

The mediating effect of customer satisfaction in relationship with service quality, corporate social responsibility, perceived quality and brand loyalty

Lama Khawaja^{a*}, AlaaEldin Abbass Ali^b and Nehale Mostapha^c

^aPhD student-Business Administration department -Beirut Arab University, Lebanon

^bAssociate Professor, Faculty of Business Administration, Beirut Arab University, Lebanon

^cDean, Faculty of Business Administration, Beirut Arab University, Lebanon

CHRONICLE

Article history:

Received: July 10, 2020

Received in revised format:

October 12 2020

Accepted: October 24, 2020

Available online:

October 24, 2020

Keywords:

Service quality

Customer perceived value

Corporate social responsibility

Brand loyalty

Private universities

ABSTRACT

This paper aims to examine empirically the mediation role of customer satisfaction between service quality, customer perceived value, corporate social responsibility, and brand loyalty at Lebanese private universities. A survey was administered with 378 respondents. A judgmental sample of university students were selected. The framework was tested through structural equation modeling (SEM). The findings indicate that service quality and perceived value influence customer satisfaction while satisfaction fully mediates the relationship between perceived value and brand loyalty. Additionally, corporate social responsibility showed insignificant relationship with customer satisfaction and brand loyalty. This study proposed that marketers should focus on service quality, customer perceived value and customer satisfaction for increasing brand loyalty in adopting their strategies at Lebanese private universities.

© 2021 by the authors; licensee Growing Science, Canada

1. Introduction

Nowadays, to compete in the highly dynamic and complex environment conditions, corporations need reliable returns on their loyalty. Subsequently, brand loyalty is considered as an essential for corporation's manageability (Chaudhuri & Holbrook, 2001). Given that loyalty to the university is driven by the general degree of customer satisfaction (Brown & Mazzarol, 2009) it is imperative to recognize the consequences and their variable influence on satisfaction. Specialists embraced an entrenched expectation-confirmation paradigm, utilized broadly in the service quality literature. Students ability to keep up a relationship with their university is dependent upon their view of the advantages of fulfilment and high relationship quality that give a consistent progression of significant worth (Parasuraman et al., 1993). According to previous studies, service quality can be viewed as a direct factor that impact satisfaction and loyalty (Brady et al., 2002; Chu et al., 2012). On the off chances that these relationships are validated, administrators can comprehend the wellsprings of both satisfaction and loyalty more obviously to give better support to customers and improve the corporation profitability. Until this point, corporate social responsibility (CSR) has fundamentally been treated as a corporate issue. Most of the research regarding this matter takes a management viewpoint. It argues how enterprises will best react to specific requests of generally external partners, which corporate social responsibility activities improve organization loyalty, and what spurs them to get occupied with CSR (Basu, 2008). However, there are some unexplored inquiries in previous studies. To start with, there is an absence of exploration on illustrating the unpredictable influence of CSR on brand loyalty. For instance, Werther and Chandler (2005) found that CSR had a direct influence on brand loyalty. While Salmons' et al. (2005) stated that there is no direct relationship between social responsibility and brand loyalty towards an organization. In consumer behaviour literature, the role of CSR was unpredictable than previously conceptualized direct relationship (Klein & Dawar, 2004). Plus, CSR has variety of measurements, it is essential to analyse each measure of CSR to know how it is really seen by consumers (Maignan & Ferrell, 2001). Customer

* Corresponding author. Tel.: +32470856201

E-mail address: lama.khawaja.s@gmail.com (L. Khawaja)

satisfaction has been utilized in the past as a mediator between social affiliations and different types of behavioural results like loyalty and positive word of mouth (García de los Salmones et al., 2005; Bartikowski & Walsh, 2014).

Previous studies stated that perceived value influences brand loyalty and confirmed the relationship between perceived value and satisfaction (Lin & Wang, 2006; Gronroos, 2000). Customer perceived value and brand loyalty programs bear significant function to win the opposition in business; so, we have to make sense of how far customer perceived value and loyalty program can satisfy customers and make them remain loyal. The previous researches on the higher education portrays students as service customers (Díaz-Méndez & Gummesson 2012). The endeavor by the government to improve the nature of advanced education through the consolation of market powers depends on a supposition that students are educated customers who settle on balanced decisions of advanced education courses and foundations (Binsardi & Ekwulugo, 2003). Customers are willing to pay extra money for their preferable brand where this cost is partially supported by brand loyalty.

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, which increased pressure on this sector and is facing intense regional, national, and international competition. This has contributed to universities to reconsider their survival strategies. Universities are turning to service quality, corporate social responsibility, and customer perceived value in the face of competition as a source of competitive advantage, which can affect brand loyalty if totally managed.

