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THE MEDIATION ROLE OF CUSTOMER SATISFACTION ON SERVICE QUALITY AND CORPORATE IMAGE - AN EVIDENCE FROM LEBANESE PRIVATE UNIVERSITIES

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THE MEDIATION ROLE OF CUSTOMER SATISFACTION ON SERVICE QUALITY AND CORPORATE IMAGE - AN EVIDENCE FROM LEBANESE PRIVATE UNIVERSITIES

Abstract

The higher education sector in Lebanon faces a number of challenges due to its rapid expansion, which has had many implications for the development of the sector. However, each university competes for a limited resources. Thus, promoting the image of the university becomes an essential factor for survival. The purpose of this study is to explore the relationship between service quality and corporate image with customer satisfaction as an intermediary in private universities in Lebanon. A survey of 378 respondents was conducted. A judgmental sample of university students was selected. The framework was tested by structural equation modeling (SEM). The results show that the service quality influences both customer satisfaction and the image of the company. In addition, customer satisfaction is partially involved in the relationship between service quality and corporate image . This study suggested that marketers should focus on service quality and customer satisfaction to strengthen the corporate image when adopting their strategies at private universities in Lebanon.

Keywords

service quality; customer satisfaction; corporate image; private universities; Lebanon

1. INTRODUCTION

Managing effective marketing tools like corporate image has been recognized as a source for organizations to become successful (Yaneva, 2016; Heinberg et al., 2018). Creating a recognizable image became one of the important priorities for universities (Aziz, 2018; Hossain, 2020).

Students, as customers, are at the center of the institution. Moreover, their satisfaction is indicative of the institution's failure or success (Abasimi & Xiaosong, 2016; Austin & Pervaiz, 2017). It is not uncommon for universities to view reputation as a measure of student choice (Chen & Zimitat, 2006). A study in Taiwan indicated that society generally focuses more on the reputation of universities (Murphy, 1997). Previously, there was less competition among Taiwanese academic universities. However, every university should compete for the limited resources according to the growth in the market. Thus, maintaining and promoting the image of universities is becoming a primary factor for survival (Cheng & Tam, 1997).

Numerous studies have confirmed that service quality was a source of customer satisfaction (Mackony & Spreng, 1996; Naik et al., 2010). Previous researchers have revealed that positive feedback from students about the service quality can help recruit new students. However, the students' complete understanding of the service quality in universities needs to be examined empirically (Narang, 2012; Sultan & Wong, 2013). The higher educational universities ensure that students are perceiving quality service delivery which are totally managed (Mukhtar & Usman, 2016). Additionally, Perez & Torres (2017) highlighted that corporate image is especially important for different organizations to build their sustainability in short and long run in the market and be more competitive. Thus, increasing demand for their services and products. Therefore, corporate image and service quality are crucial factors for determining satisfaction (Bapat, 2017).

In addition, the public does not seem to understand the role of universities as they are a means of making money. In view of this, universities are perceived negatively, and this perception has influenced their image. Thus, universities are striving to create a distinguished image to survive in the market, as it increases value by creating positive perception of being better than others (Desbordes, 2011).

The higher education sector in Lebanon faces many challenges because of the fast growth experienced in the 1990s, which had several ramifications on this sector development. As well as increased pressure on this sector, which is facing intense regional, national, and international competition. This has contributed to universities to reconsider their survival strategies. Universities are turning to service quality, and customer satisfaction in the face of competition as a source of competitive advantage, which can influence corporate image if professionally managed.

The aim of this study is to examine the mediating role of customer satisfaction in the relationship between service quality and corporate image and to confirm it in the Lebanese education sector.

The contribution of this paper is in the developing of conceptual framework that integrates service quality (SQ), customer satisfaction (CS) and corporate image (CI). Previous literature has been reviewed on those three constructs and layout the predicted relationships among them in a research model. This research is applied on Lebanese private universities students. As well as examining the role of customer satisfaction as a mediator between service quality and corporate image.

2. LITERATURE REVIEW

2.1 Service Quality

The most popular definition between the several definitions of service quality is "the degree and direction of difference between customer perception and service expectation" (Parasuraman et al., 1985). Disconfirmation over the service quality received a lot of critiques since its inception. Generally, scientists are still uncertain about whether customers consider service quality in terms of expectation and perception (Wilkins et al., 2009).

