The Quality of University Service: Its Impact on Students' Satisfaction and Loyalty in Bangladesh State University

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ABSTRACT

The present study explores the effect on student satisfaction and student loyalty of higher education service quality dimensions. Ensuring quality improvement and implementation of strategies for the tertiary education sector has become critical. Moreover, the study also tests the mediating impact of university reputation and external prestige between university service quality and satisfaction and loyalty. Data has collected through a structured questionnaire from a sample of 390 graduate and undergraduate students of two public universities in Bangladesh. The study reflects that the performance on service quality dimensions of selected public universities is not satisfactory. The study results have shown that Teaching, Support services, Library and lab facilities, and internationalization significantly influence student satisfaction except for Administrative service and Hostel facilities. Teaching, Administrative Services, Library and lab facilities, and internationalization significantly influence student Loyalty. The mediating analysis has shown that student satisfaction partially mediates between service quality and student loyalty. The study results have also indicated that university reputation and external prestige partially mediate between service quality and student satisfaction and loyalty. The previous studies which measure service quality of Bangladeshi higher educational institutions have applied the SERVQUAL model, which is not suitable for an educational institution. However, this study has applied a higher education service quality model uniquely developed to measure higher educational institutions' service quality.

INTRODUCTION

In the educational sector, various researchers consider service quality because of its relevance and performance. Quality in higher education is a complex and multi-faceted concept. (Harvey and Green, 1993). No single definition or theory can capture the essence of 'quality' in the higher education sector. In this modern era, multiple groups of stakeholders are well concerned about service quality in the higher education sector (Marzo-Navarro et al., 2005). The higher education sector (e.g., skilled human resource, ethical citizen, research works, and many more) contributes to economic and social development. Notably, international and national rankings are regularly conducted, reflecting education quality in various countries' higher education sectors. Hence, Universities are in a continuous race to ensure quality education for their students (Carvalho&Mota, 2010; DeShields, Kara, &Kaynak, 2005). Tertiary institutions had to be concerned regarding how their students feel about their educational

experience (Bemowski, 1991). Moreover, Tertiary educators are calling to account for education quality (Abdullah,2006). Customer-orientation in higher education is a generally accepted principle, and performance indicators should address student experience (Owlia and Aspinwall, 1997). In recent years, universities in developing countries have been following developed world universities by introducing quality assurance to increase their teaching, study, and direct community service programs. The adoption and successful implementation of such quality assurance programs will be beneficial for developing countries (Lim, 1999). The higher education service is considered the most effective tool for development in less developed countries. However, there is little theoretical and empirical work on the quality of higher education in developing countries. It is also difficult to get statistical data on higher education quality from such countries due to bureaucratic and privacy issues (Maringe and Mourad, 2012).

Numerous studies have investigated the influence of service quality dimensions on student satisfaction and loyalty in higher educational institutions worldwide from various country contexts. (Annamdevula and Bellamkonda, 2016; Mendez et al., 2009; Parahoo et al., 2013; Jiewanto,2013; Hanaysha,2011). Several studies have been conducted in Bangladesh to investigate service quality and other factors on student satisfaction in higher educational institutions in Bangladesh (Asaduzzaman et al., 2013; Mazumder et al., 2014; Osman et al., 2017). However, these studies have not adequately represented the real scenario because they have severe limitations in various terms. Those studies have adapted service quality models from traditional business practices, whereas separate service quality models are more accurate than traditional service quality models, and higher educational institutions have utilized in other studies. The existing studies have suffered from limitations in research method contents. Also, only satisfaction in these works was evaluating as a dependent variable. (Rashid and Rahman, 2017; Asaduzzaman et al.,2013; Rouf et al., 2016).

Moreover, essential variables regarding higher educational institutions and the service industry have not been covered, emphasizing other scholarly works such as university reputation (Bontis and Booker, 2015) and external prestige (Sung and Yung,2008). From the Bangladeshi background, the current work is not adequate on this issue and is inadequate to guide academics and policymakers since Bangladesh's higher education institutions face enormous quality issues in education.

