

The Evaluation of Problems and Prospects of Admission Systems in GST (General, Science & Technology) Universities in Bangladesh

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ABSTRACT

The study evaluates the Global Scholarship Test (GST) admission system in Bangladesh, focusing on its effectiveness in reducing costs, time of admission tests, and financial burden for students and guardians. The study used a structured questionnaire and closed-ended surveys to collect data from 400 respondents at Islamic University, Kushtia. The data reliability test was conducted from December 2023 to March 2024, with Cronbach's alpha values of 0.80, 0.72, and 0.77. The study found that students and guardians agreed that the GST system reduced costs and time of admission tests, but faced issues such as time-consuming admission processes, coordination gaps, and financial difficulties. Reputable universities face financial anomalies, violation of statutes, rules, and ordinances, and ignored representatives of worthy resources. The GST authority should monitor management systems, reduce admission time, provide guidelines, and address long queuing systems. Automatic software could help address financial burdens for lower-scoring subjects.

Keywords: Admission Test, GST System, Respondent, Financial Burden.

INTRODUCTION

After completing the HSC (Higher Secondary Certificate), students are admitted to different universities in Bangladesh. The higher education system has been expanding rapidly since 2000. The number of educational institutions has also increased significantly (Bhuia et al., 2016) but not sufficient to meet the demand. Before the independence of Bangladesh, there were only 6 universities but nowadays 172 universities in Bangladesh including 55 public universities, 114 private universities, and 3 international universities (UGC, 2024). Traditional systems of admission tests are taken in public and some private universities individually and based on the merit list and choice of the students admitted to the university (Mahmud et al., 2020). The test can not ensure that talented students are selected for admission systems.

Developed countries like the USA, recognize the SAT or ACT score and the teacher's opinion for admitting to the university. Arts students have to show papers, science students' work, and social activities (Jiang & Guo, 2020). Students of Thailand have to face The Central University Admissions System (CUAS) to admit universities which was conducted centrally designed by the National Institute of Educational Testing Service (NIETS) (Cherngchawano & Jaturapitakkul, 2014). In Australia, ATAR (Australian Tertiary Admission Rank) is the rank of the students based on the number (0.00 to 99.95) indicating the student position and is used in the selection of students in higher education it was developed by the Universities Admission Centre (UAC) (Blyth, 2014; Mahmud et al., 2020). In the UK, the application and admission

procedure for higher education is monitored and controlled by the Universities and Colleges Admission System (UCAS). An online search is offered to find out the credentials for admission to a particular subject in a specific institution (Boland & Mulrennan, 2011; Mahmud et al., 2020). Gaoko is used to admit students at the undergraduate level in China. The national government centrally coordinates the program and determines the number of seats available in each program of the particular institution under the Ministry of Education in China (Mahmud et al., 2020; Muthanna & Sang, 2016). In Japan, a standardized test is used for the admission of public and private universities called the National Centre Test for University Admission. The National Centre for University entrance examination is held on the same day on the same question across the country. The test score focused on the eligibility of students on a specific subject in a particular institution (Mahmud et al., 2020; Watanabe, 2013).

From the above, it is noted that most of the developed countries' higher education admission systems are conducted and monitored centrally. A specific test is taken based on the score of students who are eligible for specific subjects at a particular institution. Not only Brazil (Admission name Vestibular) but also France (Admission name Baccalaureate) used a central admission test system for higher education (Mahmud et al., 2020; McGrath et al., 2014; Pedrosa et al., 2014). In the past, all the public universities in Bangladesh took separate admission tests. As a result, students had to face different university admission tests which are a financial burden, burden of test repetition, communication barriers, accommodation problems, and time-consuming, various types of admission tests and question patterns, etc (Mahmud et al., 2020). Dhaka University, Chittagong University, Rajshahi University, and Jahangirnagar University, took separate admission tests based on the 1973 Act. All the agri-based universities in Bangladesh took a single admission test. All engineering and technology universities (CUET, RUET, DUET, KUET) except BUET took a single admission test for admission of students. Medical college authorities took a single admission for admission in medical, and based on the score medical college is assigned. National University and Open University did not take the admission test. Without that Bangladesh University of Professionals, Bangladesh University of Textiles, and Bangabandhu Sheikh Mujibur Rahman Aviation and Aerospace University took separate admission tests for admitting the students. 92 % of people opined on the change of admission system from traditional in Bangladesh to reduce the suffering and cost (Mahmud et al., 2020). The admission process is a very challenging process to select the right students (Mengash, 2020). Addressing the issues, the design of GST came forward and 20 public universities took part in this admission system from the session of 2020-2021 following the testing method used in developed countries. The modern process of admission is not well equipped in Bangladesh and several problems (Complex subject choice, time-consuming, etc.) were faced by both authorities and students (also guardians). So, the undertaken study is taken to the evaluation of problems and prospects of GST (General, Science & Technology) Admission in Bangladesh.

SIGNIFICANCE OF THE STUDY TO NATIONAL DEVELOPMENT

Most people consider, a university degree essential to their preparedness for the workforce (Fong & Biuk-Aghai, 2009). The university graduates are the main drivers of the different sectors of a country. Those graduates continuously enter higher educational institutions like universities every year. The quality of freshly graduated students completely depends on the proper selection of admission systems. The conventional admission systems, which are not proven in the light of the GST systems have been introduced recently so well furnished to select the students with equity, fairness, and avoiding hazards. Thus it is becoming a vital problem for the segment of higher education level in Bangladesh. The undertaken study will help reduce the impacts of the present problems and provide better selection criteria for the students and admission procedure. Moreover, the study results will be a remarkable contribution to the students, guardians, teachers, researchers, and policymakers of the education sectors in Bangladesh.

OBJECTIVES OF THE STUDY

The main objective of the study is to find out the merits and demerits of the present GST admission test

systems and provide suggestions to improve the system and whether it is sustainable in Bangladesh. The specific objectives are the following:

1. To make an overview of the admission systems under the GST Universities in Bangladesh;
2. To identify the influential factors regarding the problems and prospects of this system; and
3. To make some recommendations to overcome the drawbacks and develop a sustainable model of admission systems for GST universities.

REVIEW OF RELATED WORKS OF LITERATURE

For fulfillment of the knowledge gap and development of a conceptual framework, the researcher reviewed some research works which are narrated below:

Jiang and Guo (2020) found that to fulfill the requirement of human resources to meet the needs of the country, the students should be classified according to talent into diversified fields of knowledge within the college level. After the college level, the admission tests would be diversified and be held in combination with different subjects of the universities.

Bhuia et al. (2016) indicated that a vital number of students obtaining a GPA of 5.00 both in SSC and HSC did not qualify to be admitted into Shahjalal University of Science and Technology (SUST) though they had maximum opportunity in enrollment. Researchers suggested that admission test scores should be given more preference than academic results.

Cherngchawano and Jaturapitakkul (2014) voiced that university admission tests in Thailand are conducted by the National Institute of Education Testing Service (NIETS). This institute conducted different types of tests on the interested students based on eagerness for the field at the university level.

Mahmud et al. (2020) explored three convenient models an integrated admission system (IAS), cluster system admission based on the subject (CSAS), and, cluster system admission based on the type of university (CSAT) to conduct unified admission tests for all universities in Bangladesh. This reduces the drawbacks of traditional admission systems and provides quality students for the universities.

Fong and Biuk-Aghai (2009) explained the automated admission of higher secondary students. They presented a hybrid model of neural network and decision tree classifier for university admission. The system had high prediction accuracy and flexibility, predicting suitable universities based on students' profiles and approaches.

The reviews stated different procedures of admission systems followed in various countries across the world. In Bangladesh, 20 universities including 10 general and specialized universities followed the admission systems of GST in the session 2020-2021 and students were admitted under those systems. In the session 2023-2024, the results of admission tests under GST have already been published but have not yet been completed admission procedures. Last sessions, 2020-2021, 2021-2022, and 2022-2023 experience in this regard were not so satisfactory. So, it is needed to develop a suitable system that will help to solve the problems related to admission tests under GST universities of Bangladesh.

