

QUALITY OF EDUCATION AND VALUE FOR MONEY IN PRIVATE BUSINESS SCHOOLS OF BANGLADESH: STUDENTS' PERCEPTION

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ABSTRACT

This research studied the students' perception regarding the quality of education and value for money in private business schools in Bangladesh. A questionnaire including 42 distinct areas of student sensitivity clustered into 6 groups designed in a five-point likert scale is used. The findings show that broadly the students are more satisfied with general, administrative & registry, and faculty resources.

They are found least satisfied with financial offerings. In the areas of placement, career & perceived quality; academic, research & educational services; and facilities their satisfaction level is low and similar. Specifically, the respondents are satisfied with air-conditioning facilities, classroom cleanliness, classroom space, on-time registrations, education & communication skills of the faculty members, class schedules, and make-up classes. But the respondents are not much satisfied with transport, dormitory, recreation and gym facilities. They are found indifferent to further study from the same university they studied. Overall, the respondents are found not receiving adequate value for their money. This study indicates that the private business schools should focus more on research and development facilities enabling the students to continue further education. The research open scope to investigate quality of education in private business schools in developing necessary skills for employability.

Keywords: Classroom Facilities, Faculty Credentials, Placement, Perceived Quality, Research, Tuition

INTRODUCTION

Background

Bangladesh, since its independence in 1971, has made notable progress in the overall education sector. While the country has reached near-universal net primary enrollment rate, it has also made the tertiary education accessible, resulting in increasing enrollment in colleges, universities, and polytechnic institutes.

Tertiary education comprises of all types of formal education following up and building upon secondary education including non-university technical education (TE) and technical and vocational education and training (World Bank, 2021). One of the key drivers to achieving this change has been the support from the private sector actors, especially establishment of private universities and polytechnic institutes during the nineties.

In Bangladesh tertiary university education was fully under public sector till 1980s. Colleges and universities are the main provider of tertiary education in the country. By then, the existing public institutions could not absorb the swelling socio-economic demand for higher education. As a result, the establishment of private universities started in late eighties in different forms.

The formal voyage of non-state private universities began through the enactment of the Private University Act in 1992 allowing the University Grants Commission (UGC) as the regulatory authority. The UGC currently recognizes 107 private universities in Bangladesh, out of which four are yet to start their academic programs. This growth is mainly due to growing demand of the private universities in Bangladesh and their acceptance globally (Figure 1).

It is reported that the percentage of students in Bangladesh enrolled in tertiary education programs have almost quadrupled from 6.447% in 2005 to 24.017% in 2019 (CEIC, 2020). The rapid growth of tertiary education enrolment can be principally attributed to the boom of private universities since 1992 and private universities currently account for 45% of our tertiary education enrolments (Rahman et al., 2019).

As private universities have a disproportionate focus on business-related courses due to job orientation and market need, it is unsurprising that STEM (Science, Technology, Engineering, and Mathematics) courses only account for a meager 9% of our tertiary enrolments. But the scenario is gradually changing (World Bank, 2019).

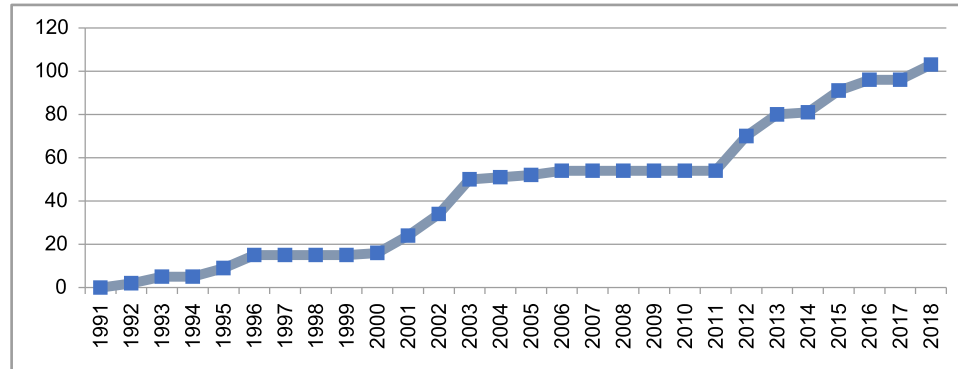


Figure 1: Growth of Private Universities in Bangladesh (1992-2020) (Source: UGC 2018)

Issue

The private universities of Bangladesh are mostly established in few cities depriving many stakeholders. This is due to market concentration and availability of facilities, especially, infrastructure, transportation and utilities. At the initiation, major focus of the private universities is the job-oriented market-need-based easy-to-start courses, particularly the business-related courses (BBA/MBA/EMBA); and most of the private universities follow the suit; but with time the course offerings diversified to science and engineering, pharmacy, social science and economics (World Bank, 2019). Still the business related degrees are dominating in the private universities and major share of revenue is coming through them. As the private universities are self-sustained, high tuition fees are the foremost source of revenue for them. Also profit motive worked behind high tuition fees for several universities.

Undeniably, access to a wider platform of selection with the comparative cost advantage of domestic study over studying abroad has benefited the student community a lot. At the same time, the rapid expansion entails a risk of compromise on quality education as there is hardly anybody to monitor quality services of private universities other than through the frail supervision of UGC - University Grant Commission of Bangladesh (Ashraf, Ibrahim & Joarder, 2009). It is true that quality education is difficult to define and measure due to high subjectivity, especially, in terms of excellence, standards, perfection, conformance to requirements, fitness for purposes, and value for money of the educational technology services and higher education institutions outcomes.