At present, the shifting nature and requirement of higher education services and a rise in competitive intensity necessitate higher performance levels in Bangladesh universities. Take appropriate action to improve universities' quality; the policymakers must know the existing service quality and the influencing factors that may affect student satisfaction and loyalty in higher educational institutions in Bangladesh. Hence, the current study aims to fulfill this objective by answering the following research questions:
1. How do public universities in Bangladesh perform higher educational service quality dimensions?
2. How do higher educational service quality dimensions influence student satisfaction and loyalty?
3. How university reputation and external prestige mediate between the overall service quality and student loyalty in public universities in Bangladesh?

Service Quality in Education
O'Neill and Palmer (2004) define service quality in higher education as "the difference between what a student expects to receive and his/her perceptions of actual delivery." According to Hill (1995), the evaluation of service quality in a student's case could range from encounters with office staff to encounters with tutors, lecturers, the head of departments, and more.

Oldfield and Baron (2000) stated that students have three main criteria that need to be satisfied with services. Requisite encounters have labeled, which essentially enable students to fulfill their study obligations; Acceptable encounters, which students acknowledge as desirable but not essential during their study and functional, encounter a practical or utilitarian nature.

Service Quality, Student Satisfaction, and Student Loyalty
Martha and Priyono (2018) showed a significant favorable influence of service quality towards student satisfaction and a significant favorable influence of student satisfaction towards student loyalty in 13 universities and colleges in Riau Province. Nevertheless, there is no significant and positive influence on the relationship between service quality and student loyalty. Fares et al. (2010) conducted

a study to test the impact of service quality, student satisfaction, and university reputation on student loyalty of International Islamic University Malaysia (IIUM). The study showed a significant favorable influence of independent variables on the dependent variable. Athiyaman (1997) demonstrated that perceived success is a result of customer satisfaction. The study also demonstrated the impact of perceived quality on the conduct of communication. The perceived consistency of behavioral purpose is more important than happiness in both the studies, using the two distinct pre-enrolment attitudes and disconfirmation steps. The findings also show that the pre-enrollment attitude has little or no direct impact on the post-enrollment attitude. A significant consequence of this higher education finding is that it is appropriate to coordinate all service meetings to increase customer satisfaction. It will, in turn, boost perceived efficiency.

Mendez et al. (2009) has explored the relative importance of relationship mechanisms between critical factors influencing student loyalty. Mendez using the following order: perceived standard of service, satisfaction, confidence, and engagement. The results indicate that perceived quality of service and student satisfaction does not directly translate into student loyalty, but rather indirectly through the mediation of trust and dedication.

Annamdevalu and Bellakmonda (2014) have conducted a study in the three oldest state universities in Andhra Pradesh in India to find the relationships between service quality, student satisfaction, and student loyalty education sector using structural equation modeling. This study tested the proposed research model and proved the mediator role of student satisfaction between service quality and student loyalty. Service quality is an essential input to student satisfaction.

Service Quality in higher education in Bangladesh

Academicians, education thinkers, education researchers, education policy planners, and other stakeholders agree that the quality of higher education in Bangladesh has been deteriorating steadily, in some areas quite alarmingly, over the last two decades (Salahuddin&Aminuzzaman, 2011). Osman (2017) has conducted a study to explore the relationship between the service quality model (SERVQUAL) and student satisfaction. Factor analysis, multiple regression, t-test, and Analysis of Variance (ANOVA) were employed to analyze data. A sample size of 119 gatherings from four private universities in Dhaka and respondents were students. Finally, 117 were found suitable for analysis. The study reveals that responsiveness, assurance, empathy, and student quality significantly influence student satisfaction. This assurance illustrated the most decisive influence on student satisfaction, followed by empathy and student quality.

Asaduzzaman et al. (2013) showed that service quality dimensions positively correlate with private university students' satisfaction in Bangladesh. Rouf et al. (2016) found that most students are satisfied with universities' facilities in Bangladesh. However, the study has conducted on 160 students from four public universities. The results of the study indicated that all five dimensions of service quality correlating with student satisfaction. Rashid and Rahman (2017) showed a significant service gap in all the selected service dimensions such as learning, teaching, recognition, assessment system, internet and library facilities, campus life, and non-academic administration in a science and technology university of Bangladesh.