Several researchers in the higher educational sector examined the relationship between service quality and customer satisfaction and found positive relationship (Brown & Mazzarol, 2009; Dericks et al., 2019;). The creation of overall image of corporations has been stated by numerous researchers which is the outcome of perceived service quality derived from the experience (Lai et al., 2009; LeBlanc & Nguyen, 1998).

A study has been conducted to investigate the relationship between service quality and corporate image in a restaurant industry, the outcome revealed that service quality is explainable and crucial factor over corporate image (Wu, 2013). Other researchers also pointed out the significant relationship between perceived service quality and corporate image in several industries like David & Geraldine (2013), Hapsari et al. (2017), Kandampully et al. (2011), Liat et al. (2014), LeBlanc & Nguyen (2001), and Wu et al. (2015). As well as, Gronroos (1983) stated the importance of service quality over the corporate image.

Previous studies in the hospitality industry, stated that perceived service quality can build awareness in the consumers mind along with corporate image (Kandampully & Suhartanto, 2000; Nguyen, 2006a).

2.2 Customer Satisfaction

In the consumer behavior literature, customer satisfaction is crucial factor which bridges the purchase-consume process to post purchase reflection (Jang & Hang, 2009). In line of the development of service provider strategy to meet competitor challenge, several definitions of customer satisfactions have emerged. In the literature, the most popular definition explained by expectancy-disconfirmation theory, (McQuitty et al., 2000) where, "satisfaction level is recognized as a result of the difference between the perceived and expected performance" (Oliver, 1999).

The level of satisfaction and dissatisfaction which is experienced by customers is derived by the level of satisfaction pertaining to a service-product (Song et al., 2011). In the academic field, the determinants of customer satisfaction has been investigated, results showed that the most important factor for students to be satisfied is the perceived quality of services (Abbasi et al., 2010). Previous studies showed a direct relationship between customer satisfaction and corporate image, because reputable image can attract new and repeat customer, as well as, its more recognized in the market like Hu & Kandampully (2007), Lindestad & Palmerk (1994), and Wilkins et al. (2009).

2.3 Corporate Image

Corporate image deals with the gaps in the integrated model between service quality and customer satisfaction, where it plays a crucial role in the marketing literature. Corporate image evaluation comprises of customer's perception, corporate reputation, quality, and kind of the services provided by corporations. According to Newsom (2012) image is the impression of people, company or institution owned by an individual or the public at large. Researchers explained that that corporate image emerges from the consumers net consumption based on their experiences (Aydin & Ozer, 2005).

In numerous studies from several industries stated that, corporate image effects customer satisfaction, perceived value, and brand loyalty. Some of the studies stated that corporate image was founded by service quality (Gronroos, 1984). It has been stated that corporate image is an outcome of service quality, customer satisfaction and perceived value (LeBlanc & Nguyen, 1998). According to the literature, the effect of customer satisfaction on corporate image reveals the level of consumption-consistency of experiences which enhances corporate image over the time (Johnson et al., 2001).

2.4 Mediating Role of Customer Satisfaction

In the management literature, it has been stated that customers satisfaction emerges from various variables like, service multicorporate image, customer emotion, customer mood, and social interactions (Neves & Vinagre, 2008; Oliver & Rust, 1994). The European customer satisfaction index model represented "image". Theoretically, corporate image has significant relationship on customer satisfaction. Although, little attention has been received from academics on the effect of customer satisfaction on corporate image.

According to the literature, a positive relationship was found between corporate image and customer satisfaction in the telecommunication industry (Abdullah & Ismail, 2001).

However, Gronroos (1984), stated about the importance of corporate image which is affected by the perceived quality of service for customers which affects their expectations. Therefore, the evaluation of the service received affects the corporate image where the most

recognizable and favorable image encourage customers to choose the corporation which keep and increase their satisfaction (Gronroos, 1988).

