Student loyalty through perceived service quality and satisfaction

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ABSTRACT
Student loyalty has become an important determinant of the success of Universities aiming to retain students and attract them back for post-graduate studies. To explain how student loyalty could be generated by examining the sequence of constructs: student perceived service quality, student satisfaction, and student loyalty and to identify the crucial determinants of student perceived service quality, we hypothesize that satisfaction plays an important role in linking service quality to loyalty. Using a sample of 177 students enrolled in a Lebanese University, our empirical study examines the relationship among student perceived service quality, student satisfaction, and student loyalty and identifies the important determinants of student perceived service quality. Our findings suggest that students must be satisfied with the service quality to demonstrate loyalty to their educational institution. The findings also conclude that the quality of curriculum is the most important determinant of student perceived service quality.

Keywords: student perceived service quality, student satisfaction, student loyalty, higher education, University, Lebanon

INTRODUCTION
In higher education institutions, emphasizing on service quality and satisfaction in generating loyalty is a newly emerging field of concern (Nadiri et al., 2009; Ramsey and Lorenz, 2016; Sanchez et al., 2006). Over the past decades, student service quality and student satisfaction have been highly considered for their correlation with student loyalty. In educational settings, students are considered as customers; consequently, educational managers should have a better understanding of how students form impressions about the quality of service delivered and should adapt the university environment to the students’ need, so that they will enhance student satisfaction and student loyalty accordingly.

In the educational industry, the quality of service perceived may have a profound effect on student loyalty. Offering good quality instructors (Mai, 2005; Walker, 1995; Purgailis and Zaksa, 2012), a clear and meaningful curriculum (Knight, 2002; Purgailis and Zaksa, 2012; Hill, 1995), and diverse extra-curricular activities (Athiyaman, 1997; Joseph et al., 2005) will boost student satisfaction and their subsequent loyalty.

Student loyalty becomes an important determinant of the success of higher education institutions aiming to retain students and attract them back for post-graduate studies (Bean, 1982; Titus, 2004; Sanchez et al., 2006; Rojas-Méndez et al., 2009). Consequently, educational institutions will have to establish appropriate programs that maintain successful relationships.
with their students (Hennig-Thurau et al., 2001; Bowden, 2011; Rojas-Méndez et al., 2009; Trice and Yoo, 2007). However, such programs have to be well-defined and based on a clear understanding of the creation of these relationships. Our goal is to investigate the antecedents of student loyalty in higher education institutions through examining the importance of relationship sequence of the following constructs: student perceived service quality, student satisfaction, student loyalty; moreover, to identify the crucial determinants that affect student perceived service quality in educational institutions. The determinants examined are as follows: quality of instructors, quality of curriculum, and extra-curricular opportunities.

The article unfolds as follows. First, we review the extend literature about the relationships existing among perceived service quality, satisfaction, and loyalty; in addition, we discuss the main determinants that affect the student’s perception of quality. Next, we describe an empirical examination of the correlation among service quality, satisfaction, and loyalty demonstrating the importance of the sequence of these constructs in generating loyalty, and examining the determinants that have higher impact on student perceived service quality. Last, we discuss the result in educational setting.

**LITERATURE REVIEW**

**Perceived service quality - satisfaction relationship**

Despite the many publications on customer satisfaction and perceived quality, little work has been done to clarify the conceptual basis of these two constructs (Athiyaman, 1997). A heavily debated topic in the literature relates to whether service quality influences satisfaction or vice-versa. Previous studies find contradictory results concerning the order of occurrence between them. While some researchers argued that perceived service quality and satisfaction are same constructs (Tian-Cole and Crompton, 2003; Iacobucci et al., 1995), others have empirically proved that these two key factors are related but separate constructs (Spreng and Mackoy, 1996). A gap still exists in the literature concerning the order of occurrence of perceived service quality and customer satisfaction. Some researchers have found that perceived service quality is an antecedent of customer satisfaction (Oliver, 1993; Kenny and Khanfar, 2009; Cronin and Taylor, 1992; Darsono and Junaedi, 2006; Kitapci et al., 2013), while others argue that perceived service quality is a consequence of customer satisfaction (Bitner, 1990; Athiyaman, 1997). In this study, we suppose that students must experience the quality delivered by their educational institutions in order to test whether they will be satisfied or not; consequently, we assumed that perceived service quality is an antecedent of satisfaction.