The results also mirror that little more than half (54.1%) students are satisfied with the selected university's service quality and an almost similar proportion (52.1 %) of the students have a future interest in studying in the same university. Based on the literature mentioned above review, we can propose the following hypotheses:

H1: Higher education service quality dimensions (Teaching, Administrative service, Support services, Hostel facilities, Internationalization, Library, and lab facilities) have a significant influence on student satisfaction of public universities in Bangladesh.

H2: Higher education service quality dimensions (Teaching, Administrative service, Support services, Hostel facilities, Internationalization, Library, and lab facilities) have a significant influence on student Loyalty of public universities in Bangladesh.

H3: Student satisfaction mediates the relationship between service quality and student loyalty in public universities in Bangladesh.

University Service quality, University Reputation, Student Satisfaction, and Student Loyalty

The link between satisfaction and reputation has received minimal attention, and it found that satisfaction leads to reputation (Anderson and Sullivan, 1993). Parahoo et al. (2013) have shown that the drivers of student satisfaction in the Gulf region tend to differ from those determined in western contexts, with university reputation playing a pivotal role. Booker and Serenko (2015) showed that organizational reputation mediates the relationship between satisfaction and loyalty. Jiewonto (2012) has conducted a case study that aimed to identify the influence of SERVQUAL to the word of mouth influence mediated by student satisfaction and university image. The results indicated that SERVQUAL positively impacted student satisfaction and university image, impacting the positive WOM Intention. Therefore, based on the discussion and aims of the research, we can propose the following hypotheses:

H4: University Reputation has a mediating role between university service quality and student satisfaction in Bangladesh's public universities.

H5: University Reputation has a mediating role between university service quality and student Loyalty in Bangladesh's public universities.

University Service quality, External Image, Student Satisfaction, and Student Loyalty

An individual's beliefs about how outsiders view the organization are construed as an external image (Dutton et al., 1994) or perceived external prestige (PEP; Smidts et al., 2001).

Sung and Yung (2008) stated that members of the same organization might have different perceptions of their external prestige. Among several attempts to assess higher education programs' quality, rankings, and ratings generated by third parties or agencies are often used to attract prospective students.

Carmeli (2005) stated that when assessing an organization's prestige, external people consider different organizational aspects. On the other hand, insiders develop their view about the organization and its values and evaluate how outsiders view their organization. Andreasen (1997) showed that the Corporate image is positively correlating with perceived quality, customer satisfaction, and customer loyalty. Sung and Yung (2008) proved that perceived external prestige has the most substantial impact on students' positive attitudes. Therefore, based on the discussion and aims of the research, we can propose the following hypotheses:

H6: External Image has a mediating role between university service quality and student satisfaction in Bangladesh's public universities.

H7: External Image has a mediating role between university service quality and student Loyalty in Bangladesh's public universities.

Based on the literature mentioned above review and proposed hypothesis, we have formulated the conceptual framework of the study as below:
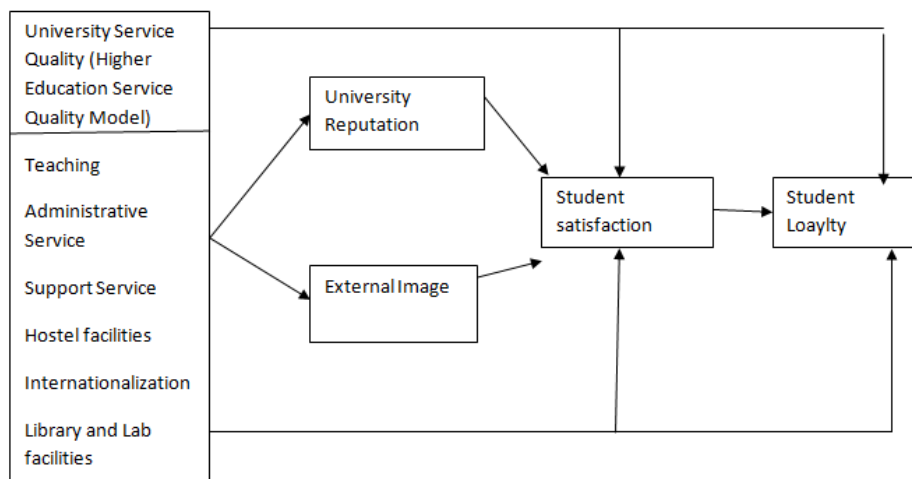