While laudable advances have been made in quality assurance, the Bangladeshi universities are still at an embryonic from the perspective of affirming quality (Rahman et al., 2019). Ehsan (2008) posits that the rapid and haphazard growth of tertiary education institutes in developing countries has raised concerns among academicians and research scholars about the quality of education. Furthermore,

Bangladesh were outmoded and they hindered the efficacy of pedagogy and learning (World Bank, 2021). Coombs (1985) says that quality of education has many dimensions which is not only customarily defined and judged by student learning achievements in terms of traditional curriculum and standards; rather, pertains to the relevance of what is taught and learned - to how well it fits the present and future needs of the particular learners in question given their particular circumstances and prospects. It also refers to significant changes in the educational system itself and its inputs; its objectives, curricula and educational technologies; and its socioeconomic, cultural and political environment.

An investigative study on quality education at private universities of Bangladesh found that faculty members' credentials, academic calendar, education expenses, research, and campus facilities are crucial aspects (Ashrafet al, 2009). The study concluded that cost of education in private universities is exorbitant. In a similar vein, another study noted that programs, environment, faculty members, infrastructure, students, officers and staff are vital in weighing the quality of education (Uddinet al, 2011). This study concluded that the private universities, in contrast to their public counterparts, have a stronger orientation towards offering and focusing on disciplines that would ensure job prospects.

Hoqueet al (2013) added that faculty credentials, intake selection, assessment system, campus facilities, research environment, university leadership, market orientation, and corporate attachment are associated with quality of business education. Pierson (1959) established that the faculty members' motivation and qualification are the most precious resources for a business school. Most educators would also include in the definition the nature of the educational experiences that help to produce the learning environment.

While plenty of literature is extant in this sector, there is a paucity of studies specifically focusing on the business schools of the private universities and the value for money they have to offer. This is crucial as most private universities offer a broad range of programs in business education and a good number of students in private universities study business.

Hence, to learn whether private universities can offer quality education while simultaneously ensuring good value for at a reasonable price, it is important to identify improvement areas that can generate maximum returns in terms of learning and research outcomes so that universities, regulatory authorities, and policymakers can focus appropriately to prioritize improving upon those specific areas. In order to assess the quality of education and ascertain whether students are attaining value for money, the study categorized a set of essential metrics and recognized various dimensions that influence education quality. Table 1 summarizes the literature on factors/determinants of quality of education.

Table 1 Success factors of Quality education

Quality Dimension	Faculty Quality	Infrastructure	Facilities	Curriculum	Administration	Cost of Study	Value for Money	Research & Development	Accreditation	Quality Assurance	Stakeholder Satisfaction
Alamgir 2007	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2008	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2009	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2010	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2011	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2012	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2013	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2014	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2015	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2016	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2017	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2018	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2019	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2020	X	X	X	X	X	X	X	X	X	X	X
Alamgir 2021	X	X	X	X	X	X	X	X	X	X	X

As noted, the teachers, teaching method, and R & D considered being the most important quality dimension by the researchers. It is true that in Bangladesh there is a dearth of qualified teachers in most of the private universities of Bangladesh. That's why they are dependent on adjunct faculty members from public universities. The researches also pay high weight on facilities and infrastructure. Majority of the private universities in Bangladesh lack permanent campus and standard facilities. The importance of clear mission, vision and value is also emphasized in the studies. Updated curriculum is another important quality dimension. Flexible administration with courteous service can make a private university acceptable to the stakeholders. Finally, the researches emphasized on cost of study and the value for their money.

through a structured questionnaire. The secondary sources included the websites and documents of the private universities, reports and policy papers to get an insight of the private business schools of the country. As the study is measuring the quality of education with respect to the tuition fees paid, the study divided the private universities in three different strata according to their tuition fees: i) high, ii) medium and iii) low (Table 2). The study also analyzed the responses based on gender, medium of instruction, and source of fund.

Table 2: Stratified Sampling of Private Business Schools based on the Tuition Fees

Category	Tuition Fees (per credit)	University Name
High	More than Tk. 4000	1. North South University 2. BRAC University 3. Independent University, Bangladesh 4. American International University of Bangladesh
Medium	Tk. 2500 -Tk. 4000	1. Daffodil International University 2. East West University 3. Northern University 4. Ahsanullah University of Science & Technology 5. Stamford University Bangladesh
Low	Less than Tk. 2500	1. United International University 2. IB AIS University 3. State University of Bangladesh 4. World University of Bangladesh

For the purpose of conducting this primary research, a standard questionnaire was developed in a 5-point Likert Scale (+2: Strongly agree, +1: Agree, 0: Indifferent, -1: Disagree, -2: Strongly disagree). The questionnaire was pretested with 10 respondents. The study used face validity for developing the variables. The study uses the Cronbach's coefficient alpha to assess the internal consistency of the variables. The responses are found reliable with high Cronbach's alpha ($0.970 \geq 0.70$). The dependent variables of the study are: (1) *overall perceived quality of education* and ii) *overall value for money*. The 42 independent variables that measured the satisfaction level of the students were grouped into eight broad categories (Table 3).