**Customer satisfaction - loyalty relationship**

It has been widespread postulation that customer satisfaction is the main driver of customer loyalty and consequent retention. The more satisfied a customer is, the higher his/her loyalty is (e.g., Alves and Raposo, 2007; Helgesen, 2006; Chiou and Droge, 2006; Bhuto et al., 2012; Helgesen and Nesset, 2007; Kiyani et al., 2012; Olajidi and Israel, 2012; Dib and Alnazer, 2013). If a service company wants to maintain customer loyalty, it should focus on satisfying customers’ desires and preferences (Liao, 2012). Purgails and Zaksa (2012) found that satisfaction has a higher effect on loyalty than does student perceived service quality and image of the educational institution. If students are satisfied with their educational institution, they must demonstrate loyalty to this institution, and they will be involved in positive word-of-mouth (Alves and Raposo, 2007; Liao, 2012), repurchase intentions (Bowden, 2011), and recommendation intentions (Agrawal et al., 2012). Other studies argue that satisfied customers are not always loyal, and the role of satisfaction is not clear as the number of customers who express satisfaction still defect and dissatisfied customers stay loyal (Rowley and Dawes, 2000;
Perceived service quality-satisfaction-loyalty relationships

Despite extensive research specially designed to study the relationship between perceived service quality and loyalty (e.g., Dado et al., 2012; Darsono and Junaedi, 2006), a gap still exists in the literature concerning whether there is a direct or indirect relationship between these two constructs. Some researchers found that perceived service quality is an antecedent to behavioral intentions without the mediating role of satisfaction (e.g., Boulding et al., 1993; Zeithaml et al., 1996; Athiyaman, 1997; Bloemer et al., 1999; Lee-Kelley et al., 2002). Others found that perceived service quality has an indirect effect on customer loyalty through the mediating role of satisfaction (Caruana, 2002; Liao, 2012) and found empirical support for this causal order in the merchandise industry (Babakus et al., 2004), in the health industry (Lonial et al., 2010), and in the leisure industry (Liao, 2012).

In the education industry, researchers have empirically examined the relationships among perceived service quality, satisfaction, and loyalty. They concluded that both student perceived service quality and student satisfaction are important factors in determining student loyalty (Dado et al., 2012). Moreover, service quality is indirectly related to loyalty through the mediation role of satisfaction. Among the factors used to investigate the drivers of student loyalty, which are satisfaction, image of the university, and image of the program, student satisfaction shows to have the highest degree of association with student loyalty (Helgesen and Nesset, 2007: 53).

Determinants of student perceived service quality

No consensus definition exists concerning the determinants of student perceived service quality (Kwek et al., 2010), this is due to the lack of literature in the educational field. The examination of the determinants of student perceived service quality can help in the understanding of student satisfaction and student loyalty. Finding the best way to measure service quality and its determinants has been a subject of academic debate for a long time.

Existing literature proves that the quality of teaching and learning have a high influence on the students’ perception of quality (Keelson, 2011; Lee et al., 2000; Hatziconstantis and Kolomympi, 2016). The overall impression of the quality of education and the curriculum are significant predictors of students’ satisfaction with their educational experience (Mai, 2005; Kwek et al., 2010). Moreover, the quality of instructors and their expertise and interest in their subject areas are related to the student perceived service quality (Mai, 2005). Introducing students to the university social life, encouraging them to participate in different events and clubs and integrating these activities with academic issues will help students establish a sense of belongingness to their educational institutions (Vander Schee, 2011; Kwek et al., 2010), which may lead to their loyalty.

