

**Examining Students' Perception about Service Quality: A case of
Higher Education Sector of Lahore, Pakistan**

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Owing to the stiff competition, Universities can get a sustainable competitive advantage by focusing on quality rather than quantity. This paper aims to investigate the students' perspective about the provision of quality services and instilling the role of higher education policies for a sustainable outcome. In this regard, a bundle of academic and administrative services is used as precursors, students' satisfaction as a mediating variable, students' loyalty as the outcome variable, and higher education policies as the controlling variable. For data collection purposes, students (N= 300) studying in public and private sector universities of Lahore, were approached in their educational jurisdiction with the formal approval of relevant university administration. W A Confirmatory Factor Analysis was carried out for validity concerns and regression analysis to determine the proposed relationship among selected variables. The findings revealed that the bundle of quality services provided by universities have a significant positive contribution in enhancing the students' satisfaction level influencing their loyalty to the university. Most specifically, higher education policies are proved as a controlling factor to improve the quality of service provision by Higher Education Institutes.

Keywords: Academic services, Administrative services, Students' satisfaction, Students' loyalty, Higher Education Policies, Pakistani Universities¹

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Since 1970, educational institutes are considered as an economic engine of the nation to transform the raw human resource into a knowledgeable and economic resource (Gettman & Gelfand, 2017; Hanushek, 2018). The dynamic economic contingencies escalate the stiff competition among educational institutes to attract, maintain, and retain customers for long-run benefits (Homburg et al., 2018). Therefore, it is very important and critical for educational institutes to understand the perceptions, requirements, and expectations of existing/potential customers regarding the quality of service provision. (Ryals, 2015; Zameer et al., 2020).

Despite the most researched and debated topic of 'service quality' among the researchers and academicians (Kotler et al., 2018), still, researcher entitled it as an abstract and elusive construct requires quantification and clarity for its identity (Baron, 2019). Moreover, Sultan and Wong (2014) claimed that the notion of 'service quality' in the context of higher educational institutions is relatively a new term as compared to another service/manufacturing sectors. Here in the education sector, service quality is an integrated system-oriented approach classified into academic and administrative services that are influenced by the policies of the Higher Education Commission (Brown et al., 2018; Car et al., 2018; Muthamia, 2016).

From the extensive review of literature, it has been found that the spectrum of academic services includes a list of all activities, processes, and functions embodied into the quality of teaching services/practices, assessment tools, laboratory and library facilities (Manzoor, 2017; Muthamia, 2016; Voss & Gruber, 2018). While, the notion 'administrative services' refers to supporting services as non-academic services functioning as the quality of registration process, cafeteria, transportation, recreational activities, the social welfare system, and accommodation (Colton et al., 2014; Mhlanga et al., 2018; Odhiambo, 2016). 'Customers is king', an academic proverb highlighted the importance of customers in getting a competitive edge in the specific market (Faganel, 2015; Brown et al., 2018). Students as an academic king whose perceptions, judgments, actions, and behaviors write down the fate of academic institutions (Woltering et al., 2019). This relative importance

of students guides the academic sector to understand the students' emotions and feelings towards the service provision of universities to make them loyal for future association accordingly. The future association can be demonstrated in multiple ways; institutional preference over others, repetitive purchase intention in the future, spreading positive word of mouth, recommending others to join, patronize the preferred institution in the future, and paying the premium price over time (Helgesen & Nettet, 2017).

Rationale of the Study

Since 1970, Globally economic system witnessed a dramatic shift from the manufacturing system to the service system(Grönroos & Ojasalo, 2014; Youtie & Shapira, 2018). This revolutionary transformation proved the higher education sector as an economic engine of the nation(Abdullah & Kalianan, 2019; Sultan & Wong, 2014). In conjunction with this significant importance, public and private sector Higher Education Institutes (HEIs) faced stiff competition to drive efforts for sustainable competitive advantage instead of short term visibility or market share (Quintal et al., 2018). While, students have multiple opportunities to avail themselves nationally and internationally and it is quite challenging for the HEIs to satisfy, retain and make them loyal for future long-term connections and associations(Brotherton et al., 2015; Cervero, 2020). To address this major apprehension, an extensive review of previous research outputs highlighted that universities should understand the students' perceptions and expectations to become a market star (Helms & Nixon, 2020; Sdebatabeal., 2017).