Furthermore, corporate image emerges from experience, where service quality is an extension of this experience (Lai et al., 2009). So, service quality influences student perception for corporate image. According to the literature, the relationship between corporate image and customer satisfaction is not consensual. Some studies stated that customer satisfaction influences corporate image (Helgesen & Nettet, 2007). While others confirmed the opposite (LeBlanc & Nguyen, 1998).

Additionally, most of the studies revealed that corporate image influences and has a power on customer satisfaction. The previous discussions on the relationship between the chain of service quality and corporate image and customer satisfaction proposes that student satisfaction plays a major role as a mediator between service quality and corporate image in the educational field. The debates shown that service quality influences customer satisfaction and as well on corporate image. Thus, this ensures the role of satisfaction as a mediator between service quality and corporate image; This is confirmed by Bolton & Drew (1991), Fornell (1992), and Linda & Oliver (1981). The constructs for the current study are illustrated in Fig.1

According to the lack of empirical studies on the relationship between customer satisfaction and corporate image, this study, proposed hypotheses to contribute across the development of knowledge in the academic field. Therefore, the following hypotheses are formulated:

- H1: Service quality significantly influences customer satisfaction at the Lebanese private universities.
- H2: Service quality significantly influences corporate image at the Lebanese private universities.
- H3: Customer satisfaction significantly influences corporate image at the Lebanese private universities.
- H4: Customer satisfaction mediates the Influence of service quality on corporate image at the Lebanese private universities.

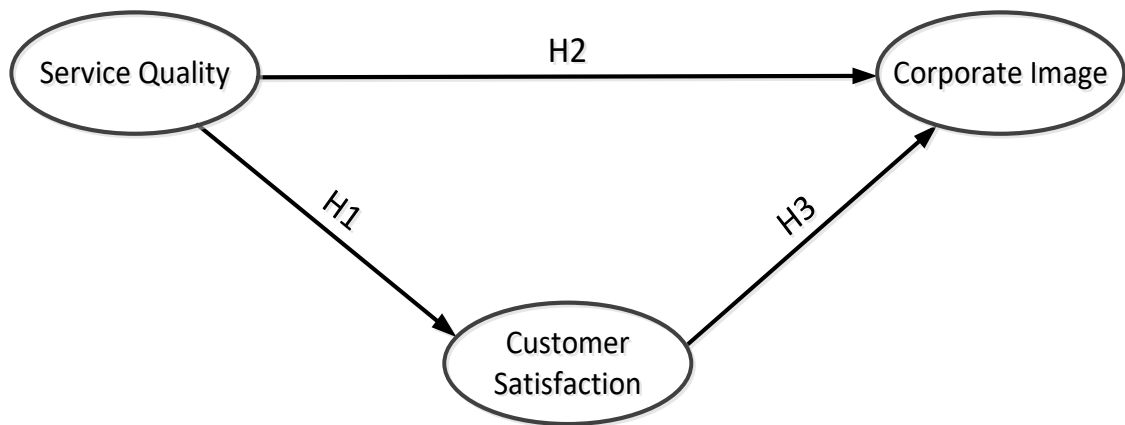


Fig.1: Conceptual Framework.

3. METHODS

3.1 Population

Population is defined as “an aggregate or totality of all the objects, subjects or members that conform to a set of specifications” Hungler & Polit (1999:37). In the academic year 2019-2020, the student body was formed of around 222,064 students. According to the ministry of education and higher education in Lebanon, there are 36 private universities. In this study, the population is the students at the Lebanese private universities which comprises 138,060 (CRDP, 2020).

3.2 Sampling and Data Collection

Data collection includes several private Lebanese universities. Most of the data was collected among the top 10 universities in Lebanon. A survey was conducted on senior students from undergraduate and post graduate studies from several specialisations through a judgmental sampling method. This sample type was chosen because its “a technique in which researcher relies on his or her own judgment when choosing members of population to participate in the study” (Black, 2010). Moreover, 378 questionnaires out of 400 were returned, and they were considered suitable for the study with response rate 95%. According to the demographic characteristics, female and male are 56% and 44%, respectively.

3.3 Measures

The survey item scales were prepared to measure the following variables: service quality, customer satisfaction, and corporate image on a five-point Likert scale. Service quality, the 22 SERVPERF item instruments were adopted from Ngo and Nguyen (2016) and has shown previously good reliability in the educational sector. Student satisfaction and corporate image adopted from Alves & Raposo (2010) were measured by 6 and 5 items, respectively.

