# AN APPROACH TO UNDERSTAND THE INTERNAL ENROLLMENT CRITERIA OF STUDENTS' FOR HIGHER EDUCATION IN PRIVATE UNIVERSITIES OF BANGLADESH

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ABSTRACT: The main objective of this research is to identify the internal enrollment criteria of students for higher education at private universities in Bangladesh. A structured questionnaire was used to survey the opinions of 1,000 students who are enrolled at various private universities in Bangladesh. The researchers conducted various statistical analyses such as descriptive statistics, chi-square test and multiple regression to analyze the survey responses and identified a number of key findings pertinent to the internal enrollment criteria of students at private universities. The study reveals that the common factors of students' enrollment are teaching quality, instruction medium, campus size, campus location, resident facilities, transport facilities, canteen facilities, and separate common room facilities and so on for students.

KEYWORDS: Enrollment Criteria, Students, Higher Education and Private University.

JEL Classification Code: I20; I23

#### INTRODUCTION

Education is the fundamental right and the development of a country largely depends on the attainment of higher education of all of its citizens (Rahman 2012). Unfortunately, the achievement of in attaining higher education in Bangladesh is very low. According to Bangladesh Bureau of Educational Information and Statistics (BANBEIS 2011), in 2001, the total number of enrolled students in private universities was 27,245 which stood at 124,267 in 2006. But, in 2015, the number enrolled students in private universities are 379781 (BANBEIS 2015). Due to some limitations of public universities (e.g. limited enrollment capacity, political unrest, and excessive time taken to complete degrees) in mid- nineties a large number of private universities emerged to fulfill the demand of the higher education. Apparently, the time takes to complete a degree seems to be one of the biggest reasons in recent to increase the student's enrollment at private universities. While a four-year bachelor degree could take seven or eight years at a public university, it hardly takes four and half year at any private university. Another important factor is the convenience of credit transfer from one private university to another one in the country or even to a foreign university (Europe or North America). It is known that tuition fees of the private universities are very high but some of the private universities offer a handsome waiver for students and some of the universities even go as far as arranging special scholarships for talented students. Good and political unrest free environment is a further significant factor as well. Between the year of 1991 and 1996, sixteen private universities were opened and after 2001, the concept of establishing private universities got significant a significant boost. According to statistics from University Grants Commission of Bangladesh (UGC, 2015), there are 127 universities in Bangladesh of which 37 are public, 3 are international and 87 are private universities. Almost 100,000 students get themselves admitted into the private universities each year (Rahman, 2012, Debnath, 2007). Among those students who admitted to private universities about one fourth are students are either from middle class or poor family (Rahman, 2012).

However, the percentage of students enrolling at the universities in Bangladesh in the recent years is on the rise, especially in the private universities which inspired the researchers to look into the factor(s) or criteria that are causing the recent increase.

#### **OBJECTIVE OF THE STUDY**

The fundamental objective of this research study is to investigate the internal enrollment criteria of the students of private universities in Bangladesh. In order to emerge this objective, the following specific objectives were considered

- 1. To know the demographic information of the students of private universities of Bangladesh.
- 2. To investigate the relationship between the internal enrollment factors or criteria of private universities in Bangladesh.

#### LITERATURE REVIEW

The progress of regional education in this country (Bangladesh) has largely been due to the rapid growth of private universities in recent years. According to Rezwanul Huque Khan et all (2009), "Students are considered as the customers of the university". So, it is essential for a private university to focus on their targeted customers and ensuring the quality education. The students select a private university on the basis of some criteria. Andaleeb (2003) analyzed seven crucial criteria for effectively fostering higher education in Bangladesh, namely teaching quality, method, content, peer quality, direct facilities, indirect facilities and political climate. Majid, Mamun, and Siddique (2009) found the similar factors mentioned above and they identified teaching quality, teaching learning methodology, teaching aids and support facilities as the basic selection factors of business education in private institutions.

On the other hand Mamun and Das (1996) undertook a study and pointed towards some other attracting factors such as library facilities, laboratory facilities and internship assistance for students as the key factors of students' choice of private universities On another research studied by Zahid, chowdhury and sogra(2009) and mentioned and extensive qualitative study of performance of business education in Bangladesh and identified the course system, quality of teaching, medium of instruction, campus size and location, accommodation for the students, campus facilities such as auditorium, parking, canteen, indoor and outdoor parking facilities as the factors of satisfaction.

