77,70
	Postgraduate	41	22,30
Professional Title	Certified Public Accountant (CPA)	115	62,70
	Sworn in Certified Public Accountant (Sworn-in CPA)	69	37,30
Professional Seniority	Under 15 years	29	15,90
	15 to 20 years	56	30,00
	21 to 25 years	34	18,50
	26 to 30 years	28	15,00
	Over 30 years	37	20,60

Data Analysis

The statistical techniques which are SPSS 21.0 and AMOS 21.0 were used in data analysis. While SPSS 21.0 was used to compute reliability, normality and descriptive statistics, a structural equation modeling (SEM) program, AMOS 21.0 was used to perform first order confirmatory factor analysis (CFA) to verify the appropriate structural model. In data analysis were followed the two-step approach recommended by Anderson and Gerbing (1988) and the analysis was made from two sections. In the first section, a first order confirmatory factor analysis was performed to specify the appropriate structure between latent variables and observed indicators and to test the validity constructs. In the second section, the structural equation model was examined to explain the relationship among customer loyalty, service quality, trust, satisfaction and the hypotheses of the relationships between latent variables were tested.

3. Results

Structural Model

The structural model analyses the interrelationships between constructs and how they influence directly or indirectly other constructs in the model (Byrne 2001).

In this study, an attempt has been made to understand the factors that define learner's loyalty in the Vocational Education Institutes relationships among learner's loyalty, service quality, trust, satisfaction, is examined through structural equation model. Figure 1 illustrates conceptual framework of the study.

Figure 1.
Conceptual Framework of the Study
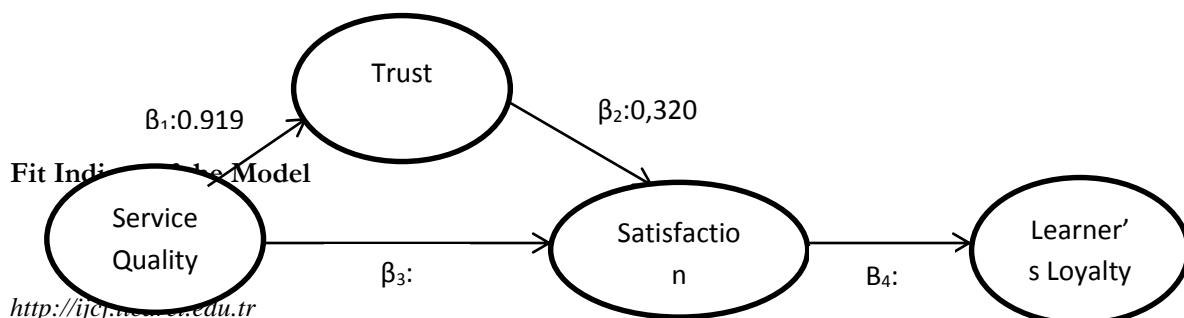
Hu and Bentler (1999) suggested the model fit criteria for both measurement and the structural model. Accepted model should have $(X^2)/df \leq 3$, Goodness of Fit (GFI) ≥ 0.90, Adjusted Goodness of Fit (AGFI) ≥ 0.80, Comparative Fit Index (CFI) ≥ 0.90, Root Mean square Residual (RMR)≤ 0.10, and Root Mean Square Error of Approximation (RMSEA)≤ 0.10.

Structural model to test the proposed model resulted in as indicated in table 2 the following fit statistics: X^2/df=2,695; GFI=0,953; AGFI=0,921; CFI=0,982, and SRMR=0,0226)

Table 2.

Results of Fit Indices of the Model

Model	X^2	df	X^2 / df	GFI	AGFI	CFI	SRMR
Measurement Model	123,978	46	2,695	,953	,921	,982	,0226
Structural Model	156,861	48	3,268	,940	,903	,975	,0269
Recommended Value	-	-	< 3.0 or 5.0	≥ 0,90	≥ 0,90	≥ 0,90	< 0,08

In assessing the structural model, all the fit measures indicated that most fit statistics met recommended values and the structural model was moderately acceptable.

Convergent and Discriminant Validity Measures

Convergent validity explains how well observed variables posited to a latent construct converges or shares a high proportion of variance. On the other hand, discriminant validity provides evidence that each construct can capture its own unique information not obtained from other constructs in the model. This means that each observed variable should be posited to one and only one construct, therefore any evidence of cross-loadings would be a violation of discriminant validity (Douglas, Mills & Phelan, 2010).

To determine convergent validity, Hair et al. (2010) recommends analyzing the factor loadings (path coefficients) and calculating the average variance extracted (AVE) and construct or composite reliability (CR). Fornell and Larcker (1981) suggest that AVE values be at least .500 while Fornell and Bookstein (1982) and Hair et al. (2010) state that CR values of at least .600 are acceptable.