Figure 1.Conceptual Framework

The conceptual framework shows that the quality model of higher education services affects student satisfaction and student loyalty. The figure shows that university reputation and external prestige positively influence university service quality and student satisfaction.

The figure also shows that university reputation and external prestige positively influence university service quality and student loyalty.

METHODS

The research philosophy of this study basically on positivism. The study has developed hypotheses from previous studies and then test those hypotheses through empirical testing. This study is descriptive and quantitative, aiming to investigate the impact of university service quality dimensions on student satisfaction and student loyalty with the Mediating Role of External prestige and University Reputation.

Selection of Sample and Data Collection

The study is empirical and based on the primary data. The data has collected from students of selected public universities in Bangladesh. The study population consists of the students of two public universities from the southern part of Bangladesh. The data collection has carried out on a sample of 500 respondents by distributing structured questionnaires in November- December 2019.

The respondents of the study have chosen through simple random sampling. All of the respondents who have participated in the study are students of two recognized public universities in Bangladesh (Patuakhali Science and Technology University and Barisal University). A group of BBA students has been given proper instructions and sent as interviewers. The questionnaire is compiling so that it was possible to gather extensive information on the respondents' demographic characteristics.

The questionnaire contains items regarding students' views on higher education service quality dimensions in their universities, their perception of university reputation and external image, student satisfaction, and loyalty toward their university. Around 500 questions have to distribute in the selected public universities of Bangladesh, and 390 filled up respondents completed the questionnaire. Hence, the response rate is 78%, which is entirely satisfactory.

Method of Data Analysis

The data has analysis using the statistical application SPSS (version 23.0). The questionnaire items' reliability and validity checked through Cronbach's alpha values, composite reliability, and average variance extraction values. The values of reliability and validity testing cross the cut off values to justify the measurement items. The structural equation model has been used to investigate the impact of university service quality dimensions on student satisfaction and student loyalty with the Mediating Role of External prestige and University Reputation. The study investigates the direct and indirect impact of independent and mediating variables on dependent variables. Hence, SEM is an appropriate tool to investigate such relationships.

Scale and Measurement

Higher education service quality performance has been considered a multidimensional construct consisting of five elements: Teaching, Administrative service, support service, hostel facilities, and social and environmentally responsible dimensions. Each of the components has been measured reliably with multi-item scales. The researchers measure higher education service quality dimensions, student satisfaction, loyalty, university reputation, and external prestige through a five-point Likert scale (1 = strongly disagree," and 5 = Strongly agree. The researchers will adapt questionnaire items from Allemdevula and Bellamkonda (2016) to measure the higher education service quality performance, student satisfaction, and loyalty.

The measurement items used by Allemdevula and Bellamkonda (2016) can be applied in the Bangladeshi context because the factors adopted by this study are consistent and standard for any higher educational institution's service quality performance. Moreover, the study has conducted in India, which is a neighboring country in Bangladesh. To measure university reputation and external image, the researchers will adapt questionnaire items from Sung and Yang (1997).

RESULTS
Demographic Characteristics of the Respondents
Among the 390 respondents, more than 70 % are male, and the rest are female. More than 80 percent of the respondents are undergraduate level students from different semesters. More students enrolled in undergraduate levels in higher educational institutions in Bangladesh; hence, more undergraduate level students are appropriate here. More than 95% of the study respondents are unmarried, which reflects the original scenario.