This purpose of this study is to contribute to the development of a conceptual framework that integrate service quality (SQ), corporate social responsibility (CSR), customer perceived value (CPV), customer satisfaction (CS) and brand loyalty (BL). Previous literature has been reviewed on those five variables, and layout the predicted relationships among them in a research model. This research is applied on Lebanese private universities student.

2. Conceptual framework and research hypotheses

2.1 Conceptual framework

This paper aims to examine customer satisfaction mediation role among service quality, perceived value, corporate social responsibility and brand loyalty and to confirm them in the Lebanese education sector. The different factors considered in this study are shown in Fig. 1.

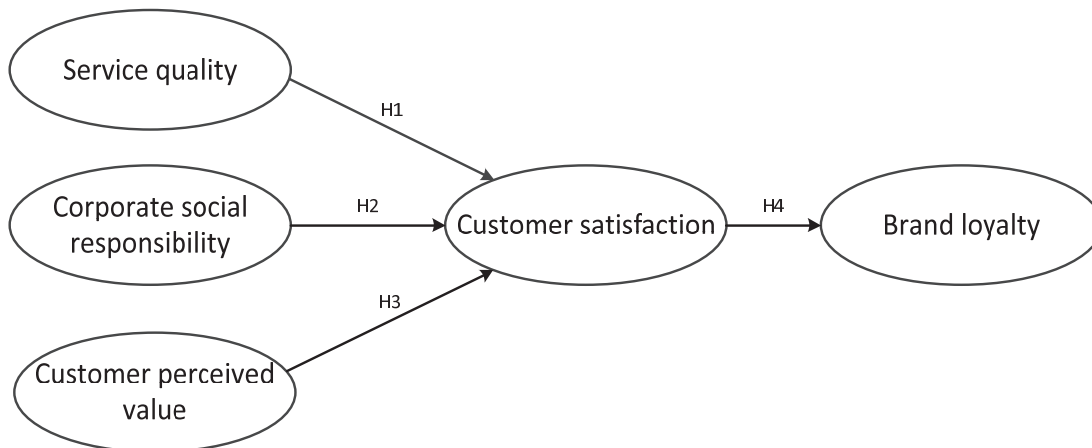


Fig. 1. Conceptual Framework

2.2 Lebanese private universities

Higher education in Lebanon is the most well-known in the locale and returns to 1866, when the American University of Beirut was established under the name of the Syrian Evangelical College, at that point continued in 1875 by the University of Saint Joseph, next by the Lebanese American University in 1947, followed by the Beirut Arab University in 1960. Most of the 36 universities in Lebanon were initially established in the late 1990s, when the private sector expanded rapidly. Lebanon struggled between 1975 and 1990 because of the civil war, damagingly affected the higher education sector (Al-Soufi, 2010). In the academic year 2018-2019, the number of students was around 190,157 (CRDP, 2018). The majors of study offered by Lebanese universities are various like business administration, law representing around 26.2% followed by students majoring in literature and arts with 19.3%.

2.3 Hypothesis development

2.3.1 Service Quality and customer satisfaction

Service quality is characterized as “a form associated with attitude related but not equivalent to satisfaction, which results from comparison of expectation- perceptions with loyalty” (Parasuraman et al., 1988: 15). SERVQUAL is the most popular service quality model (Parasuraman et al., 1988) implemented in quality assessment exercises in higher education (Galiva & Galiva, 2016). Empirical findings confirm that service quality is essential for the customer Satisfaction (Brady et al., 2002; Cronin et al., 2000; Wu, 2014). In the context of higher education, several studies have examined the relationship between service quality and student satisfaction and have found confirmation for this (Brown & Mazzarol, 2009; Derricks et al., 2019).

Selvaraj (2013) stated that there is a correlation among service quality, customer satisfaction, and brand loyalty. According to Shpëtim (2012), service quality has a positive influence on brand loyalty. This ensures that high levels of brand loyalty are determined by the best service providers. Additionally, it was found that service quality is a consequence for customer satisfaction and they share a positive and direct relationship with satisfaction (Darsono & Junaidi, 2006). Zeithaml (2000) stated that a high-quality awareness brand can lead for higher satisfaction. Therefore, the following hypothesis is proposed:

H₁: Service quality significantly influences customer satisfaction at the Lebanese private universities.

2.3.2 Corporate Social responsibility and customer Satisfaction

Defining CSR is not easy, for example, Matten and Moon (2008) showed that there was a considerable literature on CSR and related concepts, but it is still difficult to define CSR accurately. However, the main message of CSR is that it most often reflects the social impact and reaction of a successful business. West et al. (2010: 454) state, “CSR is the actions of this company to behave in a socially responsible manner to enhance and protect the various stakeholders that have an interest in the company, the community in which it works, the society and environment which surrounds it.” The university sector considers CSR as a requirement. The university provides long-lasting services to students, with sophisticated relationships to multiple parties such as instructors, parents, industries, government, alumni, and professional institutes (Moogan, 2011).