Table 3: Categorization of Independent Variables

<p>A. <u>General, Administrative & Registry</u></p> <ol style="list-style-type: none"> 1. Modern campus building 2. Peaceful learning atmosphere 3. Nationwide recognition 4. Foreign university affiliation 5. Automated registration process 6. Timely registration 7. Maintaining schedule 	<p>B. <u>Faculty Resource</u></p> <ol style="list-style-type: none"> 8. Academic background 9. Teaching experience 10. Communication skills 11. Fair treatment 12. Make up class provisions 13. Faculty's availability to help students 14. Help after graduation
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<p>C. <u>Academic, Research & Educational Services</u> 15. Course content 16. Support in students research 17. Support in faculty's research 18. Research center 19. Publication Facilities 20. Extensive library 21. Computer lab facilities</p>	<p>D. <u>Facilities & Services</u> 22. Modern teaching aids 23. Air-conditioned rooms 24. Spacious rooms 25. Neat and clean rooms 26. Transport facility 27. Dormitory facilities 28. Dining/canteen facility 29. Recreation and gym facilities 30. High speed Internet</p>
<p>E. <u>Financial Assistance</u> 31. Moderate tuition fees 32. Financial aid for poor students 33. Scholarships provided 34. Cost of study materials 35. Foreign scholarships by the university</p>	<p>F. <u>Placement, Career & Perceived Quality</u> 36. On-campus job facilities 37. Campus recruitment 38. High paid graduates in job market 39. Students pride 40. Sense of belonging 41. Prospects in same university 42. Employability in job market</p>

The study followed non-probability convenient sampling. With a significance level of 10%, precision of $\pm 5\%$ and a proportion value of 0.50 the targeted sample size was 272. Questionnaire was distributed among 280 business students (both undergraduate and graduate students) physically, as well as, online. Finally, 214 responses were collected and used for the analysis of the study. The study made use of both descriptive and inferential statistics. Specifically, index analysis, hypothesis testing, factor analysis, regression, and ANOVA tests are conducted.

FINDINGS AND ANALYSIS

Overall Mean Indices of the Simple and Group Variables

This study tried to find out the student satisfaction and value for money with respect to 42 simple variables grouped into 8 complex variables (Table 4). Excepting three, the overall mean values of the 42 variables are found to be positive and significantly different from 0 (indifferent). The findings show that in terms of complex variables the respondents are more satisfied with i) General, administrative and registry (1.03) and ii) faculty resources (1.01). They are found least satisfied with i) financial assistance (0.60), ii) facilities (0.69), iii) academic, research & educational services (0.70), and iv) placement, career and perceived quality (0.72).

Specifically, the respondents are satisfied with air-conditioning facilities (1.36), class room cleanliness (1.358), class room space (1.30), timely registrations (1.132), educational background of the faculty members (1.25), communication skills of the faculty members (1.12), strict schedules and routines (1.24), make-up classes (1.23).

But the respondents are not much satisfied with transport facilities to and from the university (0.159), dormitory facilities (0.029), recreation and gym facilities (0.019). This is also reflected to their indifference to further study (MBA) from the same university they are currently studying (0.085). The respondents are found to be happy with overall quality of business education (1.21), but found not receiving adequate value for their money (0.55). Also, the mean of the 42 variables (0.79) does not reflect satisfactory response from the respondents.

Table 4: Mean Indices of the Variables

Variables	Mean (μ)	Variables	Mean (μ)
A. General, Administrative & Registry	1.03	B. Faculty Resources	1.01
1. Modern campus buildings	1.06	1. Good educational background of the faculties	1.25
2. Good and peaceful learning atmosphere	0.99	2. Fairly experienced faculties	0.91
3. Nationally recognized for quality education	1.09	3. Good communication skills of the faculties	1.12
4. Good affiliation with foreign universities	0.75	4. Students are treated fairly by the faculties	0.79
5. Good automated registration process	0.90	5. Make-up classes are taken properly by the faculties	1.23
6. Timely completion of registrations	1.13	6. Available faculty to help students in problem solving	0.98
7. Strict schedules and routines	1.24	7. Faculties are helpful even after students graduation	0.77
C. Academic, Research & Educational Services	0.70	D. Facilities and general services	0.69
1. Constantly updating of curriculum to meet global demand	0.78	1. Modern teaching aids available	1.03
2. Adequate support in student research	0.64	2. Adequate air-conditioning facilities	1.36
3. Fairly good support in faculty research	0.57	3. Fairly spacious classrooms	1.30
4. Good research center facilities for students	0.43	4. Neat and clean classrooms	1.36
5. Good publication facilities	0.63	5. Good transport facilities to and from	0.16
6. Good library facilities	1.00	6. Good dormitory facilities *	0.03
7. Good computer lab facilities	0.85	7. Adequate dining/canteen facilities	0.51
		8. Good recreation and gym facilities *	0.02
		9. Adequate internet access speed	0.46
E. Financial Assistance	0.60	F. Placement, Career & Perceived Quality	0.72
1. Moderate tuition fees	0.19	1. Good on-campus job facilities	0.38
2. Financial aid for poor students	0.89	2. Regular campus recruitment by the	0.68
3. Sufficient scholarships for meritorious	0.90	3. Good number of high paid graduates	1.08
4. Reasonable cost of study materials	0.52	4. Students take pride in the university	1.11
5. Good number of foreign scholarships provided by the university	0.50	5. Students has sense of belongingness towards the university	0.85

		6. You will do MBA from this university*	0.08
		7. High favorability for graduates in job market	0.84
Mean Index of the 42 variables in 6 areas (A-	0.79		
G. Overall Value		H. Overall Quality	
1. You are receiving adequate value for your tuition fees	0.55	2. Overall quality of business education is good	1.21
<i>*not significantly different from 0 (Indifference)</i>			

Demographic Perceptual difference of the responses

Gender wise

The World Bank report confirms that female students comprise only 38% of the enrolments in tertiary education institutions of Bangladesh (Rahman et al., 2019). Hence it is important to see the views of female students. Gender wise no significant difference is observed among the responses of the 42 variables except 6 of them (at $\alpha=5\%$): i) good and peaceful learning atmosphere, ii) nationally recognized for quality education, iii) good transport facilities to and from the university, iv) good gym and recreational facilities, v) good dormitory facility, and vi) further education (MBA) from this university (Appendix 1).