For this reason Salahuddin et all (2008) mentioned that "it is obvious that students do consider cost and cost related factors more than anything else because private university education is still very expensive from an economic perspective and a significant number of students are from middle- class families. On the other sense Schofield(1996),mentioned that tuition fees as the main factor affecting a student's choice of a private university in Bangladesh as the tuition fees of these universities very widely here. As Bangladesh is a developing country and most of the students especially students do not have any opportunity to engage themselves in any earning source. So, they have to depend on their guardian to maintain their educational expenses which sometimes considered as a burden. Tisdell and Hossain (2005) stated that early marriage, cultural norms and religious orthodoxy have also been responsible for the low educational attainments of women in Bangladesh. Another important factor mentioned by Rezwanul Huque khan and et all (2009), that parents decision has been considered as the selection criteria of a private university.

Thus the enrollment criteria regarding private universities found in the literature review as few factors that may motivate students to choose a university. In this case the researcher focused some factors which are the lower tuition fees, library and laboratory facilities, location of the campus, market oriented subjects, credit transfer facility, and hostel facility for the students, common room facilities for the students, brand value of the university, parents' decision and Approved by UGC.

#### RESEARCH METHODOLOGY

# **Research Design**

This research is an exploratory and empirical in nature based on primary data. Secondary sources of information also used for review of the literature, theoretical framework, and questionnaire. Primary data were collected through a structured self-administered questionnaire consisting of respondent's demographic variables as well as research specific independent and dependent variables. The questionnaire, the first, was administered to 50 students from three private universities at Sylhet Division to justify the validity and reliability of all questions. After few corrections, results have shown good internal consistency.

# **Participants**

On the basis of pilot study's feedback, the final questionnaire was modified and finalized to collect primary data. 1350 survey instruments were surveyed and total 1035 were returned representing an effective response rate of 76. 68 %. 35 filled questionnaires were discarded because of respondents' inconsistent information. Finally, this study was based on 1000 full times employees who met our sampling criteria (e.g., Cohen & Cohen 1983) mentioned that for running multiple linear regression analysis, the optimum sample size might be 20 samples for one independent variable and minimum sample size might be 5 samples for one independent variable). However, details about participants are presented in Table No.1.

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**Table: 01 Demographic Analysis of Respondents** 

Variable	Categories	No. of Responses	Percentages
Gender	Male	670	63.00
	Female	330	37.00
	Below-18 Years	15	01.50
Age	18-23 Years	656	65.60
	23-28 Years	244	24.44
	28-33 Years	43	04.26
	33 Years- Above	42	04.20
	Below-30,000	60	06.00
Guardian Income	30,000-45,000	450	45.00
	45,000-60000	296	29.60
	60,000- Above	194	19.40
	Business Studies	350	35.00
Passing Group in HSC	Science	325	32.50
	Humilities	156	15.60
	Others	169	16.90
	Islam	850	85.00
Religion	Hindu	96	09.60
	Christian	24	02.40
	Buddhist	15	01.50
	Others	05	0.50

63% respondents are male students and 37% students are female students. 65.60% students' age range between 18-23 Years and 24.44% of the students are in the range of 23-28 years. The findings regarding the "Guardian Monthly Income" demonstrates that almost 45.00% students' average monthly income is more than BDT 30000 but less than BDT 45000 which indicates that most of the students of the private universities come from Middle Class family. On the other hand 29.60% students" average monthly income is more than BDT 45000 which indicates that a large portion of students" come from Upper Middle Class family. 32.50% students' who are studying in private universities had their educational background in HSC level in Science, 35.00% students' educational background had Business Studies, 15.60% had Humilities group and rest 16.90% of the students' are from other educational backgrounds like A level, Vocational and religious institutions. 85.00% students have come from Muslim family while 09.60% of the students have come from Hindu family and 2.40%, 1.50% and 0.5% respectively from Christian, Buddhist and Other religion.

# **Measures and Plan for Analysis**

All independent and dependent variables were rated on 5-point Likert Scale where 1= strongly disagree and 5= strongly agree. Data analysis was carried out with the use of SPSS 17.5 version software. First, descriptive statistics are shown based on the mean and standard deviation. Second, the chi-square test was conducted to know the association among most significant variables and finally, multiple regression analysis was directed to know the effect and relationship of all research variables.