HISTORY OF THE GST ADMISSION SYSTEM IN BANGLADESH

On the desire of the former honorable president of Bangladesh and chancellor of university advocate Abdul Hamid, the design of GST came forward to reduce the suffering of the students admitting universities. With

the presence of the Vice-Chancellor of different universities, a meeting was held to decide on GST (General Science and Technology) in the premises of the University Grand Commission of Bangladesh. A final decision was taken to take the combined admission test from the session 2020-2021. Four times (Session 2020-2021, 20 universities; Session:2021-2022, 22 universities; Session:2021-2022 & 2022-2023, 22 universities; Session:2023-2024, 24 universities are attached in GST) GST admission system admission tests were held in which a total of 2,98,067 students participated in the GST admission tests in 2022-23, whereas it was 305,346 in 2023-24 (<https://bn.wikipedia.org/wiki>; News, 2024).

METHODOLOGY ADOPTED IN THE INVESTIGATION

Data collection: A well-defined structured questionnaire with a five-point Likert scale is used to collect primary data. Moreover, a set of closed-ended questionnaires and opinion surveys is conducted using the formalities of a piloting questionnaire, test, re-test, and validity and reliability confirmation. Since the admission system and student categories under GST are the same, respondents of the study are admitted students under GST of Islamic University, Kushtia, Bangladesh; and their guardians are selected based on simple random sampling where the sample size of 400 respondents is estimated by applying the following formula suggested by Yamane (Yamane, 1973)

$$n = \frac{N}{1 + N(e^2)}$$

Where, n = Size of the sample to be determined

N =Population size of students (2275 students in each session i.e. 9100 students in total and their parents)

e = is the level of precision (Acceptable error 5%)

Moreover, open suggestions and recommendations have been taken from educationists, social workers, and university teachers.

Data Collection Period and Test of Reliability: Data is collected from 200 students and guardians each but due to incompleteness 19 are not considered. So, the final collected data is 191 students and 191 guardians (including parents, elder brothers, or legal guardians). The data collection period has been from December 2023 to March 2024 highly emphasized given to the students admitted under GST systems. The result of the data reliability test is good since the Cronbach alpha (value) is 0.80, 0.72, and 0.77 respectively for students, guardians, and overall respondents.

Analysis Tools and Techniques

The collected data is analyzed by different types of statistical tools and techniques like mean, mode, median, standard deviation, coefficient of variation, factors loading using a rotated component matrix, total variance explained, and regression analysis are used to assess the different factors affecting the perception of the respondents about the GST admission system using SPSS version-24.

Selected Variables of the Study

There are 20 perceptions taken for the analysis of the problem and prospects of the GST admission system under **general issues**, distress of the admission issues, and drawback issues. 5 (five) General Issues are Cost / Expenses regarding admission process is reduced(X1), Time duration of admission test is minimized(X2), It facilitates relief of transportation others cost(X3), It provides effectiveness and fairness of admission activities(X4), It solves excessive pressures of tests repetition(X5). 10 (ten) **distresses of GST admission**

systems are Increasing the suffering of the applicants (X6), Time-consuming in the admission process(X7), Faultyadmission systems(X8), Complex admission systems(9), Increasing the financial burden of the guardian(X10), Selected students are failed to get desired subject (X11), Co-ordination gaps are foundamong universities(X12), Private tertiary levels are benefited in unhealthy competitions (X13), It fails to maintain academic years on time (X14), It causes the creation of session jam (X15), and **the drawback issues** are Reducing the self-status of renowned universities(X16), Unpublished financial information and distribution policy (X17), Violation of universities statutes and rules regarding admission (X18), Sustaining discrimination in the education systems(X19), Representatives of worthy resources are ignored (X20).

DATA ANALYSIS AND INTERPRETATIONS

Collected data have been stored, edited, and analyzed. The analysis and interpretations are as follows:

Table No. 1 Demographic Information of Students and Guardian

Variables	Particulars	Students			Guardians			Overall		
		f	%	C %	f	%	C %	f	%	C %
University	Islamic University	191	100	100.0	191	100	100	382	100	100
Division	Dhaka	19	10	10	19	10	10	38	10	10
	Chattagram	18	9	19	18	9	19	36	9	19
	Rajshahi	39	20	39	39	20	40	78	20	40
	Khulna	74	39	78	74	39	79	148	39	79
	Sylhet	9	5	83	9	5	83	18	5	83
	Barishal	6	3	86	6	3	86	12	3	86
	Rangpur	16	8	95	16	8	95	32	8	95
	Mymensingh	10	5	100	10	5	100	20	5	100
	Total		191	100		191	100		382	100
Gender	Male	117	61	61	149	78	78	266	70	70
	Female	74	39	100	42	22	100	116	30	100
	Total	191	100		191	100		382	100	
Age (Years)	18-25	191	100	100	1	1	1	192	50	50
	30-50	0	0		110	58	58	110	29	79
	51-73	0	0		80	42	100	80	21	100
	Total	191	100		191	100		382	100	
Educational qualifications	Uneducated				120	63	63	120	31	31
	Primary-Highschool				28	15	78	28	7	39
	SSC-HSC	191	100	100	30	16	93	221	58	97
	Hon's-Masters				13	7	100	13	3	100
	Total	191	100		191	100		382	100	
Marital status	Unmarried	180	94	94	2	1	1	182	48	48
	Married	11	6	100	187	98	99	198	52	100
	Others	0	0		2	1	100	2	1	100
	Total	191	100		191	100		382	100	

Family Members	4-Feb	97	51	51	91	48	48	188	49	49
	6-May	78	41	92	91	48	96	169	44	93
	9-Jul	16	8	100	9	5	100	25	7	100
	Total	191	100		191	100		382	100	

Source: Compiled from primary data by SPSS version: 24, *F*= Frequency, %= Percentage, *C*%= Cumulative percentage.

The assessment of respondents’ geographic location, gender, age, educational qualifications, marital status, and family size of the students and guardians are displayed in Table No. 1. Among the respondents all the students (191) were taken from the Islamic University, Bangladesh, Kushtia who are admitted under the admission system of GST and their guardians. The home division of those respondents is 74 (39%) from the Khulna division followed by Rajshahi 39 (20%), Dhaka 19 (9%), Chattagram 18 (9%), Rangpur 16 (8%), Mymensingh 10 (5%), Sylhet 9 (5%) and Barishal 6(3%). 70% (266) of respondents are male, and the maximum age level of the respondents lay between 18-25 years i.e. the age of students. The education level of the respondents is at the level of SSC-HSC 221(58%) followed by 120 (31 %) i.e. most of the guardians are uneducated and only 3 % of guardians are highly qualified i.e. honor to master’s level. The marital status of the respondents is married 52%, indicating some students are married. The family size is indicated mostly the single-family i.e. 2-4 person family of the respondents 188 (49%).

Table No. 2 Choice of university and departments in Admission

Variables	Particulars	Students			Guardians			Overall		
		f	%	C %	f	%	C %	f	%	C %
Choice of Admission	Arts	11	6	6	47	25	25	58	15	15
	Commerce	138	72	78	62	32	57	200	53	68
	General Science	11	6	84	47	25	82	58	15	83
	Technical Science	15	8	92	19	10	92	34	9	92
	Medical	16	8	100	16	8	100	32	8	100
	Total	191	100		191	100		382	100	
Admitted to Desire University	Yes	118	62	62	126	66	66	244	64	64
	No	73	38	100	65	34	100	138	36	100
	Total	191	100		191	100		382	100	
Admitted in desire Subject	Yes	153	80	80	119	62	62	272	71	71
	No	38	20	100	72	38	100	110	29	100
	Total	191	100		191	100		382	100	

Source: Compiled from primary data by SPSS version: 24, *F*= Frequency, %= Percentage, *C*%= Cumulative percentage.

