Students' and teachers' attitude towards online classes during Covid-19 pandemic: A study on three Bangladeshi government colleges

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ABSTRACT

In this paper, students and teachers' attitudes towards shifting to an entirely online learning environment were assessed due to COVID-19. The main objective of the study was to investigate the students' and teachers' attitudes towards Online learning during the COVID-19 situation in Bangladeshi Government Colleges. Findings revealed that cost and time-effectiveness, safety, convenience, and improved participation were the most frequently cited positive aspects of the online learning experience, while distraction and reduced focus, heavy workload, problems with technology and the internet, lack of ICT knowledge, and poor network infrastructure, limited availability of educational resources, low attendance of learners, uncooperative learners and insufficient support from instructors and colleagues were the most recurrent negative aspects. The qualitative and quantitative research method was adopted, with semi-structured interviews conducted via Zoom with 10 College teachers and Focus group discussion conducted via Zoom with 18 and survey 100 college students via Google platform from three Bangladesh renowned Government College from Hons 1st year to masters' level located in Rajshahi divisional district town of the country. A sample of these essays was analyzed using open coding. The findings of the study help instructors and institutions understand students' and Teachers' attitudes regarding online teaching & learning under abnormal circumstances. Several recommendations informed by the interpretation of the participants' feedback are offered to assist instructors, administrators, and policymakers improve future online learning experiences. After conducting the whole study, it can be said that though have some problems adapting to online classes in three regarding BGCs colleges affiliated to the National University of Bangladesh, they are slowly becoming accustomed to it.

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Introduction

Now-a-days technology-based education is a precondition of Development. Bangladesh government is trying to implement ICT in every sector of the country, especially in Education sector (Karim, 2014). Education systems all over the world has been disrupted in the pandemic since March, 2020 and it has brought many challenges around the globe having a huge impact on the education sector (Radha, Mahalakshmi, Kumar, & Saravana kumar, 2020; Dutta, & Smita, 2020). In Bangladesh, like public universities, many students are receiving undergraduate and postgraduate education under the National University (Nagashima, Rahman, Al-Zayed Josh, Dhar, Nomura, Rahman, & Mukherjee, 2014). In this pandemic, education activities in Bangladesh are ensured through online. As online classroom might be a potential method for teaching at the tertiary level of education especially during the pandemic (Reimers, Schleicher, Saavedra, & Tuominen, 2020). Taking this into account, I have chosen to focus on Students' and Teachers' attitude towards Online Classes during Pandemic.

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Online classroom might be a potential method for teaching at the tertiary level education during the Pandemic in Bangladesh (Reimers et al., 2020). Though education sector of Bangladesh is suffering from several problems and it is a big challenge to utilize online classroom in tertiary level at the government colleges in Bangladesh due to load shading, low bandwidth speed, economic conditions of the guardians, lack of teacher-student interaction, connectivity problem, proper evaluation, lack of logistic support so on and which are difficult to solve (Sultana, & Haque, 2018; Palvia, Aeron, Gupta, Mahapatra, Parida, Rosner, & Sindhi, 2018; Dutta & Smita 2020). In this regard, as a member of the Least Developed Countries, Bangladesh has many challenges in implementing online classes (Farhana, Tanni, Shabnam and Chowdhury, 2020). In this regard, online classes may be a helpful for both students and teachers, but we need to focus on issues related to their attitude (Adnan, & Anwar, 2020). Taking this reality into account, this study examines the current practice and attitude of students and teachers towards online classes during Pandemic in Bangladeshi specially in three Government Colleges.

There are several reasons behind choosing to investigate the topic because it is a major task to justify the current practice of online classes by exploring the issues of students' and teachers' attitude during online delivery. Moreover, Virtual education is flexible to meet the individual needs of the learners (Hussain, Hussain, & Ramzan, 2019). Although Most of the teachers in Bangladesh do not have experience in online education (Mohiuddin, 2020), online activities have started extensively in Bangladesh due to the condition of Covid-19. In this study, we have tried to examine the current situation and attitude of two major stakeholders, that is, the students and the teachers towards online classes. This topic is chosen because of a crucial situation of COVID-19 to identify the students and teacher's attitude towards online classes at Rajshahi city in three Govt Colleges- one is our workplace and others nearest of our workplace.