Quality of Instructors

The quality delivered by the teaching staff is still viewed as an essential element in quality perception (Mai, 2005; Hsu and Bailey, 2011; Rojas-Méndez et al., 2009). Instructors are responsible for improving quality since they are the ones who know exactly what takes place in the classrooms (Keelson, 2011). The delivery of service, in educational institutions, highly belongs to the study process itself, the information that students can acquire from the course, and the content of the course in terms of useful information (Purgailis and Zaksa, 2012).
Quality of Curriculum

The factors that explains student perceived service quality in higher educational institutions are related directly to the process of service delivery (LeBlanc and Nguyen, 1997: 77). Among these factors, the curriculum was proved to be one of the most influential (Purgailis and Zaksa, 2012; Kwek et al., 2010; LeBlanc and Nguyen, 1997; Athiyaman, 1997), along with all its components—quality of teaching, content of the curriculum, the extent to which curriculum gives students opportunity for entering the labor market, and so on (Purgailis and Zaksa, 2012). Moreover, the curriculum factor is related to the extent to which it adds to students' new perspectives of thinking (Keelson, 2011). Since there is a lack in the literature concerning whether or not to slot curriculum as one component of student perceived service quality, a hypothesized gap was created to test this relationship.

Extra-curricular Activities

Extra-curricular activity is considered an important determinant of the student perceived service quality (Athiyaman, 1997; Ford et al., 1999; Joseph et al., 2005), because it shapes the student's total collegiate experience within the educational institution and leads to student's intention of graduating (Tinto, 1982). The social factors and the events attended by students outside the classes are positively correlated to student perceived service quality; they are considered as a major part of student's learning experience (Thomas, 2011). Students become more engaged to their educational institutions if they attend different events (Vander Schee, 2011). One objective of this study is to investigate whether the extra-curricular activities offered by educational institutions are an important determinant of student perceived service quality.

Hypothesis development

**Student perceived service quality - student satisfaction - student loyalty relationships**

Students shape their attitudes toward the services perceived and integrate them into more global affective evaluation which is the satisfaction (Darsono and Junaedi, 2006), thus, it stands to reason that student perceived service quality is an antecedent to student loyalty, and that a positive relationship exist between these two constructs.

**Hypothesis 1:** There is a positive relationship between student perceived service quality and student satisfaction.

It is recognized that if a student is satisfied with their educational experience, they will then demonstrate loyalty to that institution (Reichheld and Sasser, 1989). Behavioral loyalty is a direct outcome of customer satisfaction which will enhance loyalty and reputation and lead to strong recommendations (Bontis et al., 2007), also, it will affect the results of customer loyalty, such as positive word-of-mouth and repurchase intention (Kitapci et al., 2013), thus, it is assumed that student satisfaction has direct impact on student loyalty.

**Hypothesis 2:** There is a positive relationship between student satisfaction and student loyalty.

It has been argued that service quality has a direct relation to loyalty and nearly 45 percent of loyalty changes can be explained by service quality changes (Mosahhab et al., 2010), and the most powerful variable that affect student loyalty is the perceived quality of the institution services by the student while satisfaction construct was the second most powerful variable (de Macedo Bergamo et al., 2012), and not only does quality affect perceptions of value and satisfaction, it also influences behavioral intentions directly (Cronin et al., 2000), thus a direct effect of student perceived service quality is hypothesized on student loyalty.

**Hypothesis 3:** There is a positive relationship between student perceived service quality and student loyalty.
The relationship among the determinants of student perceived service quality and the student perceived service quality construct

Perceived service quality in educational context is highly dependent on employees' performance during service transactions. Among the factors that define service quality, the competence of the teaching faculty is paramount (Rojas-Mendéz et al., 2009). It has been argued that student care, the quality of teaching at the university as perceived by students, and the competence of professors proved to be the most relevant quality dimensions when it comes to improving student loyalty (Hennig-Thurau et al., 2001). Retention strategies include improving the student and advisor relationship, having the advisor more accessible to students, and making course instructors aware of their role in retention (Hsu and Bailey, 2011).

**Hypothesis 4:** There is a positive relationship between instructor quality of service and student perceived service quality.

In addition to the quality of instructors, a positive relationship appear between the curriculum and the overall student perceived service quality (Kwek et al., 2010). A close relationship exists between the quality of education (as perceived by students) and the students’ loyalty to their educational institution (Hennig-Thurau et al., 2001). Extensive researches have been launched to test the relationship between the quality of teaching and student satisfaction (e.g., Petruzzellis et al., 2006; Thomas, 2011) and between the quality of teaching and student loyalty (Hennig-thurau et al., 2001; Purgailis and Zaksa, 2012). There is a lack of studies that have tested the relation between quality of curriculum and student perceived service quality.