Table No.2 depicts the choice of admission of the respondents. Among the respondents it is revealed that most of the choice is commerce 52% (200), followed by arts 15%(58), general science 15%(58), technical science 9%(34), and medical 8% (32). The respondents stated that 64%(244) were admitted to their desired university and 71% (272) got their desired subject but guardians’ perceptions differ from students’ perceptions.

Table No. 3 Perception of Respondents in General Issues

Variables	Perception	Students			Guardians			Overall		
		f	%	C %	f	%	C %	f	%	C %
X1	1	22	11	12	25	13	13	47	12	12
	2	22	11	23	18	10	23	40	11	23
	3	28	15	38	60	31	54	88	23	46
	4	55	29	67	42	22	76	97	25	71
	5	64	34	100	46	24	100	110	29	100
	Total		191	100		191	100		382	100
X2	1	45	24	24	31	16	16	76	20	20
	2	28	15	38	27	14	30	55	14	34
	3	18	9	48	57	30	60	75	20	54
	4	59	31	79	41	22	82	100	26	80
	5	41	22	100	35	18	100	76	20	100
	Total		191	100		191	100		382	100
X3	1	12	6	6	8	4	4	20	5	5
	2	4	2	8	6	3	7	10	3	8
	3	31	16	25	56	29	37	87	23	31
	4	69	36	61	66	35	71	135	35	66
	5	75	39	100	55	29	100	130	34	100
	Total		191	100		191	100		382	100
X4	1	19	10	10	12	6	6	31	8	8
	2	23	12	22	14	7	14	37	10	18
	3	51	27	49	83	44	57	134	35	53
	4	71	37	86	58	30	87	129	34	87
	5	27	14	100	24	13	100	51	13	100
	Total		191	100		191	100		382	100
X5	1	12	6	6	7	4	4	19	5	5
	2	19	10	16	18	9	13	37	10	15
	3	24	13	29	64	34	47	88	23	38
	4	68	36	64	54	28	75	122	32	70
	5	68	36	100	48	25	100	116	30	100
	Total		191	100		191	100		382	100

Source: Compiled from primary data by SPSS version: 24, *F*= Frequency, %= Percentage, *C*%= Cumulative percentage, *X1*=Cost / Expenses regarding admission process is reduced, *X2*= Time duration of admission is minimized, *X3*= It facilitates relief of transportation and other costs, *X4*= It provides effectiveness and fairness of admission activities, *X5*= It solves excessive pressures of tests repetition; Strongly Disagree =1, Somewhat Disagree=2, No comment=3, Somewhat Agree=4 and Strongly Agree=5.

Table No. 3 shows that 11%, 11%, 15%, 29%, and 34% of students expressed their opinions about the variable *X1* (Cost / Expenses regarding admission process is reduced), which falls into the categories of 1, 2, 3, 4, and 5 perceptions. The guardian's perceptions, on the other hand, are 13%, 10%, 31%, 22%, and

24%. Additionally, the table indicates that of the total respondents, 12%, 11%, 23%, 25%, and 29% fall into the 1, 2, 3, 4, and 5 groups, respectively.

It shows that, about variable X2 (Time duration of entry is minimized), students' opinions fell into the following categories: 24%, 15%, 9%, 31%, and 22%. In contrast, the guardian's perceptions fall into the following categories: 16%, 14%, 30%, 22%, and 18%. Additionally, the table indicates that 20%, 14%, 20%, 26%, and 20% of the total respondents fall into groups 1, 2, 3, 4, and 5, respectively.

It demonstrates that, for variable X3 (It helps relieve transportation costs), opinions from students fall into the following categories: 6%, 2%, 16%, 36%, and 39%. In contrast, the guardian's perceptions fall into the following categories: 4%, 3%, 29%, 35%, and 29%. The chart additionally indicates that among the total respondents, categories 1, 2, 3, 4, and 5 comprise 5%, 3%, 23%, 35%, and 34% of the sample, respectively.

The findings indicate that 10%, 12%, 27%, 37%, and 14% of students expressed their opinions about variable X4 (which determines the effectiveness and fairness of admission activities). These opinions fall into the 1, 2, 3, 4, and 5 perception categories. In contrast, the guardian's perceptions are 6%, 7%, 44%, 30%, and 13%. Additionally, the data indicates that, of all responders, 8%, 10%, 35%, 34%, and 13% fall into groups 1, 2, 3, 4, and 5, respectively.

It shows that, about variable X5 (It relieves excessive stresses of exam repetition), opinions from 6%, 10%, 13%, 36%, and 36% of students fall into the categories of 1, 2, 3, 4, and 5 perceptions, while the guardian's perceptions fall into the same categories at 4%, 9%, 34%, 28%, and 25%. Additionally, the data shows that, of all responders, 5%, 10%, 23%, 32%, and 30% fall into groups 1, 2, 3, 4, and 5, respectively.

Table No. 4 Mean values of General Issues

Variables	Students				Guardians				Overall			
	Mean	Me	Mo	CV	Mean	Me	Mo	CV	Mean	Me	Mo	CV
X1	3.61	4	5	38%	3.35	3	3	39%	3.48	4	5	38%
X2	3.12	4	4	48%	3.12	3	3	42%	3.12	3	4	45%
X3	4.00	4	5	28%	3.81	4	4	27%	3.90	4	4	27%
X4	3.34	4	4	35%	3.36	3	3	30%	3.35	3	3	32%
X5	3.84	4	4a	31%	3.62	4	3	30%	3.73	4	4	31%

Source: Compiled from primary data by SPSS version: 24, Mean= Arithmetic mean; me=median, mo= mode, CV= coefficient of variation, X1=Cost / Expenses regarding admission process is reduced, X2= Time duration of admission is minimized, X3= It facilitates relief of transportation others cost, X4= It provides effectiveness`and fairness of admission activities, X5= It solves excessive pressures of tests repetition. ,

From Table No. 4, in the general issue, based on mode value, variables X1 and X3 denote strongly agreed (5), and X2, X4, and X5 indicate the agreed level (4) of the students. The included variables' mean values ranged from lower 3.12 to higher 4.00. Greater values of the coefficient of variation (C.V.%) indicate less uniformity of the respondents' opinions regarding the variables in question, while lower values of the same indicate more consistency i.e. X2 indicates less uniformity but X3 is more consistent in the student's perception.

The guardian perception's average mean value is lower at 3.12 (X2) and higher mean value at 3.81(X3). Based on mode value, variables X1, X2, X4, and X5 denote no comments(3), and X3 indicates the agreed level(4). Greater variation in the perception level is X2, and more consistency is X3.

Overall perception mode value, variables X1 denote strongly agreed(5), X2, X3, and X5 indicate the agreed level(4), and variable X4 indicates no comment(3). The included variables' mean values ranged from lower 3.12 to higher 3.90.