As can be seen the differences are mostly in the area of “facilities”. In general, it is interesting to note that the male respondents have rated higher for all the factors except “scheduling of make-up classes”. In each of the other variables, female students are less content with the performance of their university compared to their male counterparts. Overall the females rated both the quality of education and value of money more conservatively than the males.

Medium Wise

Medium wise (Bengali and English) perceptual difference of the responses is not significant at all at 5% level of significance (Appendix 2).

The study noted that, there is not much variation of attitude to quality of education received among students of English and Bengali medium, except five cases: i) “Modern” campus buildings, ii) timely completion of registration, iii) moderate tuition fees, and iv) financial aid for poor students, v) good transport facilities to and from the university. Broadly it is noted that the group perceptual difference between Bengali and English medium students is quite high in case of financial assistance (0.70 versus 0.39) indicating that the English medium students are not satisfied with the financial aids as much as the Bengali medium students. Hence, we can conclude that the medium wise response difference is insignificant except for financial assistance.

Value for Money (Tuition Fee) Wise

The study tried to see the student's mean perception about the 42 variables across the three different strata (high, medium, low) based on the tuition fees. The appendix 3 shows in details the mean differences between and across the three groups and their differences. The ANOVA test (Appendix 3) shows that in 15 cases there is mean difference across the three categories, but in majority of the cases (29) the difference is not significant ($\alpha=0.05$).

The mean value of responses to overall quality of education across the universities, are found to be same ($\alpha=0.05$). It can be noticed that the mean value is quite similar across the different ranges, but the students of universities falling in the 'high tuition fees' category see the quality they receive as lower than the other two and the overall average.

The study noted that the responses regarding the value for money is significantly different across the three strata ($\alpha=0.05$). The mean perceived value for money is the lowest in the high fees' category (Table 5). Students of this stratum tend to think they are paying more than they should. The medium tuition fees range students seem most content with the quality they receive in exchange of the fees they pay. But overall satisfaction with value for money is quite low compared to perceived overall quality (0.55 versus 1.21).

Type of the University	Overall Quality of Education		Overall Value for Money	
	μ		μ	
High tuition (n=95)	1.14	0.974	0.36	1.051
Medium tuition (n=83)	1.25	0.809	0.78	0.884
Low tuition (n=34)	1.29	0.836	0.54	0.980
Overall mean (212)	1.21	0.889	0.55	0.992

The research noted that there is no pair wise (between the strata) response difference in 25 cases out of 42 variables at $\alpha=5\%$ (Appendix4). The difference in response between high and medium category appeared in 12 cases, between medium and low category appeared in 7 cases, and between high and low category appeared in 10 cases (across the strata in 15 cases) (Table 6). In case of variable "moderate tuition fee" all the three responses are significantly different.

The group wise major differences are observed in a) Financial Assistance, b) General, Administrative & Registry, c) Faculty Resources, and d) Academic, Research & Educational Services. No significant differences in responses are found in a) Placement, Career & Perceived Quality, b) Facilities and general services. Regarding overall quality, category wise responses are same but in case of overall quality, the high and medium groups differ in response.

Table 6: Strata wise difference in different category at $\alpha=5\%$

Complex variables	Strata						
	High & Medium (1 & 2)	Medium & Low (2 & 3)	Low & High (1 & 3)	(1 & 2) & (2 & 3)	(2 & 3) & (1 & 3)	(1 & 3) & (1 & 2)	(1 & 2), (2 & 3), (1 & 3)
A. General, Administrative & Registry	2	1	1			1	-
B. Faculty Resources	2		1			1	
C. Academic, Research & Educational Services		1			2		
D. Facilities and general services			1	1			
E. Financial Assistance				1		1	1
F. Placement, Career & Perceived Quality						1	
G. Overall Value	1						
H. Overall Quality							
Total	5	2	3	2	2	4	1
N. B.: The numbers in the cells represent in how many cases the group variables are strata-wise different							

Correlation Analysis

Correlation between Value for Money, Educational Quality and Other Variables

The correlation between value for money and educational quality shows a significant ($\alpha = 0.05$) positive correlation of 0.598. Also, the correlation between value for money and other 42 variables show significant ($\alpha = 0.05$) positive correlation at varied degree (0.249 ~ 0.539). Similarly, the correlation between educational quality and other 42 variables also show significant ($\alpha = 0.05$) positive correlation at varied degree (0.252 ~ 0.644).

Gender/Medium/Tuition wise Correlation between the Variables and Value for Money

Gender wise significant correlation is observed between value for money and Male/Female respondents. But medium wise the English medium students show comparatively weak or no relationship with value for money in comparison to Bengali medium students. Tuition wise the high and medium tuition fee university students show significant relationship with value for money but interestingly no or minimum relationship is observed with low tuition university students.

Gender/Medium/Tuition wise Correlation between the Variables and Education Quality

Gender wise significant correlation ($\alpha = 0.05$) is observed between quality of education and Male/Female respondents. In general, the females are more positive than the males. But medium wise the English medium students show comparatively weak or no relationship with educational quality in comparison to Bengali medium students. Tuition wise the high and medium tuition fee university students show significant relationship with educational quality but interestingly no or minimum relationship is observed with low tuition university students.

CONFIRMATORY FACTOR ANALYSIS

Confirmatory factor analysis (CFA) seeks to determine the number of factors and the loadings of measured variables (indicator) on them to conform to what is expected on the basis of pre-established theory. The researcher's a priori assumption is that each factor (the number and labels of which may be specified a priori) is associated with a specified subset of indicator variables. Factor Analysis was performed on the data to select grouping of variables under common premise. The result from Principal Axis Factoring and Varimax rotated component matrix with Kaiser Normalization grouped the 42 variables into seven factors that explained 67.34% of the total cumulative variance (Table 7). The high factor loadings in each group shows strong correlation between the factor and the corresponding variables. The factor analysis of 42 variables with 214 sample is found adequate ($KMO=0.940 \geq 0.5$) and valid (Bartlett's test of Sphericity indicates a significance level of 0.000).