Three research questions incorporated from the three objectives of the study are given below:

- i. *To identify the Current practice of online classes at three Bangladeshi Government Colleges (BGCs)*
- ii. *To investigate the Students' Attitude (SA) towards online classes at three BGCs*
- iii. *To investigate the teachers' attitude (TA) towards online classes at three BGCs*

This study has been conducted by three research questions which are given below:

- i. *What are the current practices of online classes at three BGCs?*
- ii. *What is the SA towards online classes three BGCs?*
- iii. *What is the TA towards online classes at three BGCs?*

This study aims to consider the issue of current practice, students' and teacher' attitude towards online classes during COVID-19 pandemic at three government colleges of Bangladesh. Prior to Covid-19, the education system in Bangladesh was not generally accustomed to online classes, but after the outbreak of Covid-19, Online-based activities are introduced in Bangladesh (Dutta, & Smita, 2020). Finally, it is hoped that this study will provide the necessary guidance for the future in promoting quality education in Bangladeshi government colleges.

So, the Online classes is a crucial issue in the education sector of Bangladesh. This study emphasized on several important themes guided by specific research questions that helped to understand in later sections.

Literature Review

This part includes the review of existing literature online classes in COVID-19 situation. Finally, this Chapter includes a section emphasizing the attitude towards online classes in COVID-19 situation and current practice in the higher education of Bangladesh. For finding out the knowledge gap the following literatures have been critically reviewed.

Overview of Online classes

According to (Moore, Dickson-Deane, & Galyen, 2011), the term online learning was first used in the 1980s, later known as e-learning. It is difficult to define in one word because there is a lot of confusion, frustration, and debate, surrounding the basic idea of defining online learning (Singh, & Thurman, 2019). The term Integrates online learning define as an access to learning experience using certain technologies (Benson, 2002; Conrad, 2002; Saul Carliner, 2004). In this regard, (Edwards and Robinson, 2019; Kang, Yang, Fang, and Zhao, 2020) urged that as Internet access is important. On the other hand, researchers did not mention accessibility when integrating online learning, but rather its flexibility, connectivity, and ability to interact (Ally, 2004; Hiltz & Turoff, 2005; Oblinger, Oblinger, & Lippincott, 2005).

Therefore, it can be said that online class is the process of performing class activities with the help of technology while the teacher-student is located at a remote place.

Online classes during the COVID-19 situation

Sepulveda-Escobar, and Morrison (2020); and Ali, (2020), found in his study that the COVID-19 pandemic has changed the education system around the world, compelled many countries to launch online education. On Contrast, Mohapatra (2020) has shown in their research that the education system in India has been shut down due to COVID-19. Baloran, (2020) reported, UGC changes exam times more than once, leading to frustration and uncertainty among students and skepticism about online learning sessions. Similarly, the study of Baloran, (2020) found, in the Philippines, the college teachers used a variety of methods to address the mental health challenges due to the Covid-19 epidemic. But in the context of Bangladesh, Government at first she did not emphasize on online classes but later, gradually it has been given priority (Mondol & Mohiuddin, 2020; Rashid and Yadav 2020). Moreover, Oranburg, (2020) urged that both teachers and students can easily be benefited from several technological innovations online.

Definition of Attitude

Eagly, & Chaiken, (1993) stated that there are three aspects of attitude such as cognitive, sensory, and behavioral. Cognitive perspective links someone's knowledge of a subject; Feelings (sensory) are about liking/disliking something and showing a tendency to respond to something with a behavioral point of view (Eagly, & Chaiken 1993). Attempts will be made to investigate these attitudes, although it will be very difficult to clarify attitudes during these smaller scales. Similarly, according to Dwyer (1993), Attitudes have three components: (a) a cognitive element (concept), (b) a perceptual element (emotion), and (c) a behavioral element (action). So, from above definition it can be said that attitude is a complex concept that combines human knowledge, emotions and displayed actions which represents that person.