Table No. 5 Distresses of GST Admission Systems

Variables	Perceptions	Students			Guardians			Overall		
		f	%	C %	f	%	C %	f	%	C %
X6	1	38	20	20	31	16	16	69	18	18
	2	36	19	39	27	14	30	63	17	35
	3	38	20	59	69	36	67	107	28	63
	4	42	22	81	35	18	85	77	20	83
	5	37	19	100	29	15	100	66	17	100
	Total	191	100		191	100		382		
X7	1	16	8	8	13	7	7	29	8	8
	2	21	11	19	13	7	14	34	9	17
	3	30	16	35	55	29	42	85	22	39
	4	40	21	56	43	23	65	83	22	61
	5	84	44	100	67	35	100	151	40	100
	Total	191	100		191	100		382		
X8	1	18	9	9	12	6	6	30	8	8
	2	13	7	16	17	9	15	30	8	16
	3	57	30	46	82	43	58	139	36	52
	4	47	25	71	34	18	76	81	21	73
	5	56	29	100	46	24	100	102	27	100
	Total	191	100		191	100		382		
X9	1	27	14	14	12	6	6	39	10	10
	2	21	11	25	24	13	19	45	12	22
	3	39	20	46	65	34	53	104	27	49
	4	52	27	73	37	19	72	89	23	73
	5	52	27	100	53	28	100	105	28	100
	Total	191	100		191	100		382		
X10	1	38	20	20	24	13	13	62	16	16
	2	31	16	36	24	13	25	55	14	31
	3	45	24	60	71	37	62	116	30	61
	4	40	21	81	37	19	82	77	20	81
	5	37	19	100	35	18	100	72	19	100
	Total	191	100		191	100		382		
X11	1	16	8	8	10	5	5	26	7	7
	2	23	12	20	19	10	15	42	11	18
	3	52	27	48	73	38	53	125	33	51
	4	36	19	67	27	14	68	63	17	67
	5	64	34	100	62	33	100	126	33	100

	Total	191	100		191	100		382		
X12	1	8	4	4	3	2	2	11	3	3
	2	23	12	16	26	14	15	49	13	16
	3	42	22	38	70	37	52	112	29	45
	4	42	22	60	36	19	71	78	20	65
	5	76	40	100	56	29	100	132	35	100
	Total	191	100		191	100		382		
X13	1	7	4	4	7	4	4	14	4	4
	2	26	14	17	29	15	19	55	14	18
	3	68	36	53	80	42	61	148	39	57
	4	28	15	68	33	17	78	61	16	73
	5	62	33	100	42	22	100	104	27	100
	Total	191	100		191	100		382		
X14	1	17	9	9	9	5	5	26	7	7
	2	20	11	19	18	9	14	38	10	17
	3	35	18	38	71	37	51	106	28	45
	4	39	20	58	28	15	66	67	18	62
	5	80	42	100	65	34	100	145	38	100
	Total	191	100		191	100		382		
X15	1	14	7	7	13	7	7	27	7	7
	2	17	9	16	18	9	16	35	9	16
	3	40	21	37	80	42	58	120	31	48
	4	38	20	57	17	9	67	55	14	62
	5	82	43	100	63	33	100	145	38	100
	Total	191	100		191	100		382		

Source: Compiled from primary data by SPSS version: 24, *f*= frequency, %= percentage, *c*%= cumulative percentage; *Increasing suffering of the applicants (X6)*, *Time-consuming in the admission process(X7)*, *Faulty admission systems(X8)*, *Complex admission systems(9)*, *Increasing financial burden of the guardian(X10)*, *Selected students are failed to get desired subject (X11)*, *Co-ordination gaps are found among universities(X12)*, *Private tertiary levels are benefited in unhealthy competitions (X13)*, *It fails to maintain academic years on time(X14)*, *It causes the creation of session jam (X15)*; Strongly Disagree =1, Somewhat Disagree=2, No comment=3, Somewhat Agree=4 and Strongly Agree=5.

Table No. 5 shows that while 20%, 19%, 20%, 22%, and 19% of students expressed their perception, and the same measures of the guardian are found in 16%, 14%, 36%, 18%, and 15% under the categories of 1, 2, 3, 4, and 5 perceptions regarding variable X6 (*Increasing suffering of the applicants*). The table also shows that, of the total respondents, the following percentages fall into the appropriate categories: 18%, 17%, 28%, 20%, and 17%, respectively.

The findings indicate that 8%, 11%, 16%, 21%, and 44% of students expressed their opinions about the variable X7 (time-consuming admission system), which falls into the categories of 1, 2, 3, 4, and 5 perceptions. Meanwhile, the guardian's perceptions are measured at 7%, 7%, 29%, 23%, and 35%. The table also shows that 8%, 9%, 22%, 22%, and 40% of the total respondents fall into categories 1, 2, 3, 4, and 5, respectively.

As per variable X8 (*Faulty admission systems*), it shows that 9%, 7%, 30%, 25%, and 29% of the students expressed their opinions. These opinions fall into the categories of 1, 2, 3, 4, and 5 perceptions, while the guardian’s perceptions are 6%, 9%, 43%, 18%, and 24%. In addition, the table indicates that, of all responders, 8%, 8%, 36%, 21%, and 27% fall into categories 1, 2, 3, 4, and 5, respectively.

It shows that concerning variable X9 (*Complex admission systems*), 14%, 11%, 20%, 27%, and 27% of students expressed their opinions. These percentages fall into the categories of 1, 2, 3, 4, and 5 perceptions, while the guardian’s perceptions are 6%, 13%, 34%, 19%, and 28%. It can be seen from the table that 10%, 12%, 27%, 23%, and 28% of the total respondents fall into categories 1, 2, 3, 4, and 5, respectively.

In contrast to the guardian’s perceptions 13%, 13%, 37%, 19%, and 18% which are measured at 20%, 16%, 24%, 21%, and 19%, the students’ opinions regarding variable X10 (*Increasing financial burden of the guardian*) fall into the categories of 1, 2, 3, 4, and 5 perceptions, according to the data. The table also shows that, of the total respondents, categories 1, 2, 3, 4, and 5 correspond to 16%, 14%, 30%, 20%, and 19% of the respondents.

The findings indicate that 8%, 12%, 27%, 19%, and 34% of students expressed their opinions about the variable X11 (*Selected students failed to get desired subject*), which falls into the categories of 1, 2, 3, 4, and 5 perceptions. Meanwhile, the guardian’s perceptions are measured at 5%, 10%, 38%, 14%, and 33%. The table also shows that 7%, 11%, 33%, 17%, and 33% of the total respondents fall into categories 1, 2, 3, 4, and 5, respectively.

As per variable X12 (*Coordination gaps are found among universities*), it shows that 4%, 12%, 22%, 22%, and 40% of students expressed their opinions. These opinions fall into the categories of 1, 2, 3, 4, and 5 perceptions, while the guardian’s perceptions are 2%, 14%, 37%, 19%, and 29%. In addition, the table indicates that, of all responders, 3%, 13%, 29%, 20%, and 35% fall into categories 1, 2, 3, 4, and 5, respectively.

It shows that, about variable X13 (*Private tertiary levels are benefited from unhealthy competitions*), 4%, 14%, 36%, 15%, and 33% of students expressed their opinions. These percentages fall into the categories of 1, 2, 3, 4, and 5 perceptions, while the guardian’s perceptions are 4%, 15%, 42%, 17%, and 22%. It can be seen from the table that 4%, 14%, 39%, 16%, and 27% of the total respondents fall into categories 1, 2, 3, 4, and 5, respectively.

Regarding variable X14 (*It fails to maintain academic years on time*), the data indicates that 9%, 11%, 18%, 20%, and 42% of students voiced their viewpoints. The guardian’s perceptions are 5%, 9%, 37%, 15%, and 34%, whereas these percentages fall into the categories of 1, 2, 3, 4, and 5. The table shows that the percentage of respondents who fit into categories 1, 2, 3, 4, and 5 is 7%, 10%, 28%, 18%, and 38%, respectively.

It demonstrates that 7%, 9%, 21%, 20%, and 43% of students voiced their thoughts about variable X15 (*It causes the creation of session jam*). The percentages in question correspond to perceptions 1, 2, 3, 4, and 5, but the guardian’s views are 7%, 9%, 42%, 9%, and 33%. The table shows that 7%, 9%, 31%, 14%, and 38% of all responses fit into groups 1, 2, 3, 4, and 5, respectively.