As can be seen from the table, that the first factor (Facilities) appears to be the most important as it explain 45.20% of the variability and consists of 17 of the 42 variables. Other factors do not seem to be very significant as they explain very low variability. The communalities of the variables that constituted the factors are found to be very strong, which indicates strong relationships among the variables. As can be noted from the factors table 5 that the grouping made from the schema and the variables under the factors are quite consistent. As noted, factor 1 (Facilities I) contains most of the variables considered in "general, administrative and registry", "placement, career and perceived quality", and in "facilities"; whereas factor 2 (Facility II) includes mostly "physical" and "research" facilities of the universities. The factor 3 (Scholarship & financial assistance) and factor 4 (Faculty credentials) mainly grouped variables in "scholarship and financial assistance" and "faculty resources and "registration" respectively. The variables of factor 5 (Quality education) is a mixture of recognition and research facilities. The sixth (Financial aid) and seventh (Computer lab facilities) factors has only one related variable in each group.

Table 7: Factors Returned by Factor Analysis

Factors (Variability)	Variables	Factor Loading
1. Facilities I (45.20%)	1) Adequate air-conditioning facilities	0.775
	2) Fairly spacious class rooms	0.763
	3) Neat and clean class rooms	0.748
	4) Modern campus buildings	0.742
	5) Good number of high paid graduates in job market	0.630
	6) Good and peaceful learning atmosphere	0.561
	7) Modern teaching aids available	0.556
	8) Good library facilities	0.555
	9) Make-up classes are taken properly	0.555
	10) Strict schedules and routines	0.547
	11) Good affiliation with foreign universities	0.542
	12) Adequate dining/canteen facilities	0.529
	13) Students take pride in the university	0.506
	14) Students has sense of belongingness towards the university	0.490
	15) High favorability for graduates in job market	0.477
	16) Good communication skills of faculty	0.473
	17) Faculties are helpful even after students graduation	0.427
2. Facilities II (6.15%)	1) Good dormitory facilities	0.727
	2) Good transport facilities to and from the university	0.680
	3) Good research center facilities for students	0.658
	4) Good recreation and gym facilities	0.652
	5) Adequate internet access speed	0.636
	6) Good publication facilities	0.614
	7) Fairly good support in faculty research	0.549
	8) You will do MBA from this university	0.457
3. Scholarship & financial assistance (4.64%)	1) Good number of foreign scholarships provided by the university	0.742
	2) Good on-campus job facilities	0.587
	3) Regular campus recruitment by the employers	0.560
	4) Reasonable cost of study materials	0.515
	5) Sufficient scholarships for meritorious students	0.481
	6) Moderate tuition fees	0.455
	7) Available faculty to help students in problem solving	0.449
4. Faculty Credentials (3.33%)	1) Good automated registration process	0.671
	2) Students are treated fairly by the faculties	0.662
	3) Fairly experienced faculties	0.612
	4) Timely completion of registrations	0.584
	5) Good educational backgrounds of the faculty	0.480
	6) Constantly updating of curriculum to meet global demand	0.459
5. Quality education (2.96%)	1) Nationally recognized for high quality education	0.566
	2) Adequate support in student research	0.532
6. Poor students Aid (2.55%)	1) Financial aid for poor students	0.757
7. Computer lab facilities (2.51%)	1) Good computer lab facilities	0.593

Regression Analysis with the Factors

Through factor analysis, we have identified 7 factors as independent variables. Associated with these 7 factors are 42 variables which independently affect the overall outcome of the research. A regression analysis is conducted taking these 7 factors as the independent variables and the overall value for money as the dependent one. The model is found significant with an adjusted R^2 of 46.4%. Computer Lab facilities is noted to be insignificant.

The 7 factors that were selected by the students par taking the survey and their corresponding coefficients are tabulated below.

Table 8: Regression model 1 with 7 factors

Variables	Coefficients	Standardized Coefficients	Sig. p-Value
(Constant)	0.550		0.000
Facilities I	0.218	0.224	0.000
Facilities II	0.263	0.270	0.000
Scholarship and Financial Assistance	0.452	0.463	0.000
Faculty Credentials	0.339	0.347	0.000
Quality Education	0.160	0.163	0.002
Poor Students Aid	0.121	0.124	0.018
Computer Lab Facilities	0.006	0.006	0.908
N.B.: Dependent Variable: You are receiving adequate value for your tuition fees.			
Adjusted $R^2 = 0.462$			

A similar regression analysis is conducted taking these seven variables as the independent variable and the overall quality of business education as the dependent one. The model is found significant with an adjusted R^2 of 56.0%. Computer Lab Facilities is noted to be insignificant. The seven factors that were selected by the students par taking the survey and their corresponding coefficients are tabulated in Table 9.

Table 9: Regression model 2 with 7 factors

Variables	Coefficients	Standardized Coefficients	Sig. p-Value
(Constant)			0.000
Facilities I	0.363	0.402	0.000
Facilities II	0.153	0.169	0.001
Scholarship and Financial Assistance	0.392	0.434	0.000
Faculty Credentials	0.297	0.328	0.000
Quality Education	0.234	0.259	0.000
Poor Students Aid	0.137	0.152	0.002
Computer Lab Facilities	0.011	0.012	0.803
N.B.: Dependent Variable: Overall quality of business education is good			
Adjusted $R^2 = 0.56$			

SUMMARY, CONCLUSION AND IMPLICATIONS

This research tried to analyze private business school students' perception regarding their universities quality education services against the tuition they pay. The study has considered 42 simple attributes grouped into six complex variables. The responses are taken from 212 business school students studying in different high, medium and low tuition private universities. The findings show that broadly the respondents are more satisfied with general, administrative and registry and faculty resources. They are comparatively less satisfied with facilities; academic, research & educational services; and placement, career & perceived quality. They are least satisfied with financial assistance. This is in line with the findings of the World Bank study which also reported that universities in Bangladesh did not have adequate facilities, especially for research and development. This signifies that R & D and physical facilities in private universities of Bangladesh need to improve considerably.