4. RESULTS

In this section, several tools were utilized for the verification of the data; Exploratory factor analysis followed by confirmatory factor analysis and path analysis were adopted for the result verification. Lastly the test for the mediator effect was performed through AMOS 26. In the below sections, results are shown.

4.1 Reliability Measure

In the reliability assessment variables and scale items should be tested (Fornell & Larcker, 1981). Cronbach α was adopted to measure the internal consistency of the item scales (Cronbach, 1951). In Table 1 the results show that α for the model variables exceed 0.7. Therefore, the internal consistency for the measurement items of each variable is met (Nunnally, 1978). The overall reliability of the values was 0.938. Therefore, internal consistency and reliability for coefficients of the scale items for all variables were suitable for the study.

4.2 Exploratory Factor Analysis

In this section, Bartlett test of sphericity & Kaiser-Meyer-Olkin (KMO) were applied to examine the data relevance for factor analysis. The value obtained of KMO is $0.921 > 0.60$ (Kaiser & Rice, 1974). While Bartlett test results obtained is $0.000 < 0.05$, which indicates significant result and a relationship between the components of the study. A close relationship between the scale items of the variables has been shown through Varimax rotation and principal component analysis. According to the eigenvalue ≥ 1 , 33 items were extracted from the components of the study, 71% of variance in factors has been explained. The Communalities were higher than 0.50, showing appropriateness of data for the factor analysis (Stewart, 1981).

The basic structure of the scale items and components is confirmed using an exploratory factor analysis. Mean, standard deviation and squared multiple correlation are shown in Table 1.

Table 1: Results of factor extraction

	Item	Mean	SD	Factor loading λ	SMC	KMO	α
Service Quality	SQ1	3.70	0.721	0.982	0.964	0.911	0.946
	SQ2	3.62	0.727	0.982	0.964		
	SQ3	3.87	0.739	0.959	0.919		
	SQ4	3.72	0.635	0.987	0.974		
	SQ5	3.65	0.725	0.993	0.985		
	SQ6	3.55	0.858	0.989	0.978		
	SQ7	3.64	0.701	0.961	0.924		
	SQ8	3.59	0.804	0.995	0.99		

	SQ9	3.80	0.701	0.988	0.977		
	SQ10	3.78	0.826	0.992	0.985		
	SQ11	3.72	0.764	0.993	0.986		
	SQ12	3.66	0.738	0.991	0.982		
	SQ13	3.63	0.804	0.991	0.983		
	SQ14	3.67	0.829	0.990	0.981		
	SQ15	3.65	0.850	0.993	0.986		
	SQ16	3.65	0.841	0.981	0.963		
	SQ17	3.53	0.831	0.989	0.978		
	SQ18	3.38	0.854	0.985	0.971		
	SQ19	3.50	0.818	0.988	0.976		
	SQ20	3.44	0.858	0.989	0.978		
	SQ21	3.47	0.853	0.99	0.981		
	SQ22	3.25	0.982	0.99	0.98		
Customer satisfaction	CS1	3.65	0.892	0.983	0.966	0.896	0.957
	CS2	3.71	0.916	0.996	0.992		
	CS3	3.63	0.859	0.995	0.990		
	CS4	3.54	0.955	0.993	0.987		
	CS5	3.64	0.901	0.995	0.990		
	CS6	3.64	0.943	0.995	0.991		
Corporate image	CI1	3.79	0.855	0.882	0.777	0.863	0.912
	CI2	3.72	0.886	0.912	0.832		
	CI3	3.91	0.904	0.778	0.606		
	CI4	3.77	0.915	0.867	0.751		
	CI5	3.8	0.867	0.863	0.745		
Note: According to the cut off criterion for the acceptable limits, Factor loadings >0.5 (Hair et al., 1995); squared multiple correlation(SMC) >0.30 (Bagozzi & Yi, 1988); Cronbach's α >0.70 (Nunnally, 1978); Kaiser-Meyer-Olkin(KMO) >0.60 (Kim & Mueller, 1978).							