In academic marketing research, the metaphor 'customer' is still controversial and debateable whose actions and reactions decide the fate of universities (Jeevarathnam et al., 2017). Few of the researchers claimed that customers of universities extended from students to parents, staff, community, government, funding agencies, employers and many more. However, students are nominated as 'primary customers who can act as brand ambassadors of HEIs, their level of satisfaction can lead towards happiness and satisfactory word of mouth of other relevant stakeholders (Al-Ghamdi, 2018; Jayasundara et al., 2019).

To work under the umbrella of the unique SERQUAL model, here it is important to operationalize the concept of 'Service Quality' as its meanings vary from person to person and situation to situation associated with their judgments, experiences, and feelings (Hune et al., 2016; Nadiri et al., 2009). Nadiri et al. (2019) emphasized that service quality is a multidimensional construct splits into two major distinct categories; academic and administrative services (Krishnamurthy et al., 2018; Peprah & Atarah, 2014). Earlier researchers are more focused on academic services (related to dimensions of an instructor, course delivery arrangements, learning resources, and assessments) to meet the expectations and demands of relevant stakeholders (Konstantinides et al., 2014; Tenopir et al., 2018). Moreover, a lot of research work has been done to address the notion of academic and administrative services in isolation by using different and terms in different eras (Arena et al., 2020; Casu & Thanassoulis, 2016; Franklin, 2019). But the comprehensive analysis and suggestive parameters are still needed to address in the academic context and the more specific role of Higher Education policies in regulating the business model of universities, how they can design and plan the service structure to satisfy the primary customers.

Therefore, the major impetus for this study is to narrate the academic and administrative services under the umbrella of "service quality" and its ultimate prolific outcomes in the form of students' satisfaction and loyalty. Another significant contribution of the study is to highlight the role of the Higher Education Commission (HEC) in the form of guidance and mentorship of HEIs to offer the guidelines or policy framework for contingent service structure.

To stimulate the above said reasons, a bundle of academic and administrative services are treated as independent variables, students' satisfaction as mediating variable, students loyalty as the dependent variable, and lastly higher education policies are considered as moderating variable to affect (positively or negatively) the association between a bundle of services quality (academic and administrative) and students' satisfaction level.

Hypothesis

Based on the arguments, the following hypotheses are postulated;

- i. Academic and Administrative services (bundle) are likely to have a positive significant association with students' satisfaction.
- ii. Academic and Administrative services (bundle) along with Students' satisfaction are likely to be have a positive significant association with students' loyalty.

- iii. Students' satisfaction is likely to act as a mediator between academic/ administrative services and students' loyalty.
- iv. Higher Education policies are likely to moderate the relationship between academic/ administrative services (bundle) and students' satisfaction.