SA towards online classes

Fullerton (2013) showed that students need to be more aware of the essential aspects of online learning from educational perspective. Researchers tried to show how students differ in attitudes towards online classes (Baloran,2020; Hussein, Daoud, Alrabaiah, & Badawi, 2020). On contrary, Hussain, (2007) obtained two types of information - i) Technology-based education system has integrated the nation by increasing the opportunities for higher education ii) it has identified some problems such as computer vision syndrome (CVS), back pain, dizziness, headache, finger joint pain, electricity, and internet problems etc.

However, McCarthy, (2017) noticed collaborative attitude of students towards learning in online classes. In addition, examining SAs about online classes conducted by Malaysian universities Ibrahim Ibrahim., Silong, & Samah, (2002) showed in their research that, richer students than poorer students; Working more than unemployed; Male students more than female students. On Contrary, Unger, & Meiran, (2020) in their research shown evaluating SAs towards online learning in undergraduate classes in the shifting education system due to pandemic feel less anxious three weeks later than before; in other words, they have gradually become accustomed to online education (Bao,2020; Unger, & Meiran,2020). Nonetheless, some positive as well as some negative attitudes of the students towards online learning was found from different literatures.

TA towards online classes

According to (Sepulveda-Escobar, & Morrison) the sudden change to the online class for teachers and students accustomed to face-to-face classes affects learning. In addition, Glass, (2017) argued that online classes require training about the Internet and found that many teachers are not ready enough for online platforms. Similar results were drawn by Kim and Bonk (2006). On Contrast, Gold (2001), showed that teachers' attitudes towards online classes changed significantly and viewed as interactive and participatory. In addition, in times of sudden change, teachers were not well prepared to teach online (Sokal, Trudel, & Babb,2020; De la Rama, Sabasales, Antonio, Ricohermoso, Torres, Devanadera, & Alieto,2020). Some teachers were less skilled in sophisticated computer and Internet-related tasks; they preferred the instructional methods of learning the course guidelines (e.g., face-to-face) rather than online learning instruction (Noor, Isa, & Mazhar, 2020; Chang & Fang 2020). However, online instruction is now very important and helps students learn without limitation.

Strategies of Online Classes

According to Guo (2020), in the online class, both teacher and student can be connected in synchronous or asynchronous ways. At Synchronous Learning, teachers and students attend and conduct classes online at specific times (McBrain, Cheng, & Jones, 2009; Oranburg, 2020). However, this method requires uninterrupted power, strong network, suitable devices, and separate reading space. In the asynchronous method, teachers present all kinds of learning materials using online platforms by sharing e-books, PDFs, documents, audios, videos or tutorials through Google Classroom, MUCS, YouTube channel or any other educational document at any time of their choice (Hosler,& Arend,2013). However, during the pandemic, both strategies are quite important for student's learning (Baloran, 2020).

Behavioral Theory in Education

This study also gives some hints on behavioral education and can enhance students' learning by applying the above concept of encouraging, transforming values and content, student assessment and student attitudes, teaching knowledge (Leahey, 2000). In this regard, behaviorism has made a major contribution to education in the teaching method (Kasonde Ng'andu, Haambokoma, & Tomaida, 2013). In addition, Kasonde et. al (2013), stated major three approaches to learning their theories-i) behaviorism, ii) cognitivism, and iii) constructivism. Behaviorism encourages students to do some behavioral transformation through positive reinforcement (Pawesty, 2012).

Behaviorism and the Attitude

To understand Behaviorism, the character and role of stimulus-response (S-R) methods, one needs to have an idea of behavioral characteristics in social psychology (Staats, 1983). Behaviorists see the mind as the response to stimulus and can be observed quantitatively (Brophy & Good, 1990; Mills, 1998). Even in this Covid-19 situation, human behavior has changed drastically, the learning process has changed. However, teachers and students have embraced this changing medium of instruction. So, the purpose of this study is to verify the attitude of teachers and students towards these educational activities.