#### EMPIRICAL RESULTS AND FINDINGS

Table: 02 Descriptive Statistics of Students' Enrollment Criteria

No	Students' Enrollment Criteria/Independent Variable	Mean	SD	CV
1	Permanent Campus	4.30	0.59	0.34
2	Position of the campus	4.35	0.59	0.45
3	Hostel facility for students'	4.25	0.66	0.23
4	Transportation facility for students'	4.08	0.61	0.37
5	Image of the university	4.38	0.57	0.32
6	Medical facility	2.91	1.20	1.44
7	Preferred Program	4.34	0.56	0.31
8	Classroom Facility	3.90	0.69	0.47
9	Library facility (Books, Journals, etc.)	3.15	0.95	0.94
10	Common room facility for students'	3.54	1.05	1.11
11	Parents Decision	4.13	0.60	0.47
12	Credit transfer facility	3.95	0.69	0.67
13	Quality of Teaching	4.33	0.59	0.35
14	Prayer room for students'	3.13	0.96	0.93
15	Wash Room Facility for 1students'	2.68	1.09	1.19
16	Discussion Room for students'	3.00	.98	1.02
17	Auditorium	2.91	1.20	1.44
18	Tuition fees	4.30	0.60	0.36
19	Cultural Club for students'	2.64	1.09	1.19
20	Freedom to choose the major subject	4.21	0.62	0.38

Students were asked on 20 university related factors, whether they were influenced by those factors and to what extent. Based on their answers, it is observed that students are highly influenced by the image of the university, the position of the campus, preferred program, and quality of teaching (table-2). The majority of students consider an important factor that is permanent campus including some facilities like hostel facility, credit transfer facility,

transportation facility, class room facility, common room facility, laboratory facility, medical facility, auditorium facility, wash room facility etc. From the above table it is found that location of the campus, parents' decision and tuition fees have a significant impact on the enrolment behaviour of students' in private universities of Bangladesh. After analyzing the descriptive statistics the researchers have found a maximum number of students at various private universities in Bangladesh think that image of a university is very important along with the preferred program and permanent campus to enroll them as a student of a university especially a private university.

# **Chi-Square Test**

Based on the results of descriptive statistics, three factors or criteria play a significant role to enroll students in private universities in Bangladesh. So, the researchers have decided to identify the relationship between these three important factors based on formulated hypotheses (Image of the University, Position of the campus and Preferred Program).

For H<sub>01</sub>

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	66.705(a)	4	.000
Likelihood Ratio	81.306	4	.000
Linear-by-Linear Association	18.585	1	.000
N of Valid Cases	1000		
1 cells (11.1%) have expected count less than 5. The minimum expected count is 1.17.			

Table: 03 Chi-square test

Let the null hypothesis ( $\mathbf{H}_{01}$ ) of no association Image of the University and Permanent Campus will be rejected only when the calculated value of test statistic is greater than the critical value. Pearson chi-square test value is 66.705(a) at 4% degree of freedom. The critical value is 09.488 at 4% d.f of 5% level of significance, which is less than calculated value. So there is some relation exist between two variables (Image of the University and Position of the Campus).

### **Symmetric Measures**

		Value	Approx. Sig.	
Nominal by Nominal	Phi	.298	.000	
	Cramer's V	.211	.000	
N of Valid Cases	·	1000		
NT				

a Not assuming the null hypothesis.

**Table: 04 Symmetric Measures** 

b Using the asymptotic standard error assuming the null hypothesis.

Here, Phi-coefficient value is 0.298, which indicates that there is positive relationship between Image of the university and Permanent Campus Here, Cramer's V value is 0.211, which indicates that there is positive relationship between Image of the university and Position of the Campus

# For $H_{02}$ :

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.954(a)	4	.003
Likelihood Ratio	16.525	4	.002
Linear-by-Linear Association	.000	1	1.000
N of Valid Cases	1000		
A 1 cells (11 10/) have expected count less than 5. The minimum expected count is 02			

A. 1 cells (11.1%) have expected count less than 5. The minimum expected count is .92.

Table: 05 Chi-square test

Let, the null hypothesis  $(H_0)$  of no association between two variables Image of the University and Preferred Program will be rejected only when the calculated value of test statistic is greater than the critical value. Pearson chi-square test value is 15.954(a) at 04% degree of freedom. The critical value is 09.488 at 04% d.f of 5% level of significance, which is less than calculated value. So there is some relation exist between two variables.

