The Role of Student's Satisfaction in Mediating Relationship Between Service Quality and Brand Image

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Abstract. In the current era, higher education institutions faced many issues due to its weak and improper education system. Many factors are involved and service quality is one of them which is majorly considered within this paper. To explore its importance, Tangibles, Reliability, Responsiveness, Assurance and Empathy based Service Quality features are considered as independent variables, and University Brand Image is considered as dependent variable. While, student satisfaction is mediator between these relationships. To collect data, online survey-based quantitative research is carried out with close-ended questions among different intermediates, graduates, masters and other degree-based students. After segregating them based on their age, gender and qualification-based statistics, a 'Confirmatory Factor Analysis' and 'Structural Equation Modeling' based SPSS software analytics has been implemented and outcomes help to justify/nullify tested hypothesis. According to the findings, there is significant impact of empathy, assurance, and responsiveness focused service quality features on enhancement of brand image under significant influence of mediator i.e., student satisfaction. However, reliability and tangible based service qualities do not cause a major impact on favorable Pakistani universities' brand image in current consumer market. This challenging paper will help current administration and policymakers of Pakistani universities and also its government to make such decisions that are in favor of upgrading their education standard for Pakistani students. To conclude, the lack of a qualitative or mixed technique of research, as well as a lack of comparative analysis, may have an influence on the acceptance of its authentic results, which can be addressed by future researchers.

Keywords: Service quality · Student satisfaction · Brand image

1   Introduction

Pakistan is such a developing state which has relatively young higher education sector. At the time of partition, this country only had one university named as the University of Punjab in Lahore which has less than 10000 students [1]. This state is considered as one of those states that have large number of the youth population. Its tertiary enrollment

increased from 305,000 in 1990 to 1.9 million in 2018, according to UNSECO statistics [2]. Its government funding to the public higher education system accounts for all-around 70% of the overall operating cost which is quite insufficient for its sustainable growth.

The problem statement of current research paper is to critically evaluate the impact of service quality factor for enhancing the brand image of Pakistani Higher Education Institutions among the student-focused consumer market by specifically considering the mediating role of their satisfaction level towards the university's performance in the current era. The following are the primary goals of this informative paper:

- To understand impact of service quality for upgrading brand image.
- To critically evaluate the influence of tangible, reliability, responsiveness, assurance and empathy-based service qualities to enhance university brand image.
- To investigate the significant mediating role of students' satisfaction between relationship of efficient service quality and university brand image.

This paper is an informative approach whose major aim is to provide efficient opportunities in order to upgrade the higher education standard within this state. In previous studies, many scholars majorly worked on exploring the influence of service quality's importance for enhancing the student satisfaction and the brand image of a university [3] but in other state's perspective by considering their educational background statistics. Nobody majorly worked on considering the Pakistan higher education system and its brand image among the current students, which is badly affected due to lack of proper quality features and improper educational budget allotment by its state's government.

This paper is a challenging and innovative approach to majorly focus on student's satisfaction provoking variables like empathy, assurance, responsiveness, reliability and tangible based services quality within the current Pakistani education system. This data will help its policymakers to develop such educational policies that secured its educational institutes' brand image in the current era.

Moreover, the rest of the study is organized as follows; its second section is based on a literature review, the third section is the methodology portion in which data collection, research design, and measure-based information will consider. After this, the last section of this paper is based on results, analysis, discussion and conclusion, future implications, and future research perspectives.

2 Literature Review

2.1 Total Quality Management Theory

'Total Quality Management' (TQM) is such a methodology based on quality improvement bodies that majorly focused on service and customer-oriented features [4]. Within the business world, the service-based quality management theory is widely considered by the managers in their customer-oriented decision-making process [5]. Many scholars utilized this customer satisfaction provoking theoretical approach in their analysis to justify its influence in the business environment. According to business scholars, quality management is essential for the sustainable success of a supply chain and all-round all the operating activities of a company in a highly competitive market [6].