**Hypothesis 5:** There is a positive relationship between quality of curriculum and student perceived service quality.

A significant positive relationship between a number of recreational activities and the overall student perceived service quality (Kwek et al., 2010). With respect to the investigations that have been done and according to our knowledge, there is a lack of studies that have been conducted to test if extra-curricular activities affect student perceived service quality in higher education institution. We assume that extracurricular activities is one of the student perceived service quality component.

**Hypothesis 6:** There is a positive relationship between extra-curricular opportunities and student perceived service quality.

Mediating role played by satisfaction in linking perceived service quality to satisfaction

Despite the fact that satisfaction exerts a mediating role or not in linking student perceive service quality to loyalty, most of the studies, especially in higher education institutions, agreed that student perceived service quality is indirectly correlated to student loyalty through satisfaction (Helgesen and Nesset, 2007; Dado et al., 2012; Purgailis and Zaksa, 2012; Kuo and Ye, 2009; Dib and AlNazer, 2013; Thomas, 2011). That is, students after receiving the service, should be satisfied first in order to demonstrate loyalty later on.

**Hypothesis 7:** There is a positive indirect relationship between student perceived service quality and student loyalty through the mediation of student satisfaction.

Mediating role played by student perceived service quality and satisfaction in linking the determinants of perceived service quality to loyalty

Previous researches have been concentrated to test the impact of quality of instructors in determining student perceived service quality in higher education (Rojas-Méndez et al., 2009; Purgailis and Zaksa, 2012), few of them have related this construct to be as a determinant of student loyalty.
Hypothesis 8: There is a positive indirect relationship between quality of instructors and student loyalty through the mediation of both constructs student perceived service quality and student satisfaction.

Most of studies have tested the impact of the quality of curriculum (quality of teaching, course objective, course content, etc.) on student perceived service quality (LeBlanc and Nguyen, 1997; Purgailis and Zaksa, 2012). Few of them have tested the correlation between quality of curriculum and student loyalty.

Hypothesis 9: There is a positive indirect relationship between quality of curriculum and student loyalty through the mediation of both constructs student perceived service quality and student satisfaction.

There is an assumption that increasing extracurricular-opportunities and encouraging students to be involved in such activities will enhance students' attachment to their higher educational institutions; consequently will increase their loyalty.

Hypothesis 10: There is a positive indirect relationship between extra-curricular activities and student loyalty through the mediation of both constructs student perceived service quality and student satisfaction.

METHODOLOGY

Participants and procedure
This study used a self-administered questionnaire in order to complete the data collection process. The items used in the questionnaire came from the work of a number of different researchers (e.g., Kwek et al., 2010; Oldfield and Baron, 2000; Purgailis and Zaksa, 2012; Rojas-Méndez et al., 2009). The instruments were selected because they contained one or more items that pertained to the variables: quality of instructors, quality of curriculum, extra-curricular opportunities, perceived service quality, satisfaction, and loyalty. All items in the survey use a 7-point Likert scale beginning by "Strongly Disagree" and ending with "Strongly Agree".

Taking student perception of educational service quality into consideration, in addition to the relation of student perceived service quality and loyalty through satisfaction construct, the target population of this study are business students enrolled in Lebanese International University in Tripoli and Akkar campuses (North Lebanon).

Concerning the sample, classes across the Business School were stratified on the basis of departments. The sample unit included full-time undergraduate business students that have completed at least one semester. The sample size was 200 and convenient sampling technique was used to select respondents (students). Out of 200 questionnaires that were distributed, 177 were returned, with a response rate of 88.5%. The respondent demographics are presented in table1.

Measures
Quality of instructors
Eight items were measured regarding the quality of instructors on 7-point Likert scale. Seven items were taken from Oldfield and Baron (2000) and included items such that "instructors at my university promise me the service within deadlines they able to meet" and "Instructors at my university have the knowledge needed to answer your questions". The remaining item is taken from Rojas-Méndez et al. (2009) and measures the extent to which instructors show friendliness toward students. According to the result of the factor analysis, this construct is divided into two factors: 'Instructors' Responsiveness' and 'Instructors' Skills and Caring' with 0.686 and 0.644 reliability respectively.
Quality of curriculum
The quality of curriculum was measured with seven items taken from Kwek et al. (2010), Purgailis and Zaksa (2012), Helgesen and Nesset (2007), Mai (2005), and Le Blanc and Nguyen (1997). The quality of curriculum included items such as "The content of the study course was interesting and useful", "There are a lot of course available in the study program" and "The course unit provided opportunities for participation and discussion". This construct is divided according to the principal component analysis into two factors: 'Course Content and Offering' with 0.561 reliability scale and 'Study Content' with 0.645 reliability scale.