This study noted that, specifically, the respondents are satisfied with air-conditioning facilities, class room cleanliness, class room space, timely registrations, educational background of the faculty members, communication skills of the faculty members, strict schedules & routines, make-up classes. But the respondents are not much satisfied with transport facilities, dormitory facilities, recreation and gym facilities. This is reflected in their indifference to further study from the same university. The respondents are found to be happy with overall quality of business education but found not receiving adequate value for their money. Overall, the respondents are not satisfied with the quality services.

Previous studies established that the faculty members' motivation and qualification are the most precious resources for a business school. On the contrary, a general study on all tertiary education institutions of Bangladesh by the World Bank, found a paucity of qualified teachers and development opportunities for faculty members in tertiary education institutions. This finding might imply that the quality of faculty members in private universities is higher than the national average. After trenchant analysis of the collected data, this study finds that that students are not fully satisfied with the value for money being obtained from their education. This dissatisfaction is also emphasized by the fact that most students are uninterested in pursuing further education from their current university. Despite the country's massive economic growth in the last decade and higher disposable income at the behest of the average citizen, this study confirms that the perception of higher costs remains unchanged among the students.

Further, this study reinforces that the quality of education offered by Bangladesh's private universities still has to improve considerably. There should be a greater focus on providing offerings such as financial assistance, research grants, academic facilities, and research facilities. Students are still dissatisfied with the amount of

money they are having to pay for the education that they are receiving. Hence, this study strongly recommends that academics and administrators of the universities take into account the students' grievances and consider their feedback to improve the factors that are most commonly found to be deficient by the students. In the ever-growing and highly competitive field of global tertiary education, it is vital that Private Universities, which are getting increasingly popular in terms of enrolment in Bangladesh, make rapid improvements in their quality and educational outcomes.

Gender wise no significant difference is observed among the responses except for good & peaceful learning atmosphere, national recognition for quality education, good transport facilities, good gym & recreational facilities, good dormitory facility, and further studies from the same university; The differences are mostly in the area of "facilities". It is interesting to note that the male respondents have rated higher for all the factors except "scheduling of make-up classes". In other variables, female students are less content with the services of their university compared to their male counterparts. Overall, the females rated both the quality of education and value of money more conservatively than the males. It is to be noted that female students comprise only 38% of the enrolments in tertiary education institutions of Bangladesh. In the light of this, it is recommended that we inquire into the nuances of female students' experience in tertiary education institutions of Bangladesh and possible gender bias that may be a factor for such findings. Medium wise (Bengali and English) perceptual difference of the responses is not significant, except for "Modern" campus buildings, timely registration, moderate tuition fees, financial aid, and good transport facilities. Broadly it is noted that the group perceptual difference between Bengali and English medium students is quite high in case of financial assistance indicating that the English medium students are not satisfied with the financial aids as much as the Bengali medium students. Hence, we can conclude that the medium wise response difference is insignificant except for financial assistance.

The study noted that in 15 cases there is mean difference across the three categories (high, medium, low tuition fees), but in majority of the cases the difference is insignificant. The mean value of responses to overall quality of education across the universities, are found to be same. It can be noticed that the mean value is quite similar across the different ranges, but the students of the 'high tuition fees' category universities see the quality they receive as lower than the other two and the overall average. The responses regarding the value for money is significantly different across the three strata. The mean perceived value for money is lowest in the high fees' category. Students of this stratum tend to think they are paying more than they should. The medium tuition fee range students seem most content with the quality they receive in exchange of the tuition they pay. But overall satisfaction with value for money is quite low compared to perceived overall quality they received.

The study noted quite strong positive correlation between value for money and educational quality. Also, the correlation between value for money and other variables show significant positive correlation at varied degree. Similar significant positive correlation is observed between educational quality and other variables at varied degree. Gender-wise significant correlation is observed between value for money and Male/Female respondents. In general, the females are more positive than the males. But medium wise the English medium students show comparatively weak or no relationship with value for money in comparison to Bengali medium students. Tuition wise the high and medium tuition fee university students show significant relationship with value for money, but interestingly no or minimum relationship is observed with low tuition university students.

A factor Analysis reduced the 42 variables into seven factors. The first factor (Facilities) appears to be the most important as it explain the most. Other factors do not seem to be very significant as they explain very low variability. As can be noted that the grouping made from the schema and the variables under the factors are quite consistent. Further research might be conducted comparing the quality of education in private business schools in Bangladesh with other neighboring countries to understand the gap. Besides, it would be interesting to have a qualitative research focusing on discussions and in-depth interviews to understand the nuances of the quality of education in business schools in terms of employability of the students in the job market in Bangladesh and around the globe.