The Research Gap

Many scholars addressed the opportunities and challenges of online classes different like including India, Chile, Philippines, China, and Pakistan (Kebritchi, Lipschuetz, & Santiago, 2017; Hussain, et.al, 2019; Toquero, 2020; Dhawan, 2020; and Adnan, & Anwar, 2020). In addition, Dutta & Smita, (2020), talked about Bangladesh private and public universities but was no research found in the context of the National University of Bangladesh or the government colleges. However, there are still some aspects of the attitude of teachers and students in government colleges regarding online classes, their ongoing practices, etc. in the context of Bangladesh which are still unexplored. This study will focus on some of those unexplored issues.

There are various variables or Concepts that can be found in the literature related to online classes in COVID-19, such as Technology, ICT, student's attitude, teacher's attitude, low internet service, power service, problems of Electricity, Behaviorism theory with which we have formulated research questions and tried to analyze them based on the information and results obtained, which seemed to be significant and coherent to findings.

Research and Methodology

Overview of Research Methodology

The Chapter explains with total research of this study which includes research design, method, research context and sampling, methods of data collection, validity and reliability and research instrument, methods of data analysis, and Finally the chapter ends with pilot study and its result.

Research Design

This Study belongs to mixed method approach combining both qualitative and quantitative approach. However, another reason behind choosing mixed method was to have a holistic picture of the context (Johnson, 2004; Creswell, 2009; Klassen, Creswell, Clark, Smith, & Meissner, 2012). The quantitative analysis will produce some concrete results through statistical calculations whereas the qualitative analysis will give an in-depth understanding of the reality (Creswell, 1998, 2012). Using mixed methods also helped the study in the issues like generalization and triangulation; and enhanced the validity of the study thereby (Jick, 1979).

Figure 1: Research Design Framework; Source: Adapted from Creswell, 2009

We have used mixed- methods in this research to get more acceptable results considering a holistic approach by applying behavioral theory to the attitudes of teachers and students in online classes which we have tried to show in the above (Figure 1).

Research Context and Sampling

The study was conducted in three well-recognized government colleges in Bangladesh: RJ College, RGW College and RGC College. RC has about 250 teachers for about 26,000 students; RGW College has about 70 teachers for about 8000 students and RGC College has about 60 teachers for about 4000 Students (www.rc.edu.bd/; <http://www.rgwcollege.ac.bd/>; www.rgcc.ac.bd/).

For quantitative part, we have selected 100 students randomly through lottery from the undergraduate and postgraduate classes of these three BGCs. There were 40 students from RC and 30 students from each of other two colleges. Data was collected online from all of them using Google classroom. In order to collect qualitative data we have chosen purposive sampling with the intention to find out the right person by considering our requirements; Where we do three FGDs from three colleges, through which it is possible to get accurate data of the research questions in a short time and at low cost (Cohen, Manion & Morrison 2007). And collected qualitative data from 3 college teachers by interviewing them in a semester-structured manner, 4 of which were from RC and the other 6 were from the other two colleges so that the data accurately represented.

Methods of data Collection

In this research, we have conducted online surveys for collecting data for quantitative part using Google platform as it is time and cost effective (Kapasia, Paul, Roy, Saha, Zaveri, Mallick, & Chouhan 2020). On the other hand, online FGD (student's) and interviews (teacher's) was recorded through audio tape and video by using Zoom apps to interpret qualitative data of the context to get better results from interviewees as a form of spoken data (Green & Thorogood, 2009, Paulus, Jackson, and Davidson, 2017). Moreover, same data were collected from the different sources to increase the validity and triangulation of the study.

Validity and Reliability

From the very beginning we were very careful about the validity and reliability of the study. Cronbach's alpha was tested for the structured questions through the following formula:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}$$

Here, N means the number of items is equal; $\bar{c}$ = to average covariance of the inter items; and $\bar{v}$ = average variance. We calculated the alpha value of Cronbach Alpha in this study using SPSS V 25. For the 14 items, we first got the Cronbach alpha value (0.77) together and then divided them into three themes. A panel of 13 experts ranked all items and we have tested their CVR based on their feedback, where the CVR was 0.93 (Lawshe, 1975). For each of the 14 items in the structured questionnaire has a five-point Likert scale used for calculating CVR values through the following formula:

$$CVR = \frac{n_e - N/2}{N/2}$$

Here, n_e = the number of experts who considered the item as relevant and N = the total number of experts. we calculated the CVR value with the 2010 version of Microsoft Excel software. Besides, all qualitative data were collected and conducted through both interview and FGD with the intention to enhance the validity and reliability of the instruments to enhance data triangulation and methodological triangulation (Winter, 2000).