As a result, the concept of CSR involving all stakeholders has a common meaning for the responsibility of companies and universities. Several researchers reported that CSR directly influences customer satisfaction (Rivera et al., 2016; Saeidi et al., 2015). Bigné et al. (2011) stated that CSR influences customer satisfaction. Conceptualized satisfaction has two-dimensional construct which are cognitive and emotional dimensions. Loyalty is one of the marketing variables known as direct customer feedback that comes from a CSR perspective (Mandhachitara & Poolthong, 2011). Du et al. (2010) suggested that CSR operations with a customer participation could be a way to gain new brand loyalty that could eliminate the previous loyalty of a well-known brand in the field. The literature finds that CSR contributes to social satisfaction and consumers' sensation of well-being and that consumers reward this benefit in the market (Luo & Bhattacharya, 2006). Bhattacharya and Sen (2004) found out that when customers experience a relationship in social actions engaged in a brand, they will satisfy their desires through purchase behavior. Thus, CSR is a source of satisfaction. Therefore, the following hypothesis is proposed:

H₂: Corporate social responsibility significantly influences customer satisfaction at the Lebanese private universities.

2.3.3 Customer perceived value and customer Satisfaction

The perceived value can be defined as the total value given less than the total cost to the customer (Oliver, 1999; Day & Crask, 2000; Gronos, 2000). Zeithaml (1988) describes value as “It is based on the perception of what is given and received as a consumer's overall assessment of the usefulness of the product”. Literatures finds that perceived value could influence customers satisfaction (Lin & Wang, 2006; Wang & Yang 2004; Tung, 2004). In addition, perceived value also affects brand loyalty (Lin et al., 2006; Gronroos, 2000; Eggert & Ulaga, 2002; Petrick, 2002). Since customers can create perceptions or images of a service or product in their minds, the perceived value of what is offered can affect their satisfaction with that service or product (Cronin et al., 2000; Hu et al., 2009; Pirzad & Karmi, 2015; Tam, 2000). If customers are satisfied with their product brands, the value of their products will increase. Therefore, the following hypothesis is proposed:

H₃: Customer perceived value significantly influences customer satisfaction at the Lebanese private universities.

2.3.4 Customer satisfaction and brand loyalty

Consumer satisfaction is characterized from several perspectives (Dimitrides, 2006). In the literature, the most commonly known definition of customer satisfaction is the result of the difference between perceived and expected outcomes which is explained by the expectation disconfirmation theory (McQuitty et al., 2000; Oliver, 1999). The measure of overall satisfaction is utilized in this study, because it is an excellent indicator of future loyalty (Auh et al., 2003). In the consumer behavior literature, loyalty is a major issue, where its explained as a measure of business performance that affects financial performance (Khan, 2013). In general, there are two schools that measure brand loyalty: attitude loyalty and behavioral loyalty. Attitude loyalty is the positive attitude and psychological attachment of customers to a particular brand (Rauyruen & Miller, 2007). behavioral loyalty is to repurchase a particular brand despite the marketing and occasional efforts of competitors.

Thus, it can be concluded that brand loyalty is a multidimensional approach (Aurier & Séré de Lanauze, 2012; Curran & Healy, 2014). Satisfaction is an identification of loyalty, where it is explained by behavioral theories such as learning theory and cognitive dissonance theory. Customer satisfaction has been supported by several research that it has a direct and significant impact on loyalty (Boenigk & Helmig, 2013; Szymanski & Henard, 2001; Homburg et al., 2009). On the other hand, some studies have predicted that customer satisfaction does not lead to brand loyalty (Hosseini & Ahmadi, 2009). In a multi-sectoral study conducted by Cronin & Taylor (1992) on four industries (pest control, banking, fast food, and dry cleaning), we found that repurchase intention has been determined by satisfaction. However, there are situations where dissatisfied customers choose to remain loyal, or satisfied customers choose not to repeat their purchases, there is a greater chance that satisfied customers will remain loyal than usual. Therefore, the following hypothesis is proposed:

H₄: Customer satisfaction significantly influences brand loyalty at the Lebanese private universities.

2.3.5 Mediating influence of customer satisfaction

Customer satisfaction can have a total mediating effect on the relationship between perceived value and brand loyalty (Lin & Wang, 2006). The impact of service quality on brand loyalty can be mediated by customer satisfaction. Moreover, in addition to its function as a mediator of service quality impact on brand loyalty, customer satisfaction is also said to act as an intermediary in the relationship among service quality and brand loyalty. This debate suggests that customer satisfaction may reduce or increase the effect of service quality on brand loyalty. This means that if the customer is satisfied with the quality of service provided by the university, they will enhance their loyalty, and on the contrary, it will weaken the relationship between service quality and loyalty levels if they are dissatisfied. Loyalty is a marketing variable that is considered part of the direct consumer response to CSR perception. (Mandhachitara & Poolthong, 2011; O'Brien et al., 2015). Therefore, the following hypothesis is proposed,

H₅: Consumer satisfaction mediates the Influence of service quality, corporate social responsibility, and customer perceived value on brand loyalty at the Lebanese private universities.