Extracurricular activities
The quality of extracurricular activities offered by educational institutions were measured with four items taken from Kwek et al. (2010). This construct measured items such as "My university gives the opportunity to join in different campus events (Outdoors, cultural events, etc...)" and "My university offers the opportunity to join different clubs (sports, dance, music, etc...)". The reliability scale for this construct is 0.727.

Student perceived service quality
This construct is measured with five items. Four of them are taken from Purgailis and Zaksa (2012) and measured items such as "The study program has prepared me for the labor market" and "The study program has prepared me for the next study level". The remaining item was taken from Lee et al. (2000) which is "My university is focused on the best service for its student". The reliability of this construct is 0.786.

Student Satisfaction
Six items were taken from Rojas-Méndez et al. (2009), Purgailis and Zaksa (2012), Athiyaman (1997), and Bowden (2011). Student satisfaction construct measures to which extent student are satisfied with the experience and the service offered by educational institutions. It includes items such as "My choice to use this university was a wise one" and "I am satisfied with what I receive as a student". Student satisfaction construct has 0.857 reliability scale.

Student loyalty
Student loyalty construct is measured by four items taken from Purgailis and Zaksa (2012), Hennig-Thurau et al. (2001), Bowden (2011), and Helgesen and Nesset (2007). It included items such "I will recommend my university for others" and "I say positive things about my university to other people". The reliability scale for this construct is 0.813.

Common method variance
Because data were collected through the same questionnaire during the same period of time with same participants, which are the students, we applied procedure remedies for common method bias that might address (Podsakoff et al., 2003). We conducted an exploratory factor analysis using principal component analysis and Varimax rotation for independent, mediator and dependent variables. The average variance extracted meets the recommended 50 percent (Hair et al., 1979). Based on the PCA and Varimax procedure, the eigenvalues for all the constructs were greater than 1, ranging from the lowest of 1.017 (Instructor Skills and Caring factor) to the highest of 3.520 (Satisfaction factor).

FINDINGS
Measurement model
The factor analysis method was used to measure the validity. It was appropriate to use this type of analysis because the value of Kaiser-Mayer-Olkin (KMO) was between 0.655 and 0.836.
for all the factors; in addition, the statistical test for Barlett test of sphericity was significant (0.000, which is less than 0.05).

**Hypothesized models**

In order to identify the crucial determinants of student perceived service quality, multiple regression analysis was used due to its powerful effect on the relationships between a metric dependent variable and one or more metric independent variables (Hair et al., 2003). Multiple regression analysis was used to test hypotheses 4, 5, and 6.

The results of multiple regression analysis showed that the independent variables together describe 48.5 percent of student perceived service quality variability. The VIF was less than 10, meaning that there is no serious collinearity among variables. The lowest VIF (1.111) belongs to the "Extra-curricular activities" factor, while the highest VIF (1.365) belongs to the "Instructors' Skills and Caring" factor. The standard error of estimate ranges between 0.057 and 0.063 which shows that the results have low built-in error. The value of R-square coefficient is significant (F=34.198, p<0.000). The impacts of quality of instructors, quality of curriculum, and extra-curricular activities on student perceived service quality are significant. The Beta coefficients of Instructors' Responsiveness, Instructors' Skills and Caring, Course Content and Offering, Study Content, and Extra-curricular Activities are 0.279, 0.190, 0.242, 0.288, and 0.162 respectively. Instructor's Responsiveness dimension (t=4.439, p=0.000), Instructor's Skills and Caring dimension (t=3.012, p=0.003), Course Content and Offering dimension (t=3.860, p=0.000), Study Content dimension (t= 4.611, p= 0.000), and Extra-Curricular Activities dimension (t= 2.84, p= 0.005) are significantly connected with student perceived service quality. The higher the regression weight is, the more the independent variable would facilitate the change of the dependent variable. The "Study Content" factor possesses the higher regression weight; consequently, it has the most powerful effect on the student perceived service quality among other determinants.