4.3 Confirmatory Factor Analysis

The confirmatory factor analysis was carried out through Amos 26 for evaluating the model validation on the three components of this study Service quality, customer satisfaction, and corporate image.

4.3.1 Validity measure

The convergent validity is the measurement of the evaluation of a variable through various methods, which has equivalent outcome (Bennett-Martinez & John, 2000). There are three techniques for the confirmation outcome of convergent validity, SMC value should be higher than 0.30; communalities must exceed 0.50; average variance extracted (AVE) explained should be greater than 0.50; and composite reliability should exceed 0.70 (Hair et al., 1998).

In Table 1, the loading factor of each item scale is statistically significant because it exceeds 0.50. The CR and AVE were higher than the acceptable limits, indicating confirmation for convergent validity. The CR values ranged from 0.934 to 0.998, and AVE ranged from 0.742 to 0.986 as shown in Table 2.

4.3.2 Discriminant validity

According to strong discriminant validity, it states that there should be no correlation coefficient between the various components in the research model. In this study, the method utilized for confirming the discriminant validity is, the values of the diagonal should be

higher than non-diagonal (Ankit & Tiwari, 2011) However, comparing correlations between the components with average variance extracted square root is another method for verifying discriminant validity (Fornell & Larcker, 1981). The outcome of this study, the values revealed the verification of discriminant validity, diagonal values are higher than non-diagonals, the average variance extracted for all the components of the model are greater than the maximum variance extracted., results are shown in Table 2.

Table 2: Discriminant validity measurement index

	CR	AVE	MSV	ASV	SQ	CS	CI
Service quality	0.998	0.972	0.069	0.062	0.985		
Customer satisfaction	0.998	0.986	0.481	0.275	0.739**	0.992	
Corporate image	0.934	0.742	0.481	0.268	0.752**	0.860**	0.861**

Note: Convergent validity, CR >0.7 (Hair et al., 2012); AVE > 0.5 (Hair et al., 2012); for the discriminant validity: MSV < AVE (Fornell & Larcker, 1981); the diagonal values > non-diagonal values (Ankit & Tiwari, 2011); **p<0.01.

4.4 Overall Fit for the Model

Table 3 reveals outcomes of model fit. CFA results for the whole model revealed that it well fitted the data, with CMIN = 2.618, Degree of freedom = 2.000, CMIN/ df= 1. 309. Results indicated that CFI value =1.000, which is higher than the threshold limit of 0.95, showing the model is well fitted (Ho, 2006; Hair et al., 2006). RMSEA= 0.029 <0.06. Additionally, P-Close=0.55 >0.05. The findings reveal excellent fit for the structural model (Bentler & Hu, 1999).

Table 3: Model fit indices

Model fit	Model statistics	Threshold	Interpretation
CMIN	2.618	--	--
DF	2.000	--	--
CMIN/DF	1.309	Between 1 and 3	Excellent
CFI	1.000	>0.95	Excellent
RMSEA	0.029	<0.06	Excellent
P-close	0.55	>0.05	Excellent

4.5 Path Coefficient for Structural Model

The model of this study was executed under Amos 26, the findings revealed that all the hypotheses are supported. As resulted, service quality showed a significant relationship with customer satisfaction and corporate image. As well as customer satisfaction showed a significant relationship with corporate image (H3: $\beta = 0.700$; P =0.000) as shown in Table 4 and Fig. 2

Table 4: Results

Hypothesis relationship	Estimate	S.E.	C.R.	P	Result
H1: CS ← SQ	0.264	0.017	6.310	***	supported
H2: CI ← SQ	0.237	0.016	4.883	***	supported
H3: CI ← CS	0.700	0.029	18.607	***	supported