3. Research methodology

3.1 Sampling and data collection

Data collection includes various private universities in Lebanon: American University in Beirut, Lebanese American university, Holly Spirit University in Kaslick, Balamand University, St. Joseph University, etc. These universities are one of the top 10 universities in Lebanon. A survey method was utilized, the population of this study were selected from undergraduate and graduate degrees. Graduate students were preferred because they are direct students at the university to experience the services offered by the university and are therefore in the best position to answer questions about their perceived service experience at the university (Navarro et al., 2005). A judgmental sampling was used to select participants. The questionnaire was distributed to 400 students, of whom 378 were returned and considered suitable for the study with a response rate of 95%. The demographic characteristics of the respondents indicate that female and male are 56 and 44 years old, respectively.

3.2 Measures

The survey items were developed on a five-point Likert scale (5 = strongly agree and 1 = strongly disagree). The survey items were designed to measure brand loyalty, student satisfaction, service quality, corporate social responsibility, and perceived value. Brand loyalty adopted from Singh and Sabol (2002) were measured by 3 items. Student satisfaction adopted from Alves and Raposo (2001) and it was measured by 6 items. To measure service quality, the 22 SERVQUAL item instruments were adopted from Parasuraman et al. (1994:207) and have previously shown satisfactory reliability in the context of education. Corporate social responsibility adopted from Carroll and Shabana (2010) were measured by 20 items. Perceived value measured by 2 items (Cronin, 2000).

4. Analysis and result

Validated procedures and tools were used to verify the data collected. Exploratory factor analysis was performed in SPSS, followed by CFA and path analysis to verify the results, and finally the mediating effect of the variables was investigated in AMOS 26. The results are shown in the following sections.

4.1 Assessment of reliability measure

All variables and measurements should be tested for reliability assessment (Fornell & Larcker, 1981). Cronbach α was utilized to measure the reliability of the variable since it is a measure of the internal consistency of the item (Cronbach, 1951). The values obtained, as shown in Table 1 exceeds 0.7 (Nunnally, 1978). Overall, the reliability factor value was observed at 0.921. The reliability of each item on the scale is the square of the normalized factor load. Therefore, the reliability for coefficients and internal consistency of the items of all components were suitable for research purpose.

4.2 Exploratory factor analysis

Bartlett's test of sphericity and Kaiser-Meyer-Olkin (KMO) were applied to investigate relevance of data for factor analysis. KMO, obtained value is 0.867, which is above than 0.60 (Kaiser & Rice, 1974). While Bartlett's test of sphericity is significant at $0.000 < 0.05$, indicating there is a relationship between the variables. Therefore, the factors are zero correlated. Varimax rotation and principal component analysis were applied in SPSS 26, a close relationship between various items has been shown. According to the eigenvalue ≥ 1 , sixty-one items were extracted from the overall 5 factors, it explained around 83 percent of variance in factors. Communalities were higher than 0.50, showing appropriateness of data for the factor analysis (Stewart, 1981). The basic structure of the scale elements included in the study 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 | | |
| Corporate social responsibility | CSR1 | 3.54 | 0.781 | 0.993 | 0.986 | 0.854 | 0.919 |
| | CSR2 | 3.71 | 0.730 | 0.988 | 0.977 | | |
| | CSR3 | 3.66 | 0.752 | 0.994 | 0.987 | | |
| | CSR4 | 3.71 | 0.728 | 0.995 | 0.99 | | |
| | CSR5 | 3.75 | 0.656 | 0.996 | 0.992 | | |
| | CSR6 | 3.81 | 0.667 | 0.993 | 0.987 | | |
| | CSR7 | 3.69 | 0.670 | 0.977 | 0.955 | | |
| | CSR8 | 3.82 | 0.618 | 0.982 | 0.964 | | |
| | CSR9 | 3.79 | 0.600 | 0.989 | 0.979 | | |
| | CSR10 | 3.76 | 0.683 | 0.984 | 0.968 | | |
| | CSR11 | 3.85 | 0.603 | 0.983 | 0.967 | | |
| | CSR12 | 3.74 | 0.616 | 0.988 | 0.975 | | |
| | CSR13 | 3.71 | 0.769 | 0.981 | 0.963 | | |
| | CSR14 | 3.69 | 0.760 | 0.986 | 0.973 | | |
| | CSR15 | 3.84 | 0.770 | 0.985 | 0.970 | | |
| | CSR16 | 3.81 | 0.773 | 0.981 | 0.963 | | |
| | CSR17 | 3.72 | 0.909 | 0.993 | 0.987 | | |
| | CSR18 | 3.52 | 0.831 | 0.990 | 0.980 | | |
| | CSR19 | 3.51 | 0.936 | 0.992 | 0.985 | | |
| | CSR20 | 3.45 | 0.833 | 0.982 | 0.964 | | |
| Customer perceived value | CPV1 | 3.70 | 0.810 | 0.993 | 0.986 | 0.613 | 0.867 |
| | CPV2 | 3.59 | 0.894 | 0.997 | 0.995 | | |
| 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 | | |
| Brand loyalty | BL1 | 3.57 | 0.812 | 0.986 | 0.973 | 0.886 | 0.920 |
| | BL2 | 3.66 | 1.007 | 0.989 | 0.979 | | |
| | BL3 | 3.60 | 0.762 | 0.992 | 0.984 | | |