Table No. 6 Mean value of Distresses of GST Admission Systems

Vari	Students				Guardians				Overall			
	Mean	Me	Mo	CV	Mean	Me	Mo	CV	Mean	Me	Mo	CV
X6	3.02	3	4	47%	3.02	3	3	42%	3.02	3	3	44%

X7	3.81	4	5	35%	3.72	4	5	32%	3.77	4	5	34%
X8	3.58	4	3	35%	3.45	3	3	33%	3.51	3	3	34%
X9	3.42	4	4a	40%	3.50	3	3	34%	3.46	4	5	37%
X10	3.04	3	3	46%	3.18	3	3	39%	3.10	3	3	43%
X11	3.57	4	5	36%	3.59	3	3	33%	3.58	3	5	35%
X12	3.81	4	5	32%	3.61	3	3	30%	3.71	4	5	31%
X13	3.59	3	3	33%	3.39	3	3	32%	3.49	3	3	33%
X14	3.76	4	5	35%	3.64	3	3	32%	3.70	4	5	34%
X15	3.82	4	5	33%	3.52	3	3	35%	3.67	4	5	34%

Source: Compiled from primary data by SPSS version: 24, Mean= Arithmetic mean, me=median, mo=mode, CV= coefficient of variation, Increasing suffering of the applicants (X6), Time-consuming in the admission process(X7), Faulty admission systems(X8), Complex admission systems(9), Increasing financial burden of the guardian(X10), Selected students are failed to get desired subject (X11), Co-ordination gaps are found among universities(X12), Private tertiary levels are benefited in unhealthy competitions (X13), It fails to maintain academic years on time(X14), It causes the creation of session jam (X15).

In the distress issue is described in Table No. 6, the average mean value of the student perception is greater at 3.82 (X15) and lower at 3.02 (X6). Two variables (X6 and X9) suggest slight agreement (4), the remaining three variables (X8, X10, and X13) indicate no remark (3), and five variables (X7, X11, X12, X14, and X15) indicate highly agreed level (5) based on mode value. X6 (47%), which shows higher variance in the perception level, and X12 (32%), which shows more consistency.

Based on mode value, all variables except X7 (strongly agreed) denote no comments (3) from the perception of the guardian. The included variables' mean values ranged from lower 3.2 (X6) to higher 3.72 (X7). Greater values of the coefficient of variation (C.V.%) indicate less uniformity of the respondents' opinions regarding the variables in question, whilst lower values of the same indicate more consistency i.e. X6 (42%) indicates less uniformity but X12 (30%) is more consistent in the student's perception.

The overall perception's average mean value is lower at 3.02 (X6) and higher mean value at 3.77(X7). Based on mode value, six variables(X7, X9, X11, X12, X14, and X15) denote strongly agreed level (5), and the other four variables (X6, X8, X10, and X13) indicate no comment (3). Greater variation in the perception level is X6(44%), and more consistency is X12 (31%).

Table No. 7 Drawbacks of GST Admission Systems in Management

Variables	Perception	Students			Guardians			Overall		
		f	%	c %	f	%	c %	f	%	c %
X16	1	11	6	6	20	10	10	31	8	8
	2	9	5	10	13	7	17	22	6	14
	3	48	25	36	75	39	57	123	32	46
	4	38	20	55	21	11	68	59	15	62
	5	85	45	100	62	32	100	147	39	100
	Total		191	100		191	100		382	100
X17	1	7	4	4	14	7	7	21	6	6
	2	15	8	12	17	9	16	32	8	14
	3	72	38	49	83	43	60	155	41	55

	4	56	29	79	52	27	87	108	28	83
	5	41	21	100	25	13	100	66	17	100
	Total	191	100		191	100		382	100	
X18	1	7	4	4	10	5	5	17	5	5
	2	20	10	14	16	8	14	36	9	14
	3	64	34	48	86	45	59	150	39	53
	4	52	27	75	50	26	85	102	27	80
	5	48	25	100	29	15	100	77	20	100
	Total	191	100		191	100		382	100	
X19	1	18	9	9	11	6	6	29	8	8
	2	17	9	18	13	7	13	30	8	15
	3	74	39	57	96	50	63	170	45	60
	4	37	19	76	42	22	85	79	21	81
	5	45	24	100	29	15	100	74	19	100
	Total	191	100		191	100		382	100	
X20	1	13	7	7	12	6	6	25	7	7
	2	18	9	16	15	8	14	33	9	15
	3	66	35	51	86	45	59	152	40	55
	4	42	22	73	46	24	83	88	23	78
	5	52	27	100	32	17	100	84	22	100
	Total	191	100		191	100		382	100	

Source: Compiled from primary data by SPSS version: 24, f = frequency, %= percentage, $c\%$ = cumulative percentage; Reducing the self-status of renowned universities(X16), Unpublished financial information and distribution policy (X17), Violation of university statutes and rules regarding admission (X18), Sustaining discrimination in the education systems(X19), Representatives of worthy resources are ignored (X20); Strongly Disagree =1, Somewhat Disagree=2, No comment=3, Somewhat Agree=4 and Strongly Agree=5.

Table No. 7 represents the drawbacks perception of students and guardians about the GST admission system in Bangladesh. Regarding variable X16 (*Reducing the self-status of renowned universities*), the data indicates that, among students, 6%, 5%, 25%, 20%, and 45% voiced their thoughts. These viewpoints are classified as views 1, 2, 3, 4, and 5, whereas the guardian's perceptions are 10%, 7%, 39%, 11%, and 32%. Furthermore, as the chart shows, of all respondents, 8%, 6%, 32%, 15%, and 39% fit into categories 1, 2, 3, 4, and 5, in that order.

It demonstrates that 4%, 8%, 38%, 29%, and 21% of students voiced their thoughts about variable X17 (*Unpublished financial information and distribution policy*). The percentages in question correspond to perceptions 1, 2, 3, 4, and 5, but the guardian's views are 7%, 9%, 43%, 27%, and 13%. The table shows that 6%, 8%, 41%, 28%, and 17% of all responses fit into groups 1, 2, 3, 4, and 5, respectively.

The data shows that 4%, 10%, 34%, 27%, and 25% of students expressed opinions about variable X18 (*Violation of university statutes and rules regarding admission*) whereas the perceptions from the guardian are 5%, 8%, 45%, 26%, and 15%; these numbers correspond to 1, 2, 3, 4, and 5 categories. According to the table, the perception of all respondents who fall into categories 1, 2, 3, 4, and 5 is, in that order, 5%, 9%, 39%, 27%, and 20%.

It shows that in regards to variable X19 (*Sustaining discrimination in the education systems*), 9%, 9%, 39%,

19%, and 24% of students expressed their opinions. The guardian’s opinions are 6%, 7%, 50%, 22%, and 15%; the percentages in question match perceptions 1, 2, 3, 4, and 5. Based on all replies, the table indicates that 8%, 8%, 45%, 21%, and 19% fall within groups 1, 2, 3, 4, and 5, respectively.

Regarding variable X20 (*Representatives of worthy resources are ignored*), the data indicates that 7%, 9%, 35%, 22%, and 27% of students voiced their thoughts. The percentages in question correspond to perceptions 1, 2, 3, 4, and 5. The guardian’s perspectives are 6%, 8%, 45%, 24%, and 17%. The table shows that, based on all responses, groups 1, 2, 3, 4, and 5 comprise 7%, 9%, 40%, 23%, and 22% of the total.

Table No. 8 Mean Value of Drawbacks of GST Admission Systems in Management

Vari	Students				Guardians				Overall			
	Mean	Me	Mo	CV	Mean	Me	Mo	CV	Mean	Me	Mo	CV
X16	3.93	4	5	30%	3.48	3	3	37%	3.70	4	5	34%
X17	3.57	4	3	29%	3.30	3	3	32%	3.43	3	3	30%
X18	3.60	4	3	30%	3.38	3	3	30%	3.49	3	3	30%
X19	3.39	3	3	36%	3.34	3	3	30%	3.36	3	3	33%
X20	3.53	3	3	33%	3.37	3	3	31%	3.45	3	3	32%

Source: Compiled from primary data by SPSS version: 24, Mean= Arithmetic mean, me=median, mo= mode, CV= coefficient of variation; *Reducing the self-status of renowned universities(X16)*, *Unpublished financial information and distribution policy (X17)*, *Violation of university statutes and rules regarding admission (X18)*, *Sustaining discrimination in the education systems(X19)*, *Representatives of worthy resources are ignored (X20)*.