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APPENDICES

Appendix 1: Gender wise Perceptual difference

Variables	Mean	Variables	Me
A. General, Administrative & Registry	1.08, 0.93	B. Faculty Resources	1.04,
1. Modern campus buildings	1.10, 0.99	1. Good educational background of the	1.27,
2. Good and peaceful learning atmosphere*	1.10, 0.81	2. Fairly experienced faculties	0.9
3. Nationally recognized for quality education*	1.20, 0.90	3. Good communication skills of the	1.1
4. Good affiliation with foreign universities	0.80, 0.67	4. Students are treated fairly by the	0.8
Good automated registration process	0.94, 0.83	5. Make-up classes are taken properly by	1.2
6. Timely completion of registrations	1.16, 1.09	6. Available faculty to help students in	0.9
7. Strict schedules and routines	1.25, 1.23	7. Faculties are helpful even after students	0.8
C. Academic, Research & Educational	0.78, 0.60	D. Facilities	0.7
1. Constantly updating of curriculum to meet	0.86, 0.84	1. Modern teaching aids available	1.1
2. Adequate support in student research	0.74, 0.48	2. Adequate air-conditioning facilities	1.4
3. Fairly good support in faculty research	0.61, 0.49	3. Fairly spacious class rooms	1.3
4. Good research center facilities for students	0.53, 0.27	4. Neat and clean class rooms	1.3
5. Good publication facilities	0.68, 0.56	5. Good transport facilities to and from the	0.2
6. Good library facilities	1.07, 0.90	6. Good dormitory facilities*	0.0
7. Good computer lab facilities	0.95, 0.67	7. Adequate dining/ canteen facilities	0.5
		8. Good recreation and gym facilities*	0.0
		9. Adequate internet access speed	0.5
E. Financial Assistance (0.60)	0.60, 0.59	F. Placement, Career & Perceived Quality	0.7
1. Moderate tuition fees	0.18, 0.21	1. Good on-campus job facilities	0.4
2. Financial aid for poor students	0.94, 0.81	2. Regular campus recruitment by the	0.7
3. Sufficient scholarships for meritorious	0.86, 0.96	3. Good number of high paid graduates in	1.0
4. Reasonable cost of study materials	0.54, 0.49	4. Students take pride in the university	1.1
5. Good number of foreign scholarships	0.50, 0.50	5. Students has sense of belongingness	0.9
		6. You will do MBA from this university*	0.1
		7. High favorability for graduates in job	0.8
Mean Index of the 42 variables in 6 areas (A-F),	0.84, 0.72		
G. Overall Value		H. Overall Quality	
2. You are receiving adequate value for your	0.64, 0.41	1. Overall quality of business education is	1.2
* Male and female means are significantly different at = 5%			
Variables	Mean μ_B, μ_E	Variables	Mean μ_B, μ_E
A. General, Administrative & Registry	1.02, 1.04	B. Faculty Resources	1.02, 0.97
1. Modern campus buildings *	0.94,	1. Good educational background of the	1.31, 1.12
2. Good and peaceful learning atmosphere	0.96, 1.06	2. Fairly experienced faculties	0.93, 0.87
3. Nationally recognized for quality	1.03,	3. Good communication skills of the	1.15,
4. Good affiliation with foreign universities	0.69, 0.88	4. Students are treated fairly by the faculties	0.80, 0.79
5. Good automated registration process	0.99,	5. Make-up classes are taken properly by	1.18,
6. Timely completion of registrations *	1.23, 0.93	6. Available faculty to help students in problem solving	1.01, 0.93
7. Strict schedules and routines	1.27, 1.18	7. Faculties are helpful even after students graduation	0.79, 0.73

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C. Academic, Research & Educational Services	0.70, 0.71	D. Facilities	0.69, 0.69
1. Constantly updating of curriculum to meet global demand	0.86, 0.61	1. Modern teaching aids available	0.97, 1.16
2. Adequate support in student research	0.61,	2. Adequate air-conditioning facilities	1.28,
3. Fairly good support in faculty research	0.60, 0.50	3. Fairly spacious class rooms	1.27, 1.37
4. Good research center facilities for students	0.42, 0.45	4. Neat and clean class rooms	1.29, 1.51
5. Good publication facilities	0.63, 0.65	5. Good transport facilities to and from the university*	0.22, 0.03
6. Good library facilities	0.93,	6. Good dormitory facilities	0.13,-
7. Good computer lab facilities	0.83,	7. Adequate dining/canteen facilities	0.52,
		8. Good recreation and gym facilities	0.06, -
		9. Adequate internet access speed	0.47,
E. Financial Assistance (0.60)	0.70,	F. Placement, Career & Perceived Quality	0.72,
1. Moderate tuition fees *	0.42, -	1. Good on-campus job facilities	0.37,
2. Financial aid for poor students *	0.99,	2. Regular campus recruitment by the	0.73,
3. Sufficient scholarships for meritorious students	0.95, 0.79	3. Good number of high paid graduates in job market	1.02, 1.21
4. Reasonable cost of study materials	0.58,	4. Students take pride in the university	1.13,
5. Good number of foreign scholarships provided by the university	0.54, 0.42	5. Students has sense of belongingness towards the university	0.77, 1.01
		6. You will do MBA from this university	0.19, - 13
		7. High favorability for graduates in job	0.82,
Mean Index of the 42 variables in 6 areas (A-	0.81,0.75		
G. Overall Value		H. Overall Quality	
1. You are receiving adequate value for your tuition fees	0.62, 0.40	1. Overall quality of business education is good	1.24, 1.13
** The means are significantly different at = 5%			

Appendix 3: ANOVA Table for Mean Differences among Three Types of University

3	Sig	Variables	Sig
1) Good educational backgrounds of the faculty	.135	23) Good computer lab facilities	.906
2) Fairly experienced faculties*	.014	24) Adequate support in student research	.903
3) Constantly updating of curriculum to meet global demand*	.013	25) Fairly good support in faculty research	.244
4) Good communication skills of faculty	.979	26) Good research center facilities for students	.068
5) Students are treated fairly by the faculties*	.011	27) Good publication facilities	.566
6) Faculties are helpful even after students graduation	.132	28) Moderate tuition fees*	.000
7) Good and peaceful learning atmosphere	.531	29) Financial aid for poor students	.332
8) Modern teaching aids available	.265	30) Sufficient scholarships for meritorious students	.285
9) Adequate air-conditioning facilities	.550	31) Good on-campus job facilities	.428
10) Fairly spacious class rooms	.771	32) Reasonable cost of study materials*	.001
11) Neat and clean class rooms*	.002	33) Nationally recognized for high quality education	.181
12) Strict schedules and routines	.093	34) Good number of high paid graduates in job market*	.008