2.2   Tangible Service Quality and University Brand Image

To examine the relationship between efficient service quality and the university's brand image, many researchers have been made by the scholars stated that the service quality causes a major effect on enhancing brand image and behavioral intention of the target audience [7]. Because the efficient brand image of the university act as a pioneer factor for the sustainable long term growth of this institute in the current digital era [8]. Also, such a tangible source of efficient service result in upgrading customer loyalty towards the company's brand in a highly competitive market [9]. As a result, the following hypothesis is proposed:

H_1: There is a significant relationship between Tangible Service Quality and University Brand Image

2.3   Reliability Service Quality and University Brand Image

In 2019, Ade Delima and others majorly discovered the impact of reliability, provoking service quality on enhancing brand image on the consumer market. They stated that product quality, brand image, price, and promotion-based service quality play major partto upgrading efficient online performance of the company [10]. Also, many scholars justify this argument in their research where they concluded that reliable services enhanced the brand loyalty and their efficient performance level in the diverse competitive market; and in Pakistan, it becomes quite essential to ponder on this factor [11]. As a result, the following hypothesis has been proposed:

H_2: There is a significant relationship between Reliability Service Quality and University Brand Image

2.4   Responsiveness Service Quality and University Brand Image

To explore influence of responsive service quality on the upgrading the university brand image, different researches have been made by scholars by stating that if the company actively respond on the customer requirements on a timely basis then there will be more chances to retain the positive image in the consumer market [12]. Because such a strategic approach helps to satisfy the requirements and needs of the target audience. In 2019, Nurrahmawati stated for the private university administrations, it is quite essential to work for the responsive behavior in front of students to gain their confidence level [13]. As a result, the following hypothesis is proposed:

H_3: There is a significant relationship between Responsiveness Service Quality and University Brand Image

2.5   Assurance Service Quality and University Brand Image

According to [14], quality assurance strongly influences the target audience's confidence towards the company activities that result in enhancing its brand equity. The others also justified it by considering the significant relationship between store image and efficient retail service quality in enhancing the productive brand image for an advanced competitive market [15]. In 2018, the business scholars also stated that brand choice and

the continuance intention to promote the company's services is based on experience that portrays the customer behavior [16]. After considering this, the following hypothesis has been offered.

H_4: There is a significant relationship between Assurance Service Quality and University Brand Image

2.5.1 Empathy Service Quality and University Brand Image

To explore the empathy-based efficient services to enhance the brand image, Waseem Bahadur and others stated that employee-customer interaction act as a string mediator between employee empathy and its brand image in the consumer market [17]. Because according to Oriol Iglesias with others, such sensory brand experience directly upgrade the brand equity [18]. According to scholars, customer loyalty is majorly developed due to such empathy service quality and gain a competitive advantage [19]. So, the following hypothesis has been suggested.

H_5: There is a significant relationship between Empathy Service Quality and University Brand Image

2.5.2 Mediating Role of Student Satisfaction Between Tangible Service Quality and University Brand Image

Within the educational sector, student satisfaction plays a main role to improve and upgrade the efficient university brand image in the advanced competitive market [20]. Majority of advanced technical and vocational education and training are given by the standard universities to enhance their satisfaction with the institute operating activities [21]. After considering the previous scholars' articles on the related topic, the following hypothesis has been proposed.

H_6**:** Student Satisfaction plays a significant mediating role between Tangible Service Quality and University Brand Image

2.5.3 Mediating Role of Student Satisfaction Between Reliability Service Quality and University Brand Image

According to [22], the reliable and standard educational services from the university enhanced its brand image in the students' consumer market that results in the sustainable growth of this educational institute.

H_7: Student Satisfaction plays a significant mediating role between Reliability Service Quality and University Brand Image

2.5.4 Mediating Role of Student Satisfaction Between Responsiveness Service Quality and University Brand Image

According to previous researches, student satisfaction act as a strong mediator in enhancing the brand image in the consumer market. They stated that such responsive service quality results in enhancing the corporate image and satisfaction level of the traded for-profit university [23]. In Pakistan education sector's perspective, it becomes concluded that the efficient service quality directly enhanced the student satisfaction level within

Pakistani student where the university reputation, price, and culture plays a significant mediating role within this mechanism [24]. Consequently, the following hypothesis has been put forth from the relevant previous researches.