Table No. 8 shows that the average mean value of the student’s perception regarding the drawbacks issues is 3.93 (X16) for higher and 3.39 (X19) for lower. Except for X16 (strongly agree), all variables are shown no comment (3). X17 (29%), which demonstrates greater consistency, and X19 (36%), which displays greater fluctuation in the perception level.

The average mean value of the gradian perception is 3.48 (X16) and lower at 3.30 (X17). All five variables indicate no comment based on the mode value (3). X16 (37%) shows higher variance in the perceptual level, whereas X18 and X19 (30%) show more stability.

The total perception’s average mean value 3.70 (X16) is higher and 3.36 (X19) is lower. Except for X16 (strongly agree), all variables show no comment (3). X16 (34%), indicating greater inconsistency, and X17 and X18 (30%), indicating greater fluctuation in the perceived level.

Table No. 9 KMO; Bartlett’s Test and Total Variance Explained for the Student’s Perceptions of the Evaluation of GST Admission Systems

Component	Total Variance Explained								
	I			E			R		
	P	Q	C	P	Q	C	P	Q	C
Factor-1	3.99	24.89	24.89	3.98	24.89	24.89	3.26	20.40	20.40
Factor-2	2.42	15.14	40.03	2.42	15.14	40.03	2.35	14.66	35.06
Factor-3	1.35	8.47	48.49	1.35	8.47	48.49	1.85	11.55	46.61

Factor-4	1.10	6.84	55.33	1.10	6.84	55.33	1.40	8.72	55.33
KMO and Bartlett's Test									
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.									0.762
Bartlett's Test of Sphericity: Approximate Chi-Squarevalue									855.519**

Source: Compiled from primary data by SPSS version: 22, Extraction Method: Principal Component Analysis, P=total, Q= Percentage of variance, C= Cumulative Percentage, I= Initial Eigenvalues, E= Extraction Sums of Squared Loadings R= Rotation Sums of Squared Loadings and **significant at 1 percent level with a degree of freedom=120. Factor-1 (Failure to maintain academic soundness), Factor-2 (Increasing suffering) Factor-3 (Cost reduction facilities, and Factor-4 (Time-saving admission test system).

The Tables No.9 clarifies the results of Kaiser-Meyer-Olkin (KMO), Bartlett's test of Sphericity as well as total variance explained by the carefully chosen components (Factor-1 to Factor-4) where initial eigenvalues are found greater than 1 for the respondents perceived satisfaction level of the evaluation of GST admission systems. The value of Bartlett's test of sphericity exposed that the approximate chi-square was 855.519 with 120 degrees of freedom at a 1 percent level of significance. The values of KMO estimated as 0.76 implied the suitability of samples of the factor analysis.

Moreover, it was found that the extracted 4 (four) factors by the principal component analysis had collectively explained 55.53 percent of the total variance. From the rotation sums of squared loadings this cumulative percentage of variance explained (55.53) was formed by the factors Factor-1, Factor-2, Factor-3, and Factor-4 by the amount of accounted from rotation sums of squared loadings of 20.40 percent, 14.66 percent, 11.55 percent, and 8.72 percent respectively. So, the large number of variables (20) included in the study was reduced to the four factors or components as below:

Table No. 10 Rotated Component Matrix for the Student's Perceptions

Variables	Included variable names for factors	Loadings
Factor -1: Failure to maintain academic soundness		
X14	It fails to maintain academic years on time	0.833
X15	It causes the creation of a session jam	0.824
X13	Private tertiary levels benefit from unhealthy competitions	0.676
X7	Time-consuming in the admission process	0.655
Factor-2: Increasing Suffering		
X6	Increasing suffering of the applicants	0.686
X10	Increasing the financial burden on the guardian	0.683
X9	Complex admission systems	0.611
X11	Selected students fail to get the desired subject	0.576
Factor- 3: Cost reduction facilities		
X4	It provides effectiveness and fairness in admission activities	0.798
X5	It solves excessive pressures of test repetition	0.640
X1	Cost reduction in Admission systems	0.581
X3	It facilitates relief of transportation and other cost	0.530
Factor-4: Time-saving admission test system		
X2	The duration of admission is minimized	0.814
X18	Violation of university statutes and rules regarding admission	0.519

Source: Compiled from primary data by SPSS version: 24, Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 8 iterations.

Table No. 10 represents the rotating component matrix that displays the four factors and their correlations. The factors are Failure to maintain academic soundness (F1), Increasing suffering (F2), Cost reduction facilities (F3), and Time-saving admission test system (F4).

Table No. 11 KMO; Bartlett’s Test and Total Variance Explained for the Guardian’s Perceptions of the Evaluation of GST Admission Systems

Total Variance Explained									
Component	I			E			R		
	P	Q	C	P	Q	C	P	Q	C
Factor-1	3.68	18.41	18.41	3.68	18.41	18.41	2.55	12.74	12.74
Factor-2	2.59	12.94	31.35	2.59	12.94	31.35	2.11	10.53	23.26
Factor-3	2.01	10.03	41.38	2.01	10.03	41.38	2.09	10.46	33.72
Factor-4	1.30	6.51	47.89	1.30	6.51	47.89	1.96	9.77	43.49
Factor-5	1.18	5.88	53.77	1.18	5.88	53.77	1.82	9.11	52.60
Factor-6	1.06	5.30	59.08	1.06	5.30	59.07	1.16	5.79	58.39
Factor-7	1.01	5.07	64.14	1.01	5.07	64.14	1.15	5.75	64.14
KMO and Bartlett’s Test									
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.								0.696	
Bartlett’s Test of Sphericity: Approximate Chi-Squarevalue								989.192**	

Source: Compiled from primary data by SPSS version: 22, Extraction Method: Principal Component Analysis, P=total, Q= Percentage of variance, C= Cumulative Percentage, I= Initial Eigenvalues, E= Extraction Sums of Squared Loadings R= Rotation Sums of Squared Loadings and **significant at 1 percent level with a degree of freedom=190. Factor-1=The Communication gap among the universities, factor-2=Cost reduction systems, Factor-3=Faulty admission system, Factor-4= Academic hazard, Factor-5=Violations of rules and statutes of public universities, Factor-6= Solving the pressure of test repetitions, and Factor-7= Lack of participation in controlling.

Tables No.11 clarifies the results of Kaiser-Meyer-Olkin (KMO), Bartlett’s test of Sphericity as well as total variance explained by the carefully chosen components (Factor-1 to Factor-7) where initial eigenvalues are found greater than 1 for the guardian’s perceived satisfaction level of the evaluation of GST admission systems. The value of Bartlett’s test of sphericity exposed that the approximate chi-square was 989.192 with 190 degrees of freedom at a 1 percent level of significance. The values of KMO estimated as 0.70 implied the suitability of samples of the factor analysis.