### **Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.146	.003
	Cramer's V	.103	.003
N of Valid Cases		1000	

- a. Not assuming the null hypothesis
- b. Using the asymptotic standard error assuming the null hypothesis

**Table: 06 Symmetric Measures** 

Here, the Phi-coefficient value is 0.146, which indicates that there is a positive relationship between Image of the University and Preferred Program. Here, Cramer's V value is 0.103, which indicates that there is a positive relationship between Image of the University and Preferred Program.

# **Multiple Regression Analysis**

As in our research, there are more than two independent variables, so multiple regression analysis would be an ideal analysis.

Y (Stu\_Enr) =  $\beta i + \beta 1$  (Par\_Cam) +  $\beta 2$  (Pos\_Cam) +  $\beta 3$  (Hos\_Fac) +  $\beta 4$  (Tran\_Fac) +  $\beta 5$  (Img Uni) +  $\beta 6$  (Med Fac)) +  $\beta 7$  (Pre Prog) +  $\beta 8$  (Cls Fac) +  $\beta 9$  (Lab Fac +  $\beta 10$  (Com Fac) +

 $\beta 11 \ (Par\_Dec) + \beta 12 \ (Crdt\_Fac) \ \beta 1 + \beta 13 \ (Qul\_Tc + \beta 14 \ (Pray\_Fac) + \beta 15 \ (Was\_Fac) + \beta 16 \ (Dis\_Fac) + \beta 17 \ (Audit\_Fac) + \beta 18 \ (Tut\_Fac) + \beta 19 \ (Cul\_Club) + \beta 20 \ (Maj\_Sub).$ 

Y: Students' Enrollment

βi: Constant

Par\_Cam= Permanent Campus
Pos Cam=Position of the Campus

Host\_Fac=Hostel Facility

Tran\_Fac= Transportation Facility

Img\_Uni=Image of the University

Med\_Fac=Medical Facility
Pre\_Prog= Preferred Program
Cls\_Fac=Class Room Facility
Lab\_Fac=Labrotary Facility

Com Fac=Common Room Facility

Par Dec= Parents Decision

Crd\_Tran= Credit Transfeer Facility
N.Qul\_Tc=Quality of Teaching
Pray\_Fac=Prayer Room Facility
Wash\_Room=Wash Room Facility
Dis\_Room= Discussion Room Facility

Audit\_Fac= Auditorium Facility

Tut\_Fees= Tuition Fees Cul\_Club= Cultural Club Maj\_Sub= Major Subjects

The researcher has assumed the null hypothesis; there is no difference among the factors to the Enrolment criteria of students' for higher education in the Private University of Bangladesh whereas an alternative hypothesis is that there are some differences among the factors the factors to the Enrolment criteria of students' for higher education in Private University of Bangladesh. We can assume the  $\beta$  values of each independent variable as group parameters. If the  $\beta$  values of all independent variables are same it indicates the independent variables (20 factors) have no effect on the dependent variable (Overall Satisfaction) which means the null hypothesis would be accepted. But if the  $\beta$  of all the independent variables are not same then it can be said that the null hypothesis is rejected and automatically the alternative hypothesis would be accepted. The researcher also uses the  $R^2$  value to the test hypothesis. If this value is 0, then it can be said that there is no relationship between the independent and dependent variables for **the Enrolment Behavior of Students' for Higher Education in Private University of Bangladesh**. If not, then we can say there is some relationship between the variables, which means we can reject the null hypothesis and accept the alternative hypothesis. Snapshot of the hypothesis with multiple regression analysis given below:

$$\mathbf{H_{3ao}}$$
:  $\beta 1 = \beta 2 = \beta 3 = \beta 4 = \beta 5 = \beta 6 = \beta 7 = \beta 8 = \beta 9 = \beta 10 = = \beta 11 = \beta 12 = \beta 13 = \beta 14 = \beta 15 = \beta 16 = \beta 17 = \beta 18 = \beta 19 = \beta 20 = 0$ 