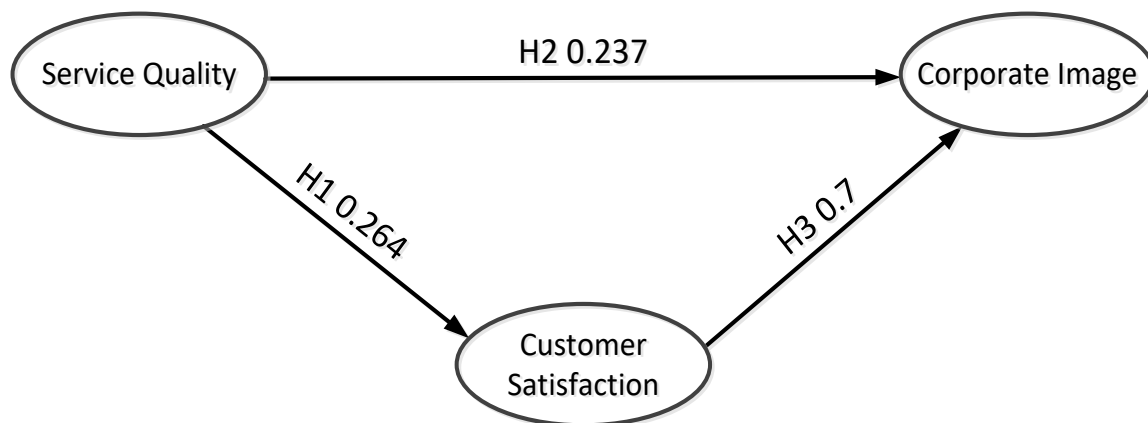


Fig. 2: Results

4.6 Test of the Mediation Effect

Regarding the mediation test, its related to the method of direct against indirect effects. The total effect equals to the summation of direct and indirect effects. In Table 5, results are revealed for direct, indirect, and total effects with variance accounted for value (VAF). The rule of thumb has three categorizations. First, if $VAF > 80\%$ results in full mediation. Second, if $20\% \leq VAF \leq 80\%$ results in partial mediation. Lastly, if $VAF < 20\%$ indicates no mediation (Hair et al., 2016). Results revealed that, Customer satisfaction mediates partially the relationship between service quality and corporate image ($\beta=0.42$, $VAF=43\%$).

Table 5: Test of the mediation effect

Variables	Direct Effect	Indirect Effect	Total Effect	VAF
SQ → CS → CI	0.237	0.182	0.42	43%

source: Author's calculation

5. CONCLUSION

This study analyzes the relationship between service quality and corporate image along with customer satisfaction as a mediator at the Lebanese private universities. According to the literature, there is a limited focus on this topic from scientists. The outcome of this study revealed that, the role of customer satisfaction mediates partially the path from service quality to corporate image. In other words, service quality and corporate image has a significant relationship even after the role of satisfaction as a mediator.

This study has theoretical and managerial implications, for the theoretical implications, this study reveals new view by building a model on the mediation role of customer satisfaction between service quality and corporate image at the Lebanese private universities.

According to the theoretical implications, First, the current study reveals new view, by building a model on service quality and corporate image by considering customer satisfaction as a mediator at the Lebanese private universities. The literature supported the relationship between service quality and corporate image, but no study has tested the mediation role of satisfaction at Lebanese private universities, where it needs separate attention. Second, the major significance of this study is the confirmation of the mediating influence of customer satisfaction, i.e., customer satisfaction partially mediates the influence of service quality on corporate image. Finally, this study contributes by predicting corporate image with the help of customer satisfaction at the Lebanese private universities. The conclusion of the current study confirms to the findings of Hui et al. (2011), Kandampully & Suhartanto (2003), and Wilkins et al. (2009).

Regarding the managerial implications, as globalized world is changing extremely fast, Lebanese universities are forced to realign their strategies for competitiveness to maintain high brand loyalty, due to the increased competition between the Lebanese universities private sector, some of them can force to shut down their business. Thus, satisfied customers and favorable corporate image will result in sustaining or quitting from the market. As a result, marketers increase their profits by

implementing effective systems to monitor customer needs for improving service quality, which will influence customer satisfaction and promote corporate image.

6. LIMITATION AND FUTURE RESEARCH

This research has some limitations. Similarly, some aspects of this research can still be explored. First, various determinants on customer satisfaction and corporate image were neglected due to the scope of the study. In further research, it is recommended to include more factors in the model to capture more determinants for customer satisfaction and corporate image in the educational sector.

Second, cross sectional design was utilized to collect the required data. Causality between variables should be evaluated in future research by longitudinal approach which may result in more accurate findings.

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