Moreover, it was found that the extracted 7 (seven) factors by the principal component analysis had collectively explained 64.14 percent of the total variance. From the rotation sums of squared loadings this cumulative percentage of variance explained (64.14) was formed by the factors Factor-1, Factor-2, Factor-3, Factor-4, Factor-5, Factor-6, and Factor-7 by the amount of accounted from rotation sums of squared loadings of 12.74 percent, 10.53 percent, 10.46 percent, 9.77 percent, 9.11 percent, 5.79 percent, and 5.75 percent respectively. So, the large number of variables (20) included in the study was reduced to the seven factors or components as below:

Table No. 12 Rotated Component Matrix for the Guardian’s Perceptions

Variables	Included variable names for factors	Loadings
Factor-1: Communication gap among the universities		
X12	Co-ordination gaps are found among universities	0.803
X11	Selected students fail to get the desired subject	0.797
X10	Increasing the financial burden on the guardian	0.703
X13	Private tertiary levels benefit from unhealthy competitions	0.528
Factor 2: Cost reduction system		
X1	Cost reduction in Admission systems	0.733
X3	It facilitates relief of transportation and other cost	0.729
X4	It provides effectiveness and fairness in admission activities	0.635
X2	Time-consuming in the admission process	0.539
Factor 3: Faulty Admission System		
X8	Faulty admission systems	0.738
X6	Increasing suffering of the applicants	0.731
X9	Complex admission systems	0.533
Factor-4: Academic hazard		
X15	It causes the creation of a session jam	0.857
X14	It fails to maintain academic years on time	0.827
Factor-5: Violations of rules and statutes of public universities		
X18	Violation of university statutes and rules regarding admission	0.868
X17	Unpublished financial information and distribution policy	0.749
X116	Reducing self-status of the of renowned universities	0.558
Factor-6: Solve the pressure of test repetitions		
X5	It solves excessive pressures of test repetition	0.692
Factor 7: Lack of participation in controlling		
X20	Representatives of worthy resources are ignored	0.871

Source: Compiled from primary data by SPSS version: 24, Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 20 iterations.

Table No. 12 represents the rotating component matrix that displays the seven factors and their correlations. The factors are the Communication gap among the universities (F1), Cost reduction systems (F2), Faulty admission system (F3), Academic hazard (F4), Violations of rules and statutes of public universities (F5), Solving the pressure of test repetitions (F6), and Lack of participation in controlling (F7).

Table No.13 KMO; Bartlett’s Test and Total Variance Explained for the Overall Perceptions of the Evaluation of GST Admission Systems

Components	I			E			R		
	P	Q	C	P	Q	C	P	Q	C
Factor-1	4.31	21.57	21.57	4.31	21.57	21.57	3.30	16.49	16.49
Factor-2	2.35	11.73	33.29	2.35	11.73	33.29	2.72	13.62	30.11

Factor-3	1.71	8.55	41.84	1.71	8.55	41.84	1.98	9.92	40.03
Factor-4	1.31	6.54	48.38	1.31	6.54	48.38	1.37	6.85	46.88
Factor-5	1.15	5.75	54.13	1.15	5.75	54.13	1.26	6.32	53.19
Factor-6	1.01	5.05	59.18	1.01	5.05	59.18	1.20	5.99	59.18
KMO and Bartlett's Test									
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.									0.78
Bartlett's Test of Sphericity: Approximate Chi-Squarevalue									1930.07**

Source: Compiled from primary data by SPSS version: 24, Extraction Method: Principal Component Analysis, P=total, Q= Percentage of variance, C= Cumulative Percentage, I= Initial Eigenvalues, E= Extraction Sums of Squared Loadings R= Rotation Sums of Squared Loadings and **significant at 1 percent level with a degree of freedom=190. Limitations to getting admission in the desired subject, Factor-2= Management inefficiencies, Factor-3 Cost reduction facilities, Factor-4=Time-consuming admission system, Factor-5=Hampered sustainable education system, and Factor-6=Effective pressure-less admission situation.

Table No.13 clarifies the results of Kaiser-Meyer-Olkin (KMO), Bartlett's test of Sphericity as well as total variance explained by the carefully chosen components (Factor-1 to Factor-6) where initial eigenvalues are found greater than 1 for the respondents perceived satisfaction level of the evaluation of GST admission systems. The value of Bartlett's test of sphericity exposed that the approximate chi-square was 1930.07 with 190 degrees of freedom at a 1 percent level of significance. The values of KMO estimated as 0.78 implied the suitability of samples of the factor analysis.

Moreover, it was found that the extracted 6 (six) factors by the principal component analysis had collectively explained 59.18 percent of the total variance. From the rotation sums of squared loadings this cumulative percentage of variance explained (59.18) was formed by the factors Factor-1, Factor-2, Factor-3, Factor-4, Factor-5, and Factor-6 by the amount of accounted from rotation sums of squared loadings of 16.49 percent, 13.62 percent, 9.92 percent, 6.85 percent, 6.32 percent, and 5.99 percent respectively. So, the large number of variables (20) included in the study was reduced to the six factors or components as below:

Table No. 14 Rotated Component Matrix for the Perceptions of Overall Respondents

Variables	Included variable names for factors	Loadings
Factor-1: Limitations to getting admission in the desired subject		
X11	Selected students fail to get the desired subject	0.777
X12	Co-ordination gaps are found among universities	0.755
X9	Complex admission systems	0.583
X6	Increasing suffering of the applicants	0.572
X10	Increasing the financial burden of the guardian	0.563
X7	Time-consuming in the admission process	0.557
X13	Private tertiary levels benefit from unhealthy competitions	0.523
Factor-2: Management Inefficiencies		
X17	Unpublished financial information and distribution policy	0.768
X15	It causes the creation of a session jam	0.705
X14	It fails to maintain academic years on time	0.694
X16	Reducing self-status of the of renowned universities	0.683

X18	Violation of university statutes and rules regarding admission	0.640
Factor 3: Cost reduction facilities		
X1	Cost reduction in Admission systems	0.778
X3	It facilitates relief of transportation and other cost	0.700
Factor 4: Time-consuming admission system		
X2	The duration of admission is minimized	0.752
X8	Faulty admission systems	0.544
Factor-5: Hampard sustainable education system		
X19	Sustain discrimination in the education systems	0.765
X20	Representatives of worthy resources are ignored	0.680
Factor-6: Effective pressure-less admission systems		
X5	It solves excessive pressures of test repetition	0.828
X4	It provides effectiveness and fairness in admission activities	0.551

Source: Compiled from primary data by SPSS version: 24, Extraction Method: Principal Component Analysis; Rotation converged in 11 iterations.

Table No. 14 represents the rotating component matrix that displays the six factors and their correlations. The factors are limitations to getting admission in the desired subject (F1), management inefficiencies (F2), cost reduction facilities (F3), time-consuming admission system (F4), hampered sustainable education system (F5), and effective pressure-less admission situation (F6).

Regression Analysis of the Perception

The regression analyses have been done by taking influential variables for each of the segments and recommended the following models:

Dependent variables are Y1= mode of perceived satisfaction level of students, Y2= mode of perceived satisfaction level of guardians, and Y3= mode of perceived satisfaction level of overall respondents. The regression equations are:

$$Y1 = 0.604X14 + 0.156X6 + 0.125X4 + 0.013X2 + 0.825 \text{---(i)}$$

$$Y2 = 0.354X12 + 0.286X1 + 0.223X8 + 0.236X15 - 0.033X18 + 0.058X5 + 0.129X20 + 0.737 \text{---(ii)}$$

$$Y3 = 0.44X11 + 0.24X17 + 0.21X1 + 0.09X2 + 0.19X19 + 0.05X5 + 0.81 \text{---(iii)}$$

Table No. 15 Measurement of Identified Model Based on Regression Analysis in the Admission System of GST

Students		Guardians		Overall	
Variables	β-Standardized	Variables	β-Standardized	Variables	β-Standardized
X14	0.60**(1.0)	X12	0.35**(1.2)	X11	0.44**(1.0)
X6	0.16**(1.1)	X1	0.29**(1.0)	X17	0.24** (1.0)
X4	0.13**(1.1)	X8	0.22**(1.2)	X1	0.21**(1.0)
X2	0.01**(1.0)	X15	0.24**(1.1)	X2	0.09**(1.0)
		X18	-0.03**(1.0)	X19	0.19**(1.1)
		X5	0.06**(1.0)	X5	0.05**(1.0)

		X20	0.13**(1.0)		
Model Summary and Model Fittings					
R- square	0.433	R- square	0.448	R- square	0.395
Adjusted R- Square	0.420	Adjusted R- Square	0.427	Adjusted R- Square	0.385
F _(4,186) -Ratio [ANOVA]	35.44**	F _(7,183) -Ratio [ANOVA]	21.23**	F _(6,375) -Ratio [ANOVA]	40.74**

Sources: Accumulated from field survey; calculations of the measurements are done with the help of SPSS version-22; Strongly Disagreed =1, Disagreed=2, No Comment=3, Agreed=4 and Strongly Disagreed =5, figures within the first bracket indicate VIF, **significant at 1percent level, *significant at 5percent level.