13) Make-up classes are taken properly	.240	35) Good affiliation with foreign universities*	.002
14) Good automated registration process*	.041	36) Students take pride in the university	.956
15) Timely completion of registrations*	.036	37) Students has sense of belongingness towards the university	.190
16) Modern campus buildings	.099	38) Available faculty to help students in problem solving	.148
17) Good transport facilities to and from the university	.336	39) Regular campus recruitment by the employers	.250
18) Good dormitory facilities*	.023	40) You will do MBA from this university*	.013
19) Adequate dining/canteen facilities	.397	41) High favorability for graduates in job market	.713
20) Good recreation and gym facilities	.476	42) Good number of foreign scholarships provided by the university*	.019
21) Adequate internet access speed	.539	43) You are receiving adequate value for your tuition fees*	.016
22) Good library facilities*	.000	44) Overall quality of business education is good	.568
* significantly different across the groups			

Appendix 4: TuitionFee Wise Perceptual Differences Between and Across the Groups

Variables	Mean μ_H, μ_M, μ_L	Variables	Mean μ_H, μ_M, μ_L
A. General, Administrative & Registry	1.06, 1.00, 0.96	B. Faculty Resources	0.91, 1.09, 1.07
1. Modern campus buildings ³	1.20, 1.02, 0.74	1. Good educational background of the faculties	1.12, 1.33, 1.40
2. Good and peaceful learning atmosphere	1.07, 0.90, 0.97	2. Fairly experienced faculties ^{1,3,4}	0.71, 1.06, 1.09
3. Nationally recognized for quality education	1.22, 0.95, 1.06	3. Good communication skills of the faculties	1.11, 1.12, 1.14
4. Good affiliation with foreign universities ^{1,3,4}	1.00, 0.63, 0.34	4. Students are treated fairly by the faculties ^{1,4}	0.58, 1.05, 0.77
5. Good automated registration process ^{1,4}	0.69, 1.08, 1.00	5. Make-up classes are taken properly by the faculties	1.35, 1.14, 1.11
6. Timely completion of registrations ^{1,4}	0.96, 1.33, 1.14	6. Available faculty to help students in problem solving ¹	0.86, 1.13, 0.94
7. Strict schedules and routines ²	1.28, 1.08, 1.49	7. Faculties are helpful even after students graduation ³	0.65, 0.79, 1.03
C. Academic, Research & Educational Services	0.72, 0.67, 0.76	D. Facilities	0.76, 0.64, 0.75
1. Constantly updating of curriculum to meet global demand ^{2,3,4}	0.64, 0.75, 1.23	1. Modern teaching aids available	1.15, 0.98, 0.83
2. Adequate support in student research	0.66, 0.64, 0.57	2. Adequate air-conditioning facilities	1.43, 1.30, 1.29
3. Fairly good support in faculty research	0.60, 0.44, 0.79	3. Fairly spacious class rooms	1.35, 1.25, 1.29
4. Good research center facilities for students ²	0.48, 0.33, 0.77	4. Neat and clean class rooms ^{1,2,4}	1.51, 1.08, 1.62
5. Good publication facilities	0.61, 0.59, 0.80	5. Good transport facilities to and from the university	0.11, 0.10, 0.16
6. Good library facilities ^{2,3,4}	1.20, 1.05, 0.37	6. Good dormitory facilities ^{3,4}	0.17, 0.07, 0.52

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7. Good computer lab facilities	0.86, 0.86, 0.77	7. Adequate dining/canteen facilities	0.63, 0.43, 0.35
		8. Good recreation and gym facilities	0.07, 0.14, 0.03
		9. Adequate internet access speed	0.40, 0.43, 0.68
E. Financial Assistance)	0.32, 0.90, 0.62	F. Placement, Career & Perceived Quality	0.71, 0.67, 0.70
1. Moderate tuition fees ^{1,2,3,4}	- 0.56, 0.95,	1. Good on-campus job facilities	0.38, 0.46, 0.17
2. Financial aid for poor students	0.78, 1.01, 0.91	2. Regular campus recruitment by the employers	0.57, 0.82, 0.66
3. Sufficient scholarships for meritorious students	0.80, 1.04, 0.74	3. Good number of high paid graduates in job market ⁴	1.29, 0.86, 1.03
4. Reasonable cost of study materials ^{1,3,4}	0.24, 0.75, 0.74	4. Students take pride in the university	1.09, 1.13, 1.09
5. Good number of foreign scholarships provided by the university ^{1,2,4}	0.36, 0.76, 0.29	5. Students has sense of belongingness towards the university	0.97, 0.80, 0.63
		6. You will do MBA from this university ^{1,3,4}	- 0.19, 0.25,
		7. High favorability for graduates in job market	0.88, 0.78, 0.88
Mean Index of the 42 variables in 6 areas (A-F)	0.75, 0.83, 0.81		
G. Overall Value		H. Overall Quality	
1. You are receiving adequate value for your tuition fees ^{1,2,4}	0.36, 0.78, 0.54	1. Overall quality of business education is good	1.14, 1.25, 1.29
¹ μ_H, μ_M are significantly different at = 5%, ² μ_M, μ_L are significantly different at = 5%, ³ μ_H, μ_L are significantly different at = 5%, ⁴ across the groups the means are different			