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

4.3 Confirmatory factor analysis

CFA was utilized by using AMOS 26 to evaluate the dimensions and validity of the model. The CFA applies to all five components: service quality, corporate social responsibility, customer perceived value, customer satisfaction, and brand loyalty.

4.3.1 Validity measure

Convergent validity is the measurement of how many different methods of evaluating a variable bring equivalent results (John & Bennett-Martinez, 2000). Three methods are found to confirm the convergent validity of the data: the value of the SMC should be greater than 0.30; communalities must exceed 0.50, average variance explained should be greater than 0.50, and composite reliability should exceed 0.70 (Hair et al., 1998). As shown in Table 1, each factor loading is greater than 0.50 and is statistically significant. Appropriate convergent validation is shown in the data because CR and AVE were above acceptable limits. The CR values ranged from 0.995 to 0.998 as shown in Table 2, and the AVE also exceeded the limit of 0.50 and ranged from 0.972 to 0.990.

4.3.2 Discriminant validity

Strong discriminant validity suggests that there is no correlation coefficient between different factors in the model. It demonstrates the specificity of these factors. The method taken by researchers to verify the discriminant validity of a model and diagonal should exceed non diagonal values (Kesharwani & Tiwari, 2011). Fornell and Larcker (1981) proposed for verifying discriminant validity, it is by comparing correlations between factors with square root of average variance extracted. In this study, average variance extracted exceeds maximum shared variance for all constructs, and the diagonal exceeds the non-diagonals, results are shown in Table 2. Therefore, discriminant validity is confirmed for all the constructs.

Table 2

Discriminant validity measurement

| | CR | AVE | MSV | ASV | SQ | CSR | CPV | CS | BL |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|----|
| SQ | 0.998 | 0.972 | 0.562 | 0.292 | 1 | | | | |
| CSR | 0.998 | 0.975 | 0.562 | 0.271 | 0.751 | 1 | | | |
| CPV | 0.995 | 0.990 | 0.562 | 0.373 | 0.72 | 0.751 | 1 | | |
| CS | 0.997 | 0.986 | 0.409 | 0.127 | 0.739 | 0.698 | 0.845 | 1 | |
| BL | 0.992 | 0.979 | 0.032 | 0.015 | 0.742 | 0.665 | 0.709 | 0.765 | 1 |

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 (Kesharwani & Tiwari, 2011)

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 that the data fits adequately into the model (Ho., 2006; Hair et al., 2006). RMSEA= 0.029 <0.06. Additionally, P- Close=0.55 >0.05. The findings reveal the fitness of the model demonstrating excellent fit for the structural model (Hu & Bentler, 1999).

Table 3

Model fit indices

| Model fit | Model statistics | Acceptable limit | Result |
|-----------|------------------|------------------|-----------|
| 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

Under Amos 26, the model was tested, findings revealed that all the hypotheses were significant except H2, corporate social responsibility had insignificant relationship with customer satisfaction at the Lebanese private universities ($\beta= 0.02$, p-value = 0.692). The reason behind the insignificance of H2, perhaps because of these universities lack of effective communication about their CSR projects. Customer satisfaction had significant relationship with brand loyalty ($\beta= 0.39$; P-value =0.000). Additionally, Service quality and customer perceived value had direct significant relationship with customer satisfaction as shown below in Table 4 Fig. 2.

Table 4

The results of testing the hypotheses

| Hypothesis relationship | Estimate | S.E. | C.R. | P | Result |
|-------------------------|----------|-------|--------|-------|---------------|
| CS ← SQ | 0.263 | 0.017 | 6.310 | *** | supported |
| CS ← CSR | 0.02 | 0.023 | 0.397 | 0.692 | not supported |
| CS ← CPV | 0.642 | 0.129 | 15.378 | *** | supported |
| BL ← SAT | 0.390 | 0.095 | 2.428 | 0.015 | supported |

**Fig. 2.** The summary of testing the hypotheses

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 $VAF < 20\%$ it indicates no mediation (Hair et al., 2016). Results revealed that, model 1, customer satisfaction was found to mediate partially the relationship between service quality and brand loyalty ($\beta=0.31$, $VAF=32\%$). For model 2, customer satisfaction was found to fully mediate the relationship between perceived value and brand loyalty ($\beta=0.28$, $VAF=90\%$).