H_8: Student Satisfaction plays a significant mediating role between Responsiveness Service Quality and University Brand Image

2.5.5 Mediating Role of Student Satisfaction Between Assurance Service Quality and University Brand Image

In the International Journal for Quality Research, [25] stated that university image and its program quality based perception among the student plays a significant role in enhancing the sustainable profit margin within this state. Also, [26] explored the importance of student satisfaction in enhancing the assured high-quality services in creating a positive behavioral approach to gain admission in such reliable and highly demanded university. Consequently, it has been proposed that:

H_9: Student Satisfaction plays a significant mediating role between Assurance Service Quality and University Brand Image

2.5.6 Mediating Role of Student Satisfaction Between Empathy Service Quality and University Brand Image

In the current era, the empathy factor is such a service quality factor that directly impact on enhancing the customer-employer relationship in an advanced competitive market. Like in a higher learning institute, The ensured service quality and the institute's image are significantly related to upgrade the students' loyalty and positive word of mouth [27]. Therefore, the following hypothesis has been proposed:

H10: Student Satisfaction plays a significant mediating role between Empathy Service Quality and University Brand Image

3 Methodology

To critically evaluate, an online surveys based quantitative study has been taken into consideration as a suitable data collection method to objectively assess the impact of service quality on the development of Pakistani University's brand image. As, present research paper is majorly based on exploring Pakistan's university performance in the student's consumer market, so majorly current intermediates, graduates, masters, and other degree-level students considered for the accurate data collection mechanism. To collect the relevant data, different close-ended questions are widely distributed to the 550 respondents on which only 495 of them gave their valid response on the tested variables where the 269 respondents were males and 226 were females with the ratio of 54%:46%.

As far as its age-based demographic statistics are concerned, it is concluded that the frequency of active respondents within the age limit of fewer than 25 years old was 101 (with 33%), 203 of them were from 26 to 30 years old (with 41%), 111 of them were from 31 to 35 years old (with 22%) and only 20 of them were more than 35 years old (with 4%). Last, but not the least, the qualification-based segregation is concerned, it becomes

clear that 21% of respondents having intermediate, 49% of them having a bachelor's degree, 26% having master's degree, and only 4% having other related qualification factors.

To accurately measure the respondent outcomes on the tested variables, the five-point Likert scale (strongly disagreed = 1 to strongly agreed = 5) was widely used in this data collection procedure. Well, in order to test the service quality feature, some relevant indicators are used like its tangibility, reliability, responsiveness, empathy and assurance [28]. Well, student satisfaction in higher education was measured through applying the European Performance Satisfaction Index (EPSI) model where their expectation, pleasure and demand for admission were considered as measuring indicators.

While the brand image of university was measured by dividing it into six major questions related to the university performance, student's positive word of mouth, authentic degree etc. [29, 30]. To accurately measure the tested variables' outcomes, for its analytical section, the statistical tests based on structural equation modelling (SEM) and confirmatory factor analysis (CFA) have been used.

4   Results and Analysis

In order to make accurately justify the proposed hypothesis, structural equation modeling (SEM) based extremely flexible and broad framework for accurate data analysis is used that helps to accurately analyze the structural relationship.

All of the observed CFA indicator values, including CMIN/DF, GFI, IFI, CFI, and RMSEA, are within their respective threshold ranges. In the same way as the observed CMIN/DF value is 2.050 (less than 3), the GFI value is 0.878 (higher than 0.88), and the IFI value is 0.97 (less than 0.90), and the CFI value is also 0.97 (greater than 0.9), and the RMSEA value is 0.05 (less than 0.08). This shows that all the tested variables are accurately uploaded on the statistical model and its graphical outcomes have been seen in the Fig. 1.