The following multiple regression equation was formed:

\[
\text{Student perceived service quality} = -24.74 + 0.279\text{Instructors' Responsiveness} + 0.19\text{Instructors' Skills and Caring} + 0.242\text{Course Content and Offering} + 0.288\text{Study Content} + 0.162\text{Extra-curricular activities}.
\]

The values of the Beta coefficient among the independent variables tested in H4, H5, and H6 ranged from the weakest relationship of 0.162 (between the extra-curricular opportunities offered by the university and the students' perceived service quality) to the strongest relationship of 0.288 (between Study Content and student perceived service quality). This result will conclude that the 'quality of curriculum' is the most important determinant of student perceived service quality and the 'extra-curricular activities' is the least important determinant of student perceived service quality.

In order to test hypothesis 1, which tackles the relationship between student perceived service quality and student satisfaction, a simple regression analysis was conducted. The results show that student perceived service quality contributes to student satisfaction (F =162.219 , p= 0.000) and predicts 48.1 percent of the variance in student satisfaction. The Beta coefficient of student perceived service quality is 0.694, which shows that student perceived service quality (t = 12.737, p = 0.000) is significantly connected with student satisfaction. From the Beta estimate, it can be concluded that student perceived service quality is strongly connected with student satisfaction.
Concerning hypothesis 2, which tackles the relationship between student satisfaction and student loyalty, a simple regression analysis was conducted. The results show that student satisfaction contributes to student loyalty ($F = 257.982, p = 0.000$) and predicts 59.6 percent of the variance in student loyalty. The Beta coefficient of student satisfaction is 0.772 which shows that student satisfaction ($t = 16.062, p = 0.000$) is significantly connected with student loyalty. From the Beta estimate, it can be concluded that student satisfaction is strongly connected to student loyalty.

Hypothesis 3 tests whether there is a relationship or not between student perceived service quality and student loyalty. In order to investigate this correlation, a simple regression analysis was conducted. The results show that student perceived service quality contributes to student loyalty ($F = 46.87, p = 0.000$) and predicts 21.1 percent of the variance in student loyalty. The Beta coefficient of student perceived service quality is 0.46, which shows that student perceived service quality ($t = 6.847, p = 0.000$) is significantly connected to student loyalty.

Hypothesis 7 is set to test the mediation role played by student satisfaction in determining the relationship between student perceived service quality and student loyalty. The result shows that the mean indirect effect from the bootstrap analysis is positive and significant ($a \times b = + 0.6056$), with a 95% confidence interval excluding zero (0.537 to 0.7123). In the indirect path, a unit increase in student perceived service quality increases student satisfaction by $a = 0.6936$ units; $b = 0.8731$, which means that suppose the student perceived service quality is constant, a unit increase in student satisfaction increases student loyalty by 0.8731 units on a zero to one scale. The direct effect $c (-0.1459)$ is significant ($p = 0.0283 < 0.05$); moreover, the value $(a \times b \times c)$ is $- 0.0883$, which is negative. Consequently, we can conclude there is a partial competitive mediation role played by student satisfaction in relating student perceived service quality and student loyalty.

Hypothesis 8 is set to test the correlation between the independent variable "quality of instructors" and the dependent variable "student loyalty". The results show that the mean indirect effect from the bootstrap analysis is positive and significant ($a \times b_1 \times b_2 = + 0.1042$), with a 95% confidence interval excluding zero (0.0412 to 0.1707). In the indirect path, a unit increase in Instructors' Responsiveness increases student perceived service quality by $a = 0.2789$ units, student satisfaction by $b_1 = 0.4609$, and student loyalty by $b_2 = 0.8110$. The direct effect $c (0.2368)$ is significant ($p = 0.000 < 0.05$); moreover, the value $(a \times b_1 \times b_2 \times c)$ is 0.0246, which is positive. Consequently, we can conclude there is a partial complementary mediation role played by perceived service quality and student satisfaction in linking Instructors' Responsiveness to student loyalty. Concerning the second factor of "quality of instructors", the result shows that the mean indirect effect from the bootstrap analysis is positive and significant ($a \times b_1 \times b_2 = + 0.0770$), with a 95% confidence interval excluding zero (0.0229 to 0.1418). In the indirect path, a unit increase in Instructors' Skills and Caring increases student perceived service quality by $a = 0.1902$ units, student satisfaction by $b_1 = 0.4609$, and student loyalty by $b_2 = 0.8780$. The direct effect $c (-0.0497)$ is not significant ($p = 0.3387 > 0.05$); Consequently, we can conclude there is a full mediation role played by perceived service quality and student satisfaction in linking Instructors' Skills and Caring to student loyalty.