Table 3 presents the convergent validity of all the constructs using composite reliability. All factor loadings in the measurement model were significant and ranged from .744 to .902 satisfying the convergent validity criteria. Composite reliability scores for each latent construct ranged from .852 to .900 whereas average variance extracted ranged from .657 to .770 as indicated in table 3.

Table 3.

Convergent Validity

Construct & Indicators	Factor Loadings	t-value	Composite Reliability	Average Variance Extracted
Service Quality			0,886	0,662
SQ1	0,885	19,014		
SQ2	0,866	18,552		
SQ3	0,744	18,863		
SQ4	0,749	λ set to 1		
Trust			0,900	0,751
TR1	0,902	λ set to 1		
TR2	0,893	27,321		
TR3	0,801	21,834		
Satisfaction			0,852	0,657
STF1	0,759	18,603		
STF2	0,847	19,736		
STF3	0,824	λ set to 1		
Loyalty			0,870	0,770
LY1	0,889	λ set to 1		
LY2	0,866	24,749		

Table 4 provides the correlations among latent variables of interest in the study and the correlations were specified as well.

Table 4.				
Correlation Among Latent Variables				
	1	**2**	**3**	**4**
SQ	1			
TRST	,821**	1		
SAT	,755**	,768**	1	
LOY	,837**	,804**	,759**	1

Note:**. Correlation is significant at the 0.01 level (2-tailed).

The intercorrelation between Trust and Service Quality (r=,821),Satisfaction and Service Quality (r=,755), Satisfaction and Trust (r=,768), Learner's loyalty and Service Quality (r=,837, Learner's loyalty and Trust (r=,804) and Learner's loyalty and Satisfaction (r=,759) were significant and all positive as shown under the table 2 on note.

Research Hypotheses Testing and Path Coefficients

Four hypotheses were proposed to assess the statistical significance of the proposed relationships among customer loyalty, service quality, trust, satisfaction and p-value was examined. The research hypotheses are:

H_1: Service Quality has a significance positive direct effect on Trust.

H_2: Trust has a significance positive direct effect on Satisfaction.

H_3: Service Quality has a significance positive direct effect on Satisfaction.

H_4: Satisfaction has a significance positive direct effect on Learner's loyalty.

The results of the hypothesis testing and standardized path coefficients for the model were explained below.

The results indicated that the first hypothesis was confirmed and service quality was found to influence trust positively were significant at $p<0,001$ level (H_1: $\beta_1=0,919$, $p<0.001$). Also in path coefficient was extracted that there was a positive and strong causation between service quality and trust.

Hypothesis two was confirmed and trust also had a positive direct influence on satisfaction (H_2: $\beta_2=0,320$, $p<0.001$).There was a positive but weak causation between trust and satisfaction.

Hypothesis three was supported in a same way. Service quality had a positive influence on satisfaction (H_3: $\beta_3=0,668$, $p<0.001$). There was a positive and moderate causation between service quality and satisfaction.

Fourth hypothesis was confirmed and satisfaction had a significance positive effect on learner's loyalty (H$_4$: β$_4$=0,972, p<0.001). There was a positive and quite strong causation between satisfaction and learner's loyalty.

4. Conclusion:

As competition has been rising, the concept of marketing has changed based upon the changing needs and wants of the customers. Instead of high profitability, companies nowadays prefer loyal customers and loyalty has been the main focus of conducting business in the era of competition. Companies, therefore, adapt customer-oriented strategies. The high level of customer satisfaction eventually leads to the development of loyalty programs. Customers either complain or give up using the brand in the case that they are not fully satisfied. Changing needs of the consumers have to be identified and met in the Education sector within the context of services sector.

As depicted throughout the paper, a special interest has been devoted to the concept of life-long learning in the context of education institutes. In this globe, continuing professional development is directly related with the emergence of life-learning concept. Besides, learner's loyalty is another issue that has been researched throughout this paper. Learner's loyalty, as stated, depends upon trust to the Institute, satisfaction, and overall service quality. Overall, such relations in comparison to life-long learning and continuing professional development have been studied.

Based on the research outcome and analysis, it can be claimed that quality of the service (and the quality perception) received by the individual as a result of the education program is a major indicator of how a loyalty can be enhanced in education institutes. Besides, trust to the Education Institute is the primary aspect of how trust can be structured in these institutes. Education institutes who deal solely with the issue of trust, satisfaction, and learner's loyalty can have the potential to keep their learners on hand on a life-long basis thereby earning their loyalty to the fullest extent.

It is believed that this study would be a good reference to future studies in the scope of extending the applicable information to education institutes in establishing their loyalty formation policies. In the case that education institution image and lifestyle factors are being included in the model for further studies, different findings can possibly be reached.

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