Research Instrument

Questionnaire, interview schedule, FDG protocol and checklist were the instruments for this study. For collecting quantitative data through survey, we have prepared a structured questionnaire with 14 five points Likert items under three themes according to the research questions where 6 items remain under theme 1, 4 items under theme 2 and 4 items under theme 3. On the other hand, in case of 3 FGDs, a checklist and interview protocol with 10 semi-structured questions were prepared and in the case of 10 teacher interviews, 12 semi-structured questions were prepared. All instruments had gone very carefully through the tests of validity and reliability.

Methods of Data Analysis

SPSS V 25 helped in analyzing and organizing all the quantitative data in this study Where various analyses of descriptive measurements like Statistical Frequency (Percentage), Mean, Mode, Standard Deviation etc. has been finalized. Mean has been used to denote to significant advocates of research questions where mode has been used to denote the maximum number of responses and SD used to know consistency of the responses according to the research questions. Specially, Mean and SD values have been calculated separately to find the coefficient of variation (C.V) (formula is $CV = \frac{S.D}{\bar{X}} \times 100$, here S.D means Standard Deviation, $\bar{X}$ = Mean) to compare two or more data, to find out to differentiate databases and to analyze the consistency of data and to get better result (Everitt, Brian 1998). Whereas Qualitative data was analyzed through thematic content analysis with the help of Atlas.ti 9 software. Content Analysis explained quality data by carefully identifying different units of corresponding themes (Cohen et al., 2007), which helped in providing results. And finally, the content analysis method draws out qualitative results from FGDs and interviews.

Pilot study

The study was piloted before the final data collection because, piloting facilitates to estimate the feasibility of research, including problems, objectives, sample size, design, money, time, etc. (Thabne, Ma, Chu, 2010 ; Cresswell, 2012; Cocks and Torgerson, 2013). SPSS v25 software was used for piloting by collecting data from 30% of the respondents through a prescribed questionnaire as a

research instrument where the Cronbach alpha value was 0.73 then we collected full data later. On the other hand, 3 The interviews were conducted considering the question to increase the reliability and validity of the qualitative part as a pilot test, which was used later. We found consistency between the answers of the three participants. we completed two FGDs with students, one at RC and one of another college. The attitude of teachers and students towards online classes was almost the same. We started the final process of the research after getting positive results from the pilot study.

Table 1: Result of Reliability test

Reliability Statistics	
Cronbach's Alpha	N of Items
.738	14

Finally, it can be said that we have tried to collect information through online platforms by eliminating all types of bias as far as possible from our side and by carefully and honestly agreeing with all the concerns of the research methodology and emphasizing ethical issues.

Findings and Discussion

This chapter is divided into three themes according to three research questions. Demographic information of the respondent is graphically presented at the beginning. Then considering each theme, first the quantitative then the qualitative analysis has been done to get the results. In the last discussion section, the results have been formulated according to our research question and findings with elaborate which is supported various citation. All the quantitative and qualitative results and findings are presented in this chapter below:

Demographic information of the respondent

Age information of the respondents

Table 2: Age of the participants

N	Valid	100
	Missing	0
Mean		22.7700

In this study the age of the respondent was 21 -26. Among them average age of the respondent is 22 which is shown in the above table. Here valid 100 means all respondent are included and missing 0 means no respondent is excluded from the count.

Name of the Department and frequencies

Figure 2 shows the number of students who provided information as respondents through online by using Google Platforms.

Figure 2: Number of students who provided information as respondents through online by using Google Platforms

Name of the college

The figure 3 shows that the percentage of student who participate from the names of three BGCs.

Figure 3: The percentage of student who participate from the names of three BGCs.

Demonstration of Gender in the three BGC

Figure 4 shows the total participating respondents in the three BGCs, 51% female respondents and 49% male respondents were included in the study.