Table 5

Test of the mediation effect

| Variables | Direct Effect | Indirect Effect | Total Effect | VAF |
|------------------------|---------------|-----------------|--------------|------|
| Model 1: SQ → CS → BL | 0.21 | 0.101 | 0.31 | 32% |
| Model 2: CPV → CS → BL | 0.029 | 0.250 | 0.279 | 90 % |

source: Author's calculation

5. Conclusion

The current study aimed to examine the mediating influence of customer satisfaction on the relationship between service quality, corporate social responsibility, customer perceived value and brand loyalty in the Lebanese private universities. This topic has not received enough attention from researchers. The results indicate that there was a significant relationship between customer satisfaction and brand loyalty. Furthermore, the path between service quality and brand loyalty was mediated partially by customer satisfaction; and it has full mediation between customer perceived value and brand loyalty. Finally, there is insignificant relationship between corporate social responsibility and brand loyalty.

5.1 Implications of Research Outcomes

5.1.1 Theoretical Implications

The current study reveals new view, by building a model on service quality, perceived value, customer satisfaction and brand loyalty at the Lebanese private universities. In consumer behaviour literature, it states that the correlation coefficient between the path of independent and mediator, and coefficient for the path between mediator and dependent variable. First, the existence of the path between service quality, perceived value, customer satisfaction and brand loyalty has been empirically supported

in this study. Despite, the literature supported the relationships between above mentioned variables, but these hypotheses were not empirically examined in the Lebanese private universities.

Second, customer perceived value and service quality had significant influence on customer satisfaction. While corporate social responsibility showed insignificance influence on customer satisfaction. Additionally, the most significant variable that influences customer satisfaction was customer perceived value followed by service quality.

In other words, findings showed that if service quality and customer perceived value are better, customer satisfaction will increase. Due to the insignificant influence of corporate social responsibility, it was removed from the model. The focus of consumers is more on both quality and value rather than being aware on the university influence on sustainability issues, society, and environment. Third, results confirmed the mediating influence of customer satisfaction. For example, customer satisfaction has full mediation between customer perceived value and brand loyalty. Finally, this study contributes by predicting brand loyalty through customer satisfaction at the private universities in Lebanon. The findings of this study support the results of (Ismail et al., 2006; Vijay Anand & Selvaraj, 2013; Lin et al., 2006; Gronroos, 2000; Wang et al., 2004; Tung, 2004).

5.1.2 Managerial implications

As globalized world is changing rapidly, Lebanese universities are enforced 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 businesses. Thus, satisfied customers and brand loyalty will result in quitting or sustaining from the market. As a result, marketers must take the necessary steps to keep customers satisfied and maintain a loyal customer base. As per the current study, the service quality and value that customers perceive has a significant influence on customer satisfaction. The path of perceived value towards brand loyalty is fully mediated by satisfaction. While service quality relationship to brand loyalty is mediated partially. In other words, there is significant relationship between quality and loyalty, even after the mediation of customer satisfaction. Consumer satisfaction increases as value and quality increases. This research is valuable to education planners, education leaders, university professors and administration which will be helpful for them to understand student behavior.

5.2 Limitation and future scope

This research has some limitations. Similarly, some aspects of this research can still be explored. First, other factors can influence and interact with brand loyalty and customer satisfaction. Casual relations with various samples for generalizations could be revealed in the future studies. Second, it is recommended further investigation in corporate social responsibility toward satisfaction and brand loyalty. Third, the use of qualitative and quantitative approaches could support the findings and research design. Fourth, this study was limited to the Lebanese private universities, the replication can be carried out with all universities participating in the study. Indeed, replicating empirical research plays a vital role in developing generalizability explanations for brand marketing. This approach is in line with Leone and Schultz (1980) who argue that replication is important for generalization to confirm the research findings.