Theoretical Framework

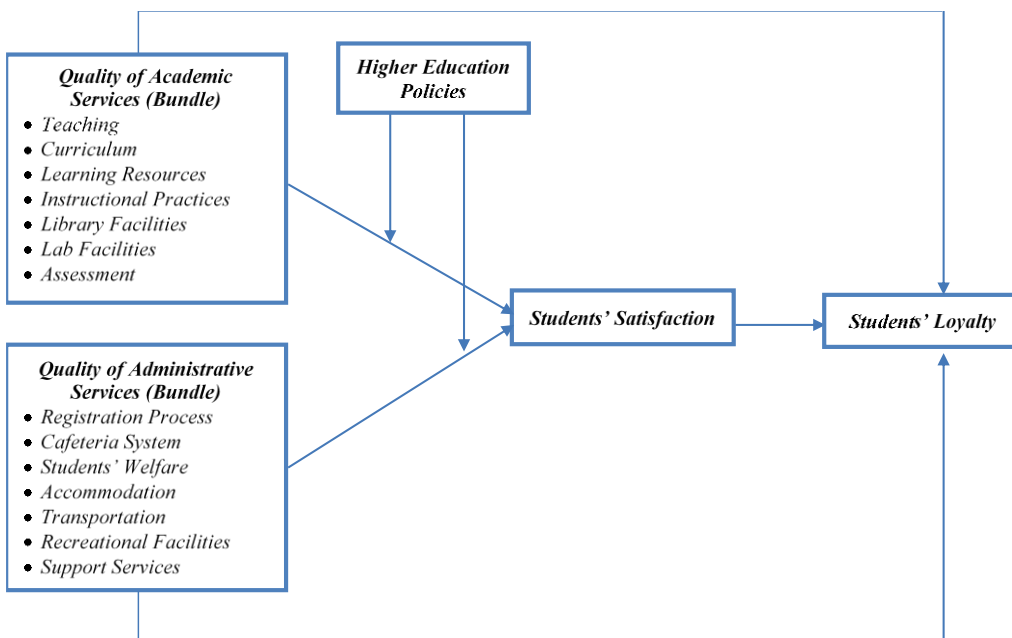


Figure 1: Theoretical framework representing the proposed relationship between selected variables

Method

Research Design

Following the positivism paradigm, this study uses a correlational research design to investigate the association between selected quality of service provision in bundle form (academic and administrative services). Thus, the positivism paradigm is the most relevant and appropriate approach to conduct a cross-sectional research using survey method as favored by (Robson & McCartan, 2016).

Sample

In this study, six universities (2 public and 4 private) of Lahore are selected as a sample by using a systematic sampling technique (Guha & Mishra, 2016). Students of the specific universities were treated as the unit of analysis. From our total sample (267 cases), 211 (79%) are male students and 56 (21) are female students. From which 189 (79%) are studying in private sector universities, 78 (21 %) are from public sector universities. It is observed that the majority of the response got from private sector universities. While with respect to the qualification of respondents, 31 respondents (11.8%) are Ph.D. Scholars, 102 (37.9%) are students of M.Phil, 61 (22.5%) are studying in Masters, 79 (29%) are doing a graduation degree.

Measures

As suggested by Rubin & Babbie (2016), survey design is the most rigorous quantitative analytical tool to identify and examine the proposed relationship between selected variables. In addition, 5-point likert scale was used to operationalize and measure all constructs adapted from existing published material as given below; the scale of Jayasundra et al. (2019) for academic services, the scale of Cho et al. (2016) for administrative services, the scale of Dalati and Al Hamwi (2016) for students' satisfaction, the scale of Oswald et al. (2015) for students' loyalty and scale of Patanduk, (2016) for Higher Education policy were used in the current study to measure the abstraction of selected constructs given above.

Procedure

To collect the data, a formal prior permission process was taken from competent authorities of selected universities to get a balanced response from the public and private sector both. A total of 300 questionnaires were randomly distributed among students of universities belongs to Lahore city, while received a response of 267 questionnaires with a response rate of 89%. Descriptive statistics are used to get a description of the demographic profile of the respondents. Moreover, to get the empirical output, AMOS 22 was used to confirm the validity concerns of selected constructs and to test the proposed association between selected variables.

Ethical Considerations

It is ensured that all the participants took voluntarily part in the study against the selected constructs and poorly informed the participants. The researcher confirms the confidentiality and anonymity of the data provided by the respondents as the primary research consideration. It is being assured to all participants that their individual distinctiveness and response were kept confidential and will be used for research purposes only.