Reliability and Validity Analysis
The variable discriminant validity and convergent validity have to verify that a conducted confirmatory factor analysis (CFA) and the measurement models showed a good fit between the model and the data. Although the chi-square was significant, the CFI, AGFI, RMR, and GFI values are within a satisfactory level, ensuring a good fit of the model. The significance of the t-values for each path coefficient of the CFA model has evaluated to ensure convergent validity (Fornell and Lacker, 1981); the construct is estimated average variance extracted (AVE) was above .50, and the composite reliability (C.R.) was above .70 confirming the convergent validity. According to Fornell and Lacker (1981), all construct AVE estimates should be larger to demonstrate discriminant validity than the corresponding squared inter construct correlation estimates. All of the constructs passed this requirement, and thus convergent validity was confirmed.

Table 1. Performance in Higher Education Service Quality Dimensions

University Service Quality Dimensions	Sample Size	Mean Value	Standard Deviation
Teaching	390	3.46	0.69
Administrative Service	390	2.72	0.96
Support Services	390	2.97	0.73
Library and Lab Facilities	390	2.84	1.14
Hostel Facilities	390	2.79	1.04
Internationalization	390	2.96	1.11
Satisfaction	390	3.15	0.92
Loyalty	390	3.01	0.84
University Reputation	390	3.08	0.83
External Prestige	390	3.25	0.78

Table 1 shows the mean value of university service quality dimensions from public universities' perspectives in Bangladesh. As far as these descriptive statistics are concerned, the universities' performance on the "Teaching" dimension is at the highest level (with a mean value of 3.46 on a 5-point Likert scale) compared to other quality dimensions.

The other five dimensions, administrative service, support services, library and laboratory facilities, hostel facilities, and internationalization, have a mean value below 3.00 (neutral value). The result indicates that the students consider that service quality is not up to the level.

Table 2. Impact of University Service Quality Dimensions on Student Satisfaction

Hypothesized Relationship	Estimate	S.E.	C.R.	P
Teaching	.312	.051	5.550	***
Administrative services	-.015	.037	4.484	.678
Support Services	.131	.048	-.517	.007
Library and Lab facilities	.178	.031	7.519	***
Hostel Facilities	-.044	.034	1.667	.201

Hypothesized Relationship	Estimate	S.E.	C.R.	P
Internationalization	.323	.032	2.089	***

Table 2 shows the summarized results of H1. The hypothesized relationships of Teaching, support services, Library and lab facilities, and internationalization are significant, with a 5% significance level (P-value < 0.05). However, Administrative services and Hostel facilities have little influence on student satisfaction levels. Therefore, Hypotheses 1 is not fully supported but partially supported.

Table 3. Impact of University Service Quality Dimensions on Student Loyalty

Hypothesized Relationship	Estimate	S.E.	C.R.	P
Teaching	.274	.049	6.086	***
Administrative services	.160	.036	-.415	***
Support Services	-.024	.047	2.707	.605
Library and Lab facilities	.226	.030	5.739	***
Hostel Facilities	.055	.033	-1.278	.095
Internationalization	.064	.031	10.128	.037

Table 3 shows the summarized results of H2. The results depict that Teaching, Administrative Services, Library and lab facilities, and Internationalization significantly influence student loyalty level with a 5% significance level (P value less than 0.05). However, support services and Hostel facilities have little influence on student loyalty (P-value 0.605 and 0.095, respectively). Therefore, Hypotheses 2 is not fully supported but partially supported.

Table 4. The Direct Impact of Service Quality on Loyalty

Mediating Path	Direct Effect without Mediator Variables with the Significance level	Direct Effect of Independent Variable on Mediator Variable with significance	Direct Effect of Independent and mediating Variable with significance	Comment
Service Quality to Satisfaction with Loyalty	3.26 (0.00)	4.04 (0.00)	2.22 (0.00)	Partial Mediation
Service Quality to University Reputation to Satisfaction	4.04 (0.00)	3.293 (0.00)	3.348 (0.00)	Partial Mediation
Service Quality to University Reputation to Loyalty	3.26 (0.00)	3.293(0.00)	1.860 (0.00)	Partial Mediation
Service Quality to External Prestige to Satisfaction	4.04 (0.00)	4.93 (0.00)	3.488 (0.00)	Partial Mediation
Service Quality to	3.26 (0.00)	4.93 (0.00)	2.389 (0.00)	Partial Mediation