Figure 4: Gender diversity of respondents

Studying year of the respondents

Figure 5 shows the number of study participants among students from different discipline in different years.

Figure 5: the number of study participants among students from different discipline in different years

Research question # 1: What are the current practices of online classes at BGC?

The findings that are found considering the research question that are reported below:

Quantitative Results

Table 3: Quantitative results

Theme 1: current practices of online classes at three Bangladeshi Govt. Colleges.									
No	Statement (Cronbach's alpha Value= 0.77) (CVR=0.93)	Scale (%)					Mean	Mode	Standard Deviation (SD)
		1	2	3	4	5			
1	Online Classes helps to engage the students with their study	0	25	13.0	47.0	15	3.52	4	1.02
2	The existing infrastructure makes it possible for online classes to reach all students	9.0	24.0	14.0	44.0	9.0	3.20	4	1.17
3	Power supply and internet facilities should be uninterrupted and devices like phones, laptops should reach out to all students on behalf of the government	0	8	4	47.0	41.0	4.21	4	0.86
4	Online classes are one-sided, not enjoyable	0	12.0	18.0	50.0	20.0	3.78	4	0.90
5	Online classes have serious health risks so the duration should not be too much	0	6.0	20.0	40.0	34.0	4.02	4	0.89
6	Urban students are getting more opportunities to take classes online than in rural areas	0	0	5.0	47.0	48.0	4.43	5	.59

Cronbach's Alpha has been used to evaluate the internal consistency of questionnaires (or surveys) consisting of multiple Likert scales and items and to measure reliability where, the questions are combined and tested. On the other hand, content validity ratio (CVR) test is used to ensure validity of our instrument. It is known that the alpha range is between 0-1 but the acceptable value of alpha is 0.7 -0.8 (Novick, & Lewis, 1967; and Taber, 2018). The value of alpha which obtained in this research 0.77 is acceptable and shows similarity between the questionnaires.

Table above shows the results of statistical tests on 6 items (item 1-6) representing theme 1 (current practices of online classes at three Bangladeshi Govt Colleges), that is, Percentage, Mean, Mode and Standard Deviation (SD). The table also contains the results of Cronbach's Alpha and CVR test. All the items that are presented in this table were Five points Likert item where 1= strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agreeing.

The Co-efficient of variation (CV) formula is used like $(CV = \frac{S.D}{\bar{x}} \times 100)$ to verify the significance of the values of 6 items under Theme 1 (Everitt, Brian 1998). Here for the item 2, CV value is highest which is 36.56 %. On the other hand, for items 6, CV value is lowest which is 13.31%. But We know that in determining the CV, the higher the value of the data, the less consistent, whereas the lower the value of the CV, the value is more consistent. So, the value of item 6 is more significant according to our research question because the value of all questions is closer to the number of 6 items than other items and highest average respondents strongly agreed with the declaration, "Urban students are more likely to take classes online than in rural areas" On the other hand for item 2, it less represents the consistency with declaration, "The existing infrastructure makes it possible for online classes to reach all students". Moreover, for the items of 1,2,3,4,5 mode value is 4 and for item 6, mode value is 5 which shows that most respondents agree with the statement (47.0) where SD was lowest (0.09), small number of respondents (5%) disagree with the statement of the same items which representing greater consistency among the answers. Therefore, students in rural areas are not getting equal opportunity to take classes like urban students in this pandemic situation.

Qualitative Findings

Findings from FGD

Findings from the FGD are presented in the following themes:

Figure 6: World Cloud Based on the FGD (student) by using Atlas-9 software

Current practice of online classes

All the students have talked about the 'current practice' of online class, the word has come eight times. The students opined that in this pandemic situation, online classes are being conducted according to the specific routine in their college. Again, financially weak students cannot attend classes due to lack of devices and high cost of internet data which have mentioned

Findings from the Interviews

Current practice of online classes

All the interview participants of this study opined about Current practice of online classes and it is mentioned in 29 times. Interviewee-1 said *“These classes are happening in two ways. Live streaming is being done on the Facebook page of the college, and some time recorded classes are being uploaded.”*

Research question #2: What is the SA towards online classes at Bangladeshi Colleges?

The