Results

Confirmatory Factor Analysis

CFA (Confirmatory Factor Analysis) is the most appropriate technique to conform the validity concerns of the specified construct and to check the overall fitness of the proposed model.

Table 1

Results of CFA, Convergent Validity and Construct Reliability

Variables	Standard Loadings	AVE	CCR	Cronbach Alpha
Academic Services (bundle)	0.729	0.613	0.807	0.987
Administrative Services(bundle)	0.816	0.723	0.793	0.873
Students' Satisfaction	0.831	0.691	0.878	0.959
Students' Loyalty	0.907	0.587	0.722	0.876
Higher Education Policies	0.976	0.654	0.832	0.779

The output of Table 1 shows the values of standard loadings, AVE and CCR of the given construct are > than .60, 0.50, and 0.70 (threshold values). The acquired results exhibit the construct reliability and convergent validity of selected variables.

Table 2
Model Good Fitness

Values	Direct Effect	Indirect Affect
GFI	.933	.921
AGFI	.838	.863
NFI	.926	.982
TLI	.954	.931
CFI	.932	.987
RMSEA	.021	.042

Table 2 reveals the overall moderate fit indices of four factors of CFA for the direct and indirect effect/mediation model reflected through the values of GFI, AGFI, NFI, TLI, CFI & RMSEA as topologies used Fornell (2007) and Hair et al. (1989).

Table 3

Discriminant Reliability and Correlation

	AVE	MSV	ASV	Academic Services	Administrative Services	Students' Satisfaction	Students' Loyalty	Higher Education Policies
Academic Services (bundle)	0.531	0.501	0.248	0.432				
Administrative Services (bundle)	0.724	0.218	0.376	0.621	0.453			
Students' Satisfaction	0.536	0.432	0.532	0.593	0.621	0.823		
Students' Loyalty	0.692	0.427	0.376	0.623	0.543	0.732	0.782	
Higher Education Policies	0.721	0.341	0.321	0.463	0.624	0.543	0.657	0.537

Note: Diagonal value: Square root of AVE and Non-diagonal value: Correlation

The output of Table 4.1.3. demonstrates the results of discriminant validity in which AVE of all constructs $>$ MSV & ASV. while the square root of AVE of each construct $>$ its correlation.

Descriptive Statistics

Table 4

Statistical Description of Data

Name of Variables	N	Min.	Max.	Mean	Std. D.
Academic Services (bundle)	267	1	5	3.21	1.123
Administrative Services (bundle)	267	1	5	3.43	1.032
Students' Satisfaction	267	1	5	3.20	.965
Students' Loyalty	267	1	5	3.53	.921
Higher Education Policies	267	1	5	3.32	.934

Table 4 revealed the results of descriptive statistics in the form of minimum, maximum, mean, and standard deviation. Against 53 items survey form, respondents' feedback varies between 1-5. The output shows the variation of values between the following range; mean values (3.20-3.53) and standard deviation (0.921-1.123).

Correlation Matrix

Table 5

Correlation Matrix

Variables	Academic Services	Administrative Services	Students' Satisfaction	Students' Loyalty
Academic Services (bundle)	---	---	---	---
Administrative Services (bundle)	0.763* (0.023)	---	---	---
Students' Satisfaction	0.693* (0.010)	0.813* (0.023)	---	---
Students' Loyalty	0.569* (0.002)	0.654* (0.030)	0.921* (0.003)	---
Higher Education Policies	0.854* (0.045)	0.763* (0.021)	0.853* (0.027)	0.627* (0.013)

Note: Significant at 0.05 level***

Correlation is inserted to analyze the mutual association between all variables (IVS, MV, DV & MDV). The output exhibited that all

mutual associations are statistically significant at level 0.05 with the moderately and strongly associated/correlated with the students' outcomes varies between .569*-.921* (see table 5).