Hypothesis 9 is set to test the correlation between the independent variable "Quality of Curriculum" and the dependent variable "student loyalty". Results show that the mean indirect effect from the bootstrap analysis is positive and significant ($a \times b_1 \times b_2 = + 0.0966$), with a 95% confidence interval excluding zero (0.0446 to 0.1770). In the indirect path, a unit increase in Course_Content and Offering increases student perceived service quality by $a = 0.2415$ units,
student satisfaction $b_1 = 0.4609$, and student loyalty by $b_2 = 0.8680$. The direct effect $c$ (0.256) is not significant ($p = 0.6301>0.05$); consequently, we can conclude there is a full mediation role played by perceived service quality and student satisfaction in linking Course_Content and Offering to student loyalty. Concerning the second factor of "Quality of curriculum", results show that the mean indirect effect from the bootstrap analysis is positive and significant ($a \times b_1 \times b_2 = + 0.1132$), with a 95% confidence interval excluding zero (0.0547 to 0.1883). In the indirect path, a unit increase in Study_Content increases student perceived service quality by $a = 0.2880$ units, student satisfaction by $b_1 = 0.4609$, and student loyalty by $b_2 = 0.8533$. The direct effect $c$ (0.0834) is not significant ($p = 0.1270>0.05$); Therefore, we can conclude there is a full mediation role played by perceived service quality and student satisfaction in linking Study_Content to student loyalty.

Hypothesis 10 is set to test the correlation between the independent variable "Extra-curricular Activities" and the dependent variable "student loyalty". Results shows that the mean indirect effect from the bootstrap analysis is positive and significant ($a \times b_1 \times b_2 = + 0.0650$), with a 95% confidence interval excluding zero (0.0219 to 0.1209). In the indirect path, a unit increase in Extra-curricular activities increases student perceived service quality by $a = 0.1619$ units, student satisfaction by $b_1 = 0.4609$, and student loyalty by $b_2 = 0.8711$. The direct effect $c$ (0.0201) is not significant ($p = 0.6946>0.05$); Consequently, we can conclude there is a full mediation role played by perceived service quality and student satisfaction in linking Extra-curricular Activities to student loyalty.

**DISCUSSION**

The increasing competition level among educational institutions, along with little enrollment and college dropouts, leads to the incapability of retaining student in the same educational institution. Literature has agreed that student loyalty has a positive relationship with education institutions profitability. A loyal student represents a sort of competitive advantage and will generate profitability through different loyalty consequences: positive word-of-mouth, repurchase intention and recommendation intentions. It was anticipated that student loyalty is a consequence of student satisfaction which is, in turn, a consequence of student perceived service quality. Educational institutions should deliver exceptional quality of service in order to delight the students and achieve high levels of loyalty. From this perspective, it is important to develop an empirical model that leads to generating student loyalty and, more specifically, that links student loyalty to student satisfaction and student perceived service quality; moreover, since the way that students will perceive quality is very important in determining his\her loyalty, there is a need to identify the crucial determinants of student perceived service quality.

The simple regression analysis indicated that there is a strong positive relationship between student perceived service quality and student satisfaction. It also indicated that there is a strong positive relationship between student satisfaction and student loyalty. The multiple regression analysis showed that the quality of instructors, the quality of curriculum, and the extra-curricular opportunities offered by the educational institution have a positive relationship with the global student perception of quality; consequently, these three factors could be considered as determinants of student perceived service quality. In addition, quality of curriculum (quality of teaching) was proved to be the most influential determinants of student perceived service quality.