**H**<sub>3**bo**</sub>: H0: 
$$R^2 = 0$$
  
H0:  $R^2 \neq 0$ 

From the result shown in the SPSS analysis for regression analysis, the following relationship was found between the independent and dependent variables-

# **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.961(a)	.924	.921	.15481	

From SPSS Calculation, the values of  $\beta$  are given

 $\begin{array}{l} Y \; (Fel\_Enr) = \beta i \; \text{-.006} \; (\; Par\_Cam) \; + \; .002 \; (Pos\_Cam) \; \text{-.017} \; (Host\_Fac) \; \text{-.013} \; (Tran\_Fac) \; + \; .957 \\ (Img\_uni) \; \text{-.076} \; (Med\_Fac) \; \text{-.011} \; (Pre\_Prog) \; \text{-.012} \; (Cls\_Fac) \; \text{-.002} \; (Lab\_Fac) \; + \; .004 \; (Lib\_Fac) \\ + \; .006 \; (Com\_Fac) \; + \; .005 \; (Parn\_Dec) \; + \; .023 \; Crd\_Tran) \; + \; .028 \; (Qul\_Tc) \; \text{-.016} \; (Pray\_Fac) \; + \; .006 \; (Wash\_Room) \; + .013 \; (Dis\_Room) \; \text{-.014} \; (Audit\_Fac) \; + \; .008 \; (Tut\_Fees) \; + .066 \; (Cul\_Club) \; \text{-.008} \\ (Maj\_Sub). \end{array}$ 

#### Here,

 $R^2$  value = 0.924 Adjusted  $R^2$  = 0.921

From the above relationship, it is clear that the  $\beta$  value associated with each independent variable is not same, that means the null hypothesis is rejected and the alternative hypothesis is accepted for **the Enrolment Behavior of Students' for Higher Education at the Private University of Bangladesh**. Also  $R^2 \neq 0$  which also means that the null hypothesis can be rejected and alternative hypothesis can be accepted. So, the hypothesis test can be done in both ways and result would be the same; rejection of null hypothesis and acceptance of the alternative hypothesis. So, we can conclude that there are some relationships among the variables.

#### IMPLICATION TO PRACTITIONERS AND POLICY MAKERS

This study is relevant to the higher authority of Private Universities in Bangladesh as it provides the necessary and real pictures of internal enrollment criteria for their students. The findings could assist the higher authority of Private Universities in Bangladesh and policy makers to understand the impact of research variables or criteria of students' of Private Universities in Bangladesh. Additionally, students of Private Universities of Bangladesh will get a comprehensive idea about enrollment criteria for higher education. Finally, University Grant Commission (UGC) may use necessary information from findings while preparing any policy relating to enrollment criteria for higher education in Private Universities in Bangladesh.

# LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This research paper has some mentionable limitations. First, some of the questionnaires were distributed to the respondents through the concerned teachers. Sometimes teachers may create pressure on students to complete the questionnaire in a particular way. In this situation actual responses from respondents may not ensure. Although several quantitative types of research have been conducted in this study but it is a matter of considerable issue that qualitative research would further help to contribute to this area to gain insight by looking through different angles of enrollment criteria of students for higher education in Bangladesh. Finally, in this research only

internal criteria or factors are considered but in future, the researchers have a plan to consider both internal and external enrollment criteria for private higher education in Bangladesh.

#### **CONCLUSION**

This study furnishes with some useful information for both business and academic community who are either involved or intense to get involved in higher education in private sector. The development of a country largely depends on the attainment of higher education of and this research paper shows a real picture of the enrollment behavior of as well as enrollment rate of higher education in private universities in Bangladesh. The present enrollment rate in private universities of Bangladesh is only one fourth of the total students. Out of them most of the students come from Muslim family and their education expenses totally depends on their guardian income. The majority of the students studying in private universities had science in HSC level and the percentage of the students from other (Madrasa and English) background is very lower. This research paper also indicates that there is a significant relationship between Image of the university and permanent campus. That means the private universities who have their own campus including some facilities they are getting some benefits to enroll the students. This study indicates some important criteria relating to enrollment criteria such as an image of the university, preferred programs, permanent campus, tuition fees, parents decisions, quality of teaching etc.

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