Mediating Path	Direct Effect without Mediator Variables with the Significance level	Direct Effect of Independent Variable on Mediator Variable with significance	Direct Effect of Independent and mediating Variable with significance	Comment
External Prestige to Loyalty				

Following Baron and Kenny's approach, the researcher testing the study variables' mediating effects to test H3, H4, H5, H6, and H7. Table 4 shows that student satisfaction has a partial mediating effect between university service quality and student loyalty.

The direct impact of service quality on loyalty has a coefficient value of 3.26 (P-value = 0.00), but the coefficient value has reduced with mediating variables student satisfaction (coefficient value 2.22, P value=0.00). Hence, H3 was partially accepted. Moreover, the table also shows that university reputation and external prestige partially mediates the impact of university service quality on student satisfaction and student loyalty.

The coefficient value of the direct impact of service quality to student satisfaction (4.04, P-value = 0.00) has reduced (3.348, P-value 0.00) when tested with university reputation (3.348, P value=0.00). The inclusion of university reputation has also reduced the coefficient value from 3.26 (P-value 0.00) to 1.86 (p-value 0.00) when tested with the impact of service quality on student loyalty.

The mediating impact of external prestige has also shown the partial mediating impact on service quality's influence on satisfaction and service quality to loyalty relationship. Therefore, H4, H5, H6, and H7 are all partially accepted.

DISCUSSION

The research investigates public universities' service quality performance by applying the higher education service quality model. Moreover, the study aims to show higher education service quality dimensions on student satisfaction and loyalty. The research shows the mediating influence of student satisfaction between university service quality and student loyalty. The study also shows the mediating influence of external image and university reputation between university service quality on student loyalty and student satisfaction. The study's result is consistent with several prior studies (Asaduzzaman et al.,2013; Rashid and Rahman,2017; Osman, 2017; Annamdevalu and Bellakmonda,2014; Mendez et al.,2009; Serenko,2015; Jiewonto,2012; Yung, 2008). However, the study's findings are somewhat inconsistent with some other prior studies, such as Rouf et al. (2016).

The result of the study shows that the performance on service quality is below satisfactory. The performance on significant dimensions of higher education service quality includes administrative service, support services, library and lab facilities, internationalization, and hostel facilities below neutral value from students' perspectives. The 'Teaching' dimension's performance is highest compared to other dimensions but not satisfactorily. Hence, there are lots of areas where administration and policymakers must focus on improving the performance level. It is worth mentioning that without a sufficient amount of financial allocation, it will be tough for university administrations to perform well in performance dimensions, especially in the library and lab facilities, hostel facilities, and support services areas. The government budget allocation for public universities is the primary source of financial resources to work in such areas. However, the allocated budget for public universities is not up to many public universities in Bangladesh, and all the universities do not have sufficient budget. Hence, universities must find alternative ways of funding to develop their performance level.

Many foreign universities have strong alumni and corporate networks through which a considerable amount of funding was managing. In addition to that, those universities have their earning sources, and they employ students as part-time workers in many of their official works, which practice is absent in Bangladesh. Many people are working at public universities in Bangladesh, and much money has been investing there. Hence, such type of cost-cutting measures can assist a lot in the university administrations. The study demonstrates that teaching, support services, library and lab facilities, and

internationalization significantly impact student satisfaction. Therefore, authorities and educational policymakers must take appropriate steps to improve those performance dimensions. Nevertheless, the study's surprising finding is that administrative service and hostel facilities have no significant impact on student satisfaction.