Table No. 15 depicts the measurement of the identified model based on regression analysis for the respondents for the selected sample areas under study. According to the model summary and model fittings values of R-square, Adjusted R-square, and ANOVA F-Ratio were found 0.395, 0.385, and 40.74** for overall respondents where as 0.433, 0.420, and 35.44** for students; and 0.448, 0.427 and 21.33** for guardians respectively indicating well fit of the three models. The figures within the first bracket indicate VIF extending from 1.0 to 1.2 implying the expected level of multicollinearity.

Standardized β -coefficient, for respondents of students, at the one percent level, the coefficients of X14, X6, X4, and X2 were found to be significant by a positive sign, suggesting that these variables had a beneficial effect on the satisfaction of admission system under GST. Additionally, it showed that, if other variables remained constant at their mean levels for each, a 1% increase in X14, X6, X4, and X2 would result in 60%, 16%, 13%, and 1% of satisfied admission system under GST.

Standardized β -coefficient, for respondents of guardians, at the one percent level, the coefficients of X12, X1, X8, X15, X18, X5, and X20 were found to be significant by a positive sign, suggesting that these variables had a beneficial effect on the satisfaction of admission system of GST. Additionally, it showed that, if other variables remained constant at their mean levels for each, a 1% increase in X12, X1, X8, X15, X18, X5, and X20 would result in 35%, 29%, 22%, 24%, -3%, 6% and 13% of satisfied admission system under GST.

Standardized β -coefficient, for overall respondents, at the one percent level, the coefficients of X11, X17, X1, X2, X19, and X5 were found to be significant by a positive sign, suggesting that these variables had a beneficial effect on the satisfaction of admission system of GST. Additionally, it showed that, if other variables remained constant at their mean levels for each, a 1% increase in X11, X17, X1, X2, X19, and X5 would result from 44%, 24%, 21%, 9%, 19% and 5% of satisfied admission system under GST.

THE MAJOR FINDING OF THE STUDY

- a. Data reliability from the respondents is good in position i.e. 0.80, 0.72, and 0.77 respectively from students, guardians, and overall.
- b. The maximum number of respondents came from the Khulna division (39%), male (70%), age 18-25 (50%), educational qualifications level SSC-HSC (58%), married (52%), family member size 2-4 persons (49%).
- c. The students and guardians agreed that they are admitted to their desired university and subject 64% and 71% respectively.
- d. GST admission system reduces the cost of the admission process(54% agreed), time of admission test(54% agreed), relief from transportation & accommodations costs (69% agreed), relief from

- excessive test repetitions (62% agreed), and 51% agreed to the effectiveness and fairness of this system.
- e. GST is a time-consuming admission process(62% agreed), a co-ordination gap among the universities (62% agreed), fails to maintain academic years in time(56% agreed), creates session jam (52% agreed), complex admission systems(51% agreed), students fail to get desire subjects(50% Agreed), faulty admission systems (48% agreed).
 - f. GST admission systems reduce the suffering of the applicants(mode value 3) and the financial burden of the guardians (mode value 3).
 - g. GST reduces the self-status of universities (54% agreed and mode value strongly agreed), 47% of respondents agreed on the violation of universities' rules and regulations, 45% of respondents agreed that the unpublished financial information and representatives of worthy resources are ignored (mode value 3).
 - h. Based on the student's perceptions, four factors collectively explained 56% of the total variance, i.e. Failure to maintain academic soundness (F1), increasing suffering (F2), Cost reduction facilities (F3), and Time-saving admission test system (F4).
 - i. Based on the guardian's perceptions, seven factors collectively explained 64% of the total variance i.e. the Communication gap among the universities (F1), Cost reduction systems (F2), Faulty admission system (F3), Academic hazard (F4), Violations of rules and statutes of public universities (F5), Solving the pressure of test repetitions (F6), and Lack of participation in controlling (F7).
 - j. Based on the overall perceptions, six factors collectively explained 59% of the total variance i.e. Limitation of getting admission in the desired subject (F1), Anomalies in proper management (F2), Cost reduction facilities (F3), Time-consuming admission system (F4), Hampered sustainable education system (F5), and effective pressure-less admission situation(F6).
 - k. The study found that variables X14, X6, X4, and X2 positively impacted the satisfaction of students.
 - l. The study found that variables X12, X1, X8,X15, X18, X5, and X20 positively impacted the satisfaction of guardians.
 - m. The study found that variables X11, X17, X1, X2, X19, and X5 positively impacted the overall satisfaction of admission system of GST, with a 1% increase in these variables resulting in 44%, 24%, 21%, 9%, 19%, and 5% satisfied admission systems.

MAJOR ADVANTAGES OF GST

- a. The admission process costs are reduced for the students and guardians.
- b. It minimizes the time of admission tests because 24 universities took a single test. If all the universities took separate admission tests, a huge time would be required to set admission for students.
- c. GST relieves the cost of transportation, accommodation, food, and other related expenses.
- d. It solves the excessive pressure of the students in the admission test repetitions.
- e. GST reduces the financial burden of the students as well as guardians.

MAJOR PROBLEMS OF GST

- a. GST management increases the suffering of the students, and guardians for the time-consuming admission process. It takes more time from the admission test to final admission to the department of the university after migration hampered the academic session.
- b. There was a coordination gap among the universities and departments. Students and guardians face difficulties during admission.
- c. GST fails to maintain the academic years on time, because of the long queuing time procedures required for admission.
- d. GST creates session jam problems because the semester system requires a continuous flow of students.

- e. Lower scores obtained by students in admission tests face financial difficulties due to migration departments and universities.
- f. There are some of the major problems arising from the opinion of the conscious guardians, journalists, educationists, and social welfare persons that renowned universities have been losing their status; financial anomalies; violation of university statutes, rules, and ordinances; and ignored representatives of worthy resources.

CONCLUSION

Bangladeshi education and education systems should be developed to cope with the modern world. The university admission systems should also be changed to select the right students in the right program at the respective university. The right selection led to generating skilled human properties. The government should take necessary steps regarding the admission of students to the university. The traditional systems should be removed and the Ministry of Education and other policy makers like UGC, should take the initiative to take a single admission system with consultation with the university authorities. GST started with 20 universities, but now the number of universities is 24. The problems of GST should be reduced in an acceptable range and all the universities in Bangladesh should come under a single umbrella for minimizing the sufferings of students and guardians.

RECOMMENDATIONS

- The authority of GST should monitor the management systems and the time duration for admitting should be an acceptable range to help decrease the suffering of the students and guardians.
- Proper guidelines for admission, migration, and responsible persons' contact numbers should be supplied to the students to reduce the coordination gap for the students.
- Proper action should be taken against the long queuing admission system. Time of admission should be reduced to a standard level that ensures the effectiveness of the GST.
- Automatic developed software should be introduced to solve the problem of the nomination of subject and university for the lower score obtained for solving their financial burden.
- It is important to verify the fairness of the relevant authorities about reputable institutions maintaining their reputation, eliminating financial irregularities, enforcing university legislation, regulations, and ordinances, and designating representatives of deserving resources.

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