Regression Analysis (Direct and Indirect Effects)

SEM (Structural Equation Modeling) is used to check the direct and indirect effect of quality of service provision (academic and administrative services) in bundle form on students' satisfaction and students' loyalty along with the moderation effect of Higher Education Policies between IDVs and MV.

Table 6

Regression Analysis (Direct Effect)

Hypothesis tested	Independent variables	Dependent Variables (Students' Satisfaction)		Dependent Variables (Students' Loyalty)		Remarks
		β coefficients	P-value	β coefficients	P-value	
H1	Academic services (Bundle)	.723	0.031			Significant
H2	Administrative services(Bundle)	.324	0.020			Significant
H3	Students' Satisfaction			.631	0.001	Significant
H4	Academic services (Bundle)			.324	0.040	Significant
H5	Administrative services (Bundle)			.532	0.003	Significant

Note: Significant at 0.05 level***

Table 6 demonstrates the direct and indirect effect of different constructs of service quality on students' satisfaction and students' loyalty. The regression coefficients among academic services (bundle), administrative services (bundle), and students' satisfaction are (0.723, 0.324), while among academic services (bundle), administrative services (bundle) and students' loyalty are 0.631, 0.324, 0.532 and all constructs are significant at 0.05 level. The above output exhibited the support of our all hypotheses; 1, 2, 3, 4& 5.

Table 7

Regression Analysis (In-direct Effect)

Hypothesis tested	Paths	Dependent Variables (Students' Satisfaction)		Remarks
		β coefficient	P-value	
H6	AcadS \rightarrow StdS \rightarrow StdLoy	0.325	0.000	Statistically Significant Mediation
H7	AdmS \rightarrow StdS \rightarrow StdLoy	0.543	0.002	Statistically Significant Mediation

Note: Significant at 0.05 level***

Table 7 exhibits the indirect association of quality of service provision in the form of academic and administrative services with the students' loyalty through the mediation role of students' satisfaction. From the output, it has been inferred that students' satisfaction acts as a statistically significant mediator between the quality of bundle of both services and students' loyalty reflected through β coefficient=.325 for academic services and .543 for administrative services. While both mediation associations show partial statistically significant mediation at level .05. So, the results supported both hypotheses H6 & H7.

Table 8

Moderation Effect

Hypothesis tested	Independent variables	Dependent Variables (Students' Satisfaction)	Remarks		
			β coefficient	P-value	
H8	HEP	AcadS StdS $\xrightarrow{\downarrow}$.451	0.019	Statistically Significant Moderation
	HEP				
H9	HEP	AdmS StdS $\xrightarrow{\downarrow}$.527	0.028	Statistically Significant Moderation
	HEP				

Note: Significant at 0.05 level***

The above Table 8 indicates that the specific HEP significantly moderate between the quality of bundle of both services and students'

loyalty reflected through β coefficient=.451 for academic services and .527 for administrative services. While in both cases Higher Education Policies shows statistically significant moderation at level.05. So, the results supported both hypotheses H8& H9.

Discussion

19th century becomes a revolutionary symbol to transform the manufacturing economy into a service economy and focused on its expansion and scalability (Zadeh et al., 2018). This fundamental transformation and restructuring open up the door for knowledge-intensive opportunities prevailing in the economy. The higher education sector is now deemed to be an economic engine for the nation (Youtie & Shapira, 2018). It is the need of the era for higher education to put all their efforts into the production of competent, capable, and skillful human resources that can propose sustainable innovative solutions (Taei, 2020). This ever-growing demand for higher education put intense pressure on higher educational institutes to make effort and war for their survival in the market. For this, educational institutes should ensure the provision of quality academic and non-academic services to their stakeholders (Palmer, 2017 & Owino et al., 2016). Educational institutes have multiple stakeholders from which students are deemed as 'primary customers' that need to be satisfied and make them to loyal to get a sustainable competitive advantage in the market (Samdal et al., 2016; Saif, 2019).