According to the results, the tangible quality service value is less deviated from its mean position. Well, assurance-based service quality highly deviates from its mean position. But the other independent and mediating variables highly deviate from its mean
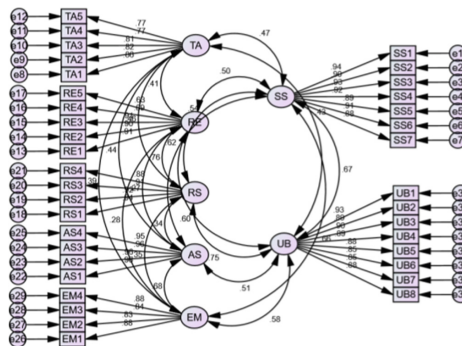

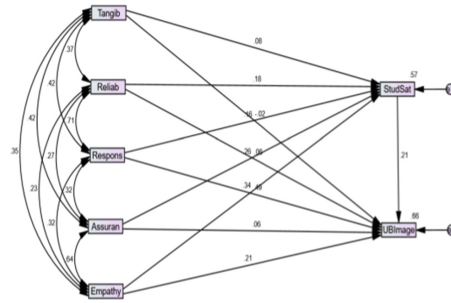**Fig. 1.** Confirmatory Factory Analysis Results

Fig. 2. Structural Equation Modelling Result

position that reduces their favorable influence on the university brand image which is moderately deviated from its mean position. It then discusses its KMO and Bartlett's test-based statistics (Fig. 2).

According to the statistics of structural equation modelling, all of the investigated variables that are independent, dependent, and mediator have a significant relationship to each other. According to the above-mentioned outcomes, the empathy factor causes a 34% change in the Pakistani student satisfaction and a 29% change in university brand image within this developing state. Well, the assurance also causes a favorable influence on both student satisfaction by 26% and university brand image by 12%, and the responsiveness caused a 16% positive influence on the student satisfaction and 52% influence on the university brand image within this state.

As far as the reliability and tangible factors-based influence are concerned, it becomes concluded that the reliable service quality cause 18% deviation in the student satisfaction and only 9.4 in the university brand image; while, the tangible service quality caused the least impact like 8.2% in student satisfaction and -0.1% on the university brand image within Pakistan education system. As far as the student satisfaction based mediating role is concerned, it becomes clear that its existence causes 21.3% favorable influence on the development of a productive university brand image in the current era. Its graphical representation is given below.

5   Discussion and Conclusion

It is evident from the findings that empathy has a significant impact, responsiveness and assurance-based service quality features in enhancing the favorable student satisfaction towards the university's brand image within the current Pakistan education industry. Well, the reliability and tangibility-based service quality are unable to derive favorable outcomes on enhancing the positive brand image of higher education institutes among the students.

According to previous scholars, the efficient customer interested provoking service features within the higher education industry caused a major impact on upgrading the education standard within a state [31, 32].

Because it enhances confidence level of student that the university administration majorly works for the bright future and loyal towards them [33, 34]. All the previous

scholars' data shows that there is a major need to make some efficient changes in the service quality factors throughout this stage of development in highly competitive era because through the advanced education standards, there are more chances that the unemployment rate and different socio-economic issues within this state can be resolved.

Resultantly, it is concluded that there is a significant relationship between empathy, responsiveness & assurance based social quality features and the development of positive brand image of the university under the influence of efficient mediator, student satisfaction. According to the CFA and SEM-based statistical results, it is proved that the existence of reliability and tangible service quality does not cause a major influence on upgrading the Pakistan universities' image among their target audience.

Overall, this is an important study for the present government and policymakers in the education sector to improve their service quality features-based policies and decisions for Pakistani young. Also, this data can be significantly utilized by the Pakistani youth and its state to understand their responsibility regarding upgrading the education status within this state. Furthermore, allied academics can use its accurate information.

However, its shortcomings, such as a lack of a quantitative or mixed methodology of study and a lack of comparative analysis, may affect the authenticity of its findings, which may be readily addressed by upcoming researchers in their subsequent studies.

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