This result supports and builds on the extant literature, thus, confirming the result of Anderson et al. (1994), which concluded that the positive impact of quality on customer satisfaction is intuitive. This result was also consistent with those of Kenny and Khanfar (2009), which
conditioned firms to provide exceptional service quality to customers (online students), in order to satisfy them. In addition, they suggested that both student perception of quality and student satisfaction have been found to be antecedents of repurchase intentions. According to the findings, students are satisfied with the quality delivered by their educational institutions.

The second hypothesis was assuming that satisfaction has a positive impact on loyalty. The findings proved empirically that there is a strong positive direct relationship between satisfaction and loyalty. If the students show satisfaction toward their institutions, they will, consequently, demonstrate loyalty by returning and completing their Master’s degree, recommending their universities to others, and spreading positive word-of-mouth. These findings were in accord with the results of studies done by preceding authors (Heskett et al., 2008; Kiyani et al., 2012; Helgesen, 2006; Chiou and Droge, 2006; Dib and Alnazer, 2013; Helgesen and Nesset, 2007; Alves and Raposo, 2007).

The findings of this study verify that loyalty is an ultimate dependent variable of satisfaction. If the students are satisfied, they will be loyal to their educational institutions. These results are not encountered by many researchers who supported an indirect relationship between student satisfaction and student loyalty through introducing trust and commitment factors in the relation between satisfaction and loyalty (Rojas-Méndez et al., 2009; de Macedo Bergamo et al., 2012; Agrawal et al., 2012).

The main objective of this research was to find the drivers of student loyalty, and to highlight the importance of studying the path that leads to loyalty and the sequence of relationships among service quality, satisfaction, and loyalty. Using regression analysis, the results of the study showed that perceived service quality is an antecedent to satisfaction, which is an antecedent to loyalty. The path that confirm loyalty to universities is the one that holds the student perceived service quality-student satisfaction-student loyalty chain. Students in higher education institutions should perceive the high quality of service in order to be satisfied, and consequently, be willing to remain in the same institution. This result is consistent with the work of Darsono and Junaedi (2006), which proved empirically that loyal customers move along the means-end chain of perceived quality, satisfaction, and loyalty. Their study showed that people form their attitudes toward a brand by learning about its different characteristics and integrating them into global affective evaluation, which is satisfaction. Consequently, loyalty will be generated.

**CONCLUSION**

The research findings have contributed and advanced in the extant literature and have some theoretical implications to various stakeholders.

The research findings offer empirical testing to determine the path that leads to student loyalty. It demonstrates that student perceived service quality and student satisfaction are both important antecedents of student loyalty; that is, student perceived service quality is positively correlated to student satisfaction, which is in turn positively correlated to student loyalty. These results contribute to service marketing literature.

Based on the extant literature, most of the researchers have correlated the student perceived service quality to student loyalty through the mediating of many constructs: satisfaction, value, trust, and commitment. It is discovered in the research findings that although perceived service quality has a positive impact on student loyalty, these two constructs are indirectly correlated through the mediating role of student satisfaction. By following the procedure
stated by Zhao et al. (2010), the mediating role of student satisfaction in relating student perceived service quality and student loyalty is partial competitive mediation.

There are some limitations in this study. Although all the proposed hypotheses were proved empirically by previous research studies, this research is based on cross-sectional data, which are collected at a single point in time; accordingly, it was not possible to explain neither the causal relationships among the variables (i.e., student perceived service quality, student satisfaction, and student loyalty) nor the reasons behind the observed constructs (Easterby-Smith et al., 2003).

This study was conducted within one private university in Lebanon, which is the Lebanese International University. As a consequence, findings cannot be easily generalized neither to all private Lebanese universities nor to universities in other countries due to academic, historical, and cultural differences.

Moreover, the perception of quality is measured from students’ point of view. Using only one stakeholder perception to measure service quality gives a limited focus. Some might argue that students are not the logical group that understand exactly the meaning of excellence in education and may have little knowledge of what to be expected in terms of quality offered (LeBlanc and Nguyen, 1997). Future studies should be done to analyze the perceived service quality from various stakeholder groups such as instructors, administrators, alumni, etc.

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