In this regard, this study is aimed at evaluating the quality of service provision i.e. academic and non-academic/administrative services to their students. Here we have a bundle of academic and administrative services are used as independent variables, students' satisfaction is a mediating variable, students' loyalty is a dependent variable, and finally Higher Education Policies a moderating/controlling variable. In totality, this study is conducted to identify and investigate the mediating model of students' satisfaction between service quality and students' loyalty along with the moderation of Higher Education policies.

From the empirical analysis and results of direct effect, it has been observed that academic and administrative services have a significant relationship with students' satisfaction by varying the strength

level, and students' loyalty. The same results were presented by Nayef (2017) and Butt et al. (2019) that the extent to which educational institutes exerted efforts to understand the needs and requirements of beneficiaries and create value accordingly will ensure the level of sustainable competitive advantage in the knowledge economy.

These results seem to support our hypotheses, Moreover, Brock (2018) and Decker et al., (2013) presented the arguments in the favour of hypotheses that educational institutes should develop a unique cohesive academic environment fully equipped and furnished with academic and non-academic services to make satisfied to all the relevant stakeholders. They should monitor that to what extent an educational institute is successful in the provision of quality services and the rate of students' retention for future education.

It is also important to notice how much future enrollment is expected to refer to the alumni side. These efforts show the students' satisfaction and a sense of happiness and joy with the institution. For indirect effect, the results reported that, students' satisfaction acts as a statistically significant mediator between services and students' loyalty. The mediation of students' satisfaction is already claimed by Meynhardt, et al. (2019), Steinmayr et al. (2014), Assunção et al. (2020), and Kim et al. (2019) expressed as an academic engagement of students is reflected through their psychological and behavioral attempts regarding institutional performance. The metaphor 'institutional performance' refers to the level and extent of services offered by the university to all the key holders.

The empirical output mentioned above reflected that higher education policies act as statistically significant moderator supported our hypotheses. It means that if higher education policies are sound, designed, and implemented properly for the quality services regarding academics and administration both then students will be more satisfied with institutions and lead them to be loyal for future association and connections. The same perceptions were presented by Al-Fraihat et al. (2020), Zhao et al. (2019), and Al-rahmi et al. (2018).

Conclusion

Dynamic global transformation fostered the need and urgency to grow the educational sector as an economic engine. Educational institutes are deemed as knowledge economies responsible to produce, retain, and develop competitive human resources to triumph over the untapped opportunities prevailing in the market. Management researchers claimed that knowledge experts can rule the world. In this regard, the current study is intended to understand the metaphor 'service quality', identify its impact on the satisfaction and loyalty of their primary stakeholder 'student', and specifically suggest to them a key to get a sustainable competitive advantage in the world. One satisfied and loyal customer will create a bundle of financial and non-financial rewards for the academic institute and ultimately for the whole nation.

By using rigorous statistical tools and techniques, academic and administrative services proved as strong predictors of students' satisfaction and ultimately create students' loyalty. While higher education policies are evidenced as controlling/moderation role in enhancing the level of students' satisfaction with the quality of service provision. This study reflects the suggestive contribution for the competent authorities of HEIs to improve the quality of academic and administrative services to get a sustainable competitive advantage.

Limitations of the Study

This study is limited due to the deficiency of resources entitled as time, financial, physical, and human resources.

Implications of the Study

In particular, this study is being conducted to fulfill the two major objectives. Firstly, it enriched the theoretical knowledge about the selected variables about how to satisfy and make students loyal to the institution. This loyalty can have a positive impact academically and practically through the creation of positive word of mouth about the provision and offerings of quality services. That will act as a convincing strategy for future connections and future associations with the institutions in the form of admission referrals etc. Secondly, this study provides the recommendation framework for the policymakers and practitioners of universities as well as Higher Education Commission to

design and implement the best policies to enhance students' level of satisfaction and loyalty.

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