A probable reason is in Bangladesh, students of the public university have minimal contact with administrative service employees. Every public university in Bangladesh offers accommodation to the students with a little charge, and it has become a common trend. Hence, a possible explanation for the insignificant effect of hostel facilities on satisfaction is this factor has been considered a 'hygiene' factor by the students, and the absence of this factor with proper performance can cause profound dissatisfaction with the students. The study depicts that Teaching, Administrative service, Library and lab facilities, and internationalization have a significant impact on student loyalty. An important fact is 'Administrative service' has been proven as a significant factor to enhance customer loyalty, although this factor has not shown a significant impact on student satisfaction. This finding implies an essential direction to recommend other students and spread positive word of mouth; university policymakers should emphasize an efficient 'Administrative Service.' The study shows that university reputation and external prestige mediates the relationship between university service quality and student satisfaction. However, the students' perception regarding their university reputation and external image is not up to the mark. Hence, there are lots of scopes to make positive contributions to these two factors. At present, several international rankings exist to evaluate the quality of universities situated all over the world.

However, the position of the universities in Bangladesh in those rankings are not satisfactory. University administrations must take appropriate measures to secure a good position in those rankings. The public relations departments of Bangladesh's public universities are not so excellent at enhancing and maintaining their reputation and image. The personnel responsible for those positions have insufficient expertise due to the lack of training and relevant academic background. Therefore, adequate steps should take here to ensure that a good experience takes by the staff responsible for working on the university's reputation. Another issue is that the internet existence of public universities is relatively low. Nowadays, people search for a particular university's websites to gain information regarding the teacher's profile, rankings, and research projects run by a particular university, and more. However, most public universities are not concerned about this issue and do not update important information that cannot demonstrate that particular university's actual status. The universities in North America and Europe maintain official Facebook and Twitter pages where stakeholders can contact and get the required information.

Future Research Directions

This research has limitations that may provide scopes for future research works. This research work's findings cannot be generalized; hence, future studies should apply this model with larger random samples or samples from other public and private universities, with other stakeholders (e.g., professors, university employees, and more). Future studies can also incorporate a qualitative or a field survey approach into the proposed framework that may help future studies develop a more holistic theoretical framework.

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Appendix

Measurement Items
Teaching
1. Teachers complete Syllabus on time
2. Teachers follow the Syllabus strictly
3. Teachers responsive and Accessible
4. Teachers Continuously evaluate the student's performance
5. Teachers follow good teaching
Practices
6. Department has Sufficient Academic Staff
7. Teachers treat all students in an equal manner
6. Students are Informed promptly of Changes in the university

Administrative Services
1. Admin Staffs Provide Service without delay.
2. Admin staffs are courteous and willing to help
3. Admin Staffs Provide Error-free work
4. Admin maintains accurate and
Retrieval Records
5. Admin staffs are accessible during Office hours
6. Students are Informed promptly of Changes in the university

Support Services
1. This University has Sports & Recreation Facilities
2. This University has Safety and Security
Measures
3. This University Provides good Medical Services
4. This University has good Internet Facilities
5. This University provides Counselling

Services
Hostel Facilities
   1. University hostels provide quality
Food
   2. Maintenance of Hostels is satisfactory in this university
   3. This University has adequate hostel facilities.

Library and lab facilities
   1. Library has Sufficient resources
   2. University has adequate Computer
Lab facilities
   3. Department has adequate facilities

Internationalization
   1. University has Students from abroad
   2. University promotes International
Activities
   3. University has teachers from abroad

Satisfaction
   1. Happiness receiving service from the University
   2. Opinion about the University service quality is favorable
   3. Student satisfying with the service received from the university

Loyalty
   1. When faced with the same choice again, still choose the same university
   2. Suggest university to someone else to prepare for the future.
   3. Feel proud to study at this University
   4. Prefer Higher Studies to study at this University
University Reputation
   1. This university puts student care as the top priority
   2. This university looks like a university with strong prospects for future growth;
   3. This university is well-managed
   4. This university is socially responsible
   5. This university is financially sound

External prestige
   1. This university is looked upon as a prestigious University in society overall
   2. Friends and family members think highly of this university
   3. This university successfully retains a prestigious place in various university ranking systems;
   4. Media coverage of this university is very positive.