References

- Alcañiz, E. B., Herrera, A. A., Manzano, J. A., & Pérez, R. C. (2011). Efectos de la responsabilidad social corporativa percibida por el consumidor sobre el valor y la satisfacción con el servicio/Effects of Consumer Perception of Corporate Social Responsibility on Service Satisfaction and Perceived Value. *European Journal of Management and Business Economics*, 20(4), 139-160.
- Ankit Kesharwani, I. B. S., & Tiwari, H. R. (2011). exploration of internet banking website quality in India: A Webqual approach. *Great Lakes Herald*, 5(1), 40-58.
- Auh, S., Salisbury, L. C., & Johnson, M. D. (2003). Order effects in customer satisfaction modelling. *Journal of Marketing Management*, 19(3-4), 379-400.
- Aurier, P., & de Lanauze, G. S. (2012). Impacts of perceived brand relationship orientation on attitudinal loyalty. *European Journal of Marketing*, 46(11-12), 1602-1627.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Bartikowski, B., & Walsh, G. (2014). Attitude contagion in consumer opinion platforms: posters and lurkers. *Electronic Markets*, 24(3), 207-217.
- Bhattacharya, C. B., & Sen, S. (2004). Doing better at doing good. When, why, and how consumers respond to corporate social initiatives. *California Management Review*, 47(1), 9-24.
- Boenigk, S., & Helmig, B. (2013). Why do donors donate? Examining the effects of organizational identification and identity salience on the relationships among satisfaction, loyalty, and donation behavior. *Journal of Service Research*, 16(4), 533-548.
- Brown, R. M., & Mazzarol, T. W. (2009). The importance of institutional image to student satisfaction and loyalty within higher education. *Higher Education*, 58(1), 81-95.
- Brady, M. K., Cronin, J. J., & Brand, R. R. (2002). Performance-only measurement of service quality: A replication and extension. *Journal of Business Research*, 55(1), 17-31.

- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *Journal of Marketing*, 65(2), 81-93.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *Journal of marketing*, 56(3), 55-68.
- Cronin, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193-218.
- Curran, J. M., & Healy, B. C. (2014). The loyalty continuum: Differentiating between stages of loyalty development. *Journal of Marketing Theory and Practice*, 22(4), 367-384.
- Chu, P. -, Lee, G. -. & Chao, Y. (2012). Service quality, customer satisfaction, customer trust, and loyalty in an e-banking context. *Social Behavior and Personality*, 40(8), 1271-1284.
- Darsono, L. I., & Junaedi, C. M. (2006). An examination of perceived quality, satisfaction, and loyalty relationship: Applicability of comparative and noncomparative evaluation. *Gadjah Mada International Journal of Business*, 8(3), 323-342.
- Day, E., & Crask, M. (2000). Value assessment: the antecedent of customer satisfaction. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 13, 50-60
- Du S., Bhattacharya C.B., & Sen S. (2010). Maximizing business returns to Corporate Social Responsibility (CSR). The role of CSR communication. *International Journal of Management Reviews*, 12(1), 8-19
- Eggert, A., and Ulaga, W. (2002). Customer perceived value: A substitute for satisfaction in business markets. *The Journal of Business and Industrial Marketing*, 17(2/3), 107-118.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- García de los Salmones, M. M., Herrero, C. A., & Rodríguez del Bosque, I. (2005). Influence of Corporate Social Responsibility on loyalty and valuation of services. *Journal of Business Ethics*, 61, 369-385.
- Gronroos, C. (2000). *Service Management and Marketing: A Customer Relationship Approach*. Chichester: Wiley
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). A primer on partial least squares structural equation modeling (PLS-SEM) Sage Publications. Thousand Oaks, CA, USA.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). *Multivariate Data Analysis*. Prentice Hall.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). *Multivariate data analysis* (Vol. 5, No. 3, pp. 207-219). Upper Saddle River, NJ: Prentice hall.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the academy of marketing science*, 40(3), 414-433.
- Homburg, C., Wieseke, J., & Hoyer, W. D. (2009). Social identity and the service-profit chain. *Journal of Marketing*, 73(2), 38-54.
- Hosseini, M. H., & Ahmadi Nejad, M. (2009). Examining the effects of customer satisfaction and trust and specific trademark value in customer loyalty and attitudinal behavior: A case study of Refah Bank. *Commerce Review*, 33, 42-51.
- Hu, H.-H., Kandampully, J., & Juwaheer, T. D. (2009). Relationships and impacts of service quality, perceived value, customer satisfaction, and image: an empirical study. *The Service Industries Journal*, 29(2), 111- 125.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- John, O. P., & Benet-Martínez, V. (2000). Measurement, scale construction, and reliability. *Handbook of research methods in social and personality psychology*, 339-369.
- Kaura, V. (2013). Antecedents of customer satisfaction: a study of Indian public and private sector banks. *International Journal of Bank Marketing*, 31(3), 167-186.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22.
- Khan, M. T. (2013). Customers loyalty: Concept & definition (a review). *International Journal of Information, Business and Management*, 5(3), 168.
- Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *Journal of Marketing*, 54(2), 1-18.
- Klein, J., & Dawar, N. (2004). Corporate social responsibility and consumers' attributions and brand evaluations in a product-harm crisis. *International Journal of Research in Marketing*, 21, 203 -217.
- Kaiser, H. F., & Rice, J. (1974). Little jiffy, mark IV. *Educational and Psychological Measurement*, 34(1), 111-117.
- Leone, R. P., & Schultz, R. L. (1980). A study of marketing generalizations. *Journal of Marketing*, 44(1), 10-18.
- Lin, H.H. & Wang, Y. S. (2006). An examination of the determinants of customer loyalty in mobile commerce. *Information & Management*, 43(3), 271-282.
- Luo, X., & Bhattacharya, C.B. (2006). Corporate Social Responsibility, customer satisfaction, and market value. *Journal of Marketing*, 70, 1-18.
- Mandhachitara, R., & Poolthong, Y. (2011). A model of customer loyalty and corporate social responsibility. *Journal of Services Marketing*, 25(2), 122-133.
- Matten, D., & Moon, J. (2008). "Implicit" and "explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404-424.

- Moogan, Y. J. (2011). Can a higher education institution's marketing strategy improve the student-institution match?. *International Journal of Educational Management*, 25(6), 570-589
- Maignan, I., & Ferrell, O.C. (2001). Corporate citizen as a marketing instrument – concepts, evidence and research directions. *European Journal of Marketing*, 35(3/4), 457–484.
- Navarro, M. M., Iglesias, M. P. & Torres, M. P. R. (2005). Measuring customer satisfaction in summer courses. *Quality Assurance in Education*, 13(1), 53-65
- Nunnally, J. (1978). *Psychometric Methods*. McGraw-Hill, New York, NY
- Oliver, R. L. (1999). *Consumption experience*. Consumer value: A framework for analysis and research, 43.
- Oliver, R. L. (1999). Value as excellence in the Consumption Experience. In M. B. Holbrook (Ed.), *Consumer Value. A Framework for Analysis and Research*, London: Routledge, 43-62.
- Oliver, R. L. (1999). Whence consumer loyalty?. *Journal of Marketing*, 63(4_suppl1), 33-44.
- Oliver, R. L., & Swan, J. E. (1989). Equity and disconfirmation perceptions as influences on merchant and product satisfaction. *Journal of Consumer Research*, 16(3), 372-383.
- Parasuraman, A., V. A. Zeithaml and L. L. Berry (1994). Alternative scales for measuring service quality: a comparative assessment based on psychometric and diagnostic criteria, *Journal of Retailing*, 70(3), 201-230.
- Petrick, J. F. (2002). Development of a multi-dimensional scale for measuring the perceived value of a service. *Journal of Leisure Research*, 34(2), 119-134.
- Prizad, A., & Karmi, E. (2015). Studying the relationship between service quality, customer satisfaction and customer loyalty through perceived value and trust. *Journal of Social Issues & Humanities*, 3(3), 275-281.
- Rauyruen, P., & Miller, K. E. (2007). Relationship quality as a predictor of B2B customer loyalty. *Journal of Business Research*, 60(1), 21-31.
- Rivera, J. J., Bigne, E., & Curras-Perez, R. (2016). Effects of corporate social responsibility perception on consumer satisfaction with the brand. *Spanish Journal of Marketing-ESIC*, 20(2), 104-114.
- Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68(2), 341-350.
- Stewart, D. W. (1981). The application and misapplication of factor analysis in marketing research. *Journal of Marketing Research*, 18(1), 51-62.
- Szymanski, D. M., & Henard, D. H. (2001). Customer satisfaction: A meta-analysis of the empirical evidence. *Journal of the Academy of Marketing Science*, 29(1), 16.
- Tam, J. L. M. (2000). The Effects of Service Quality, Perceived Value and Customer Satisfaction on Behavioral Intentions. *Journal of Hospitality & Leisure Marketing*, 6(24), 31-43.
- Tung, L. L. (2004). Service quality and perceived value's impact on satisfaction, intention and usage of short message service (SMS). *Information Systems Frontiers*, 6(4), 353-368.
- Vijay Anand, S., & Selvaraj, M. (2013). The impact of service quality on customer satisfaction and loyalty in Indian banking sector: an empirical study through SERVPERF. *International Journal of Management and Business Research*, 2(2), 151-163.
- Wang, Y., Lo, H. P., & Yang, Y. (2004). An integrated framework for service quality, customer value, satisfaction: Evidence from China's telecommunication industry, *Information Systems Frontiers*, 6(4), 325-340
- West, D. C., Ford, J., & Ibrahim, E. (2015). *Strategic marketing: creating competitive advantage*. Oxford University Press, USA.
- Werther, W.B., Jr., & Chandler, D. (2005). Strategic corporate social responsibility as global brand insurance. *Business Horizons*, 48(4), 317–324.
- Wu, P. H., Huang, C. Y., & Chou, C. K. (2014). Service expectation, perceived service quality, and customer satisfaction in food and beverage industry. *International Journal of Organizational Innovation*, 7(1).
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 52 (3), 2-22.
- Zeithaml, V. A. (2000). Service quality, profitability, and the economic worth of customers: what we know and what we need to learn. *Journal of the Academy of Marketing Science*, 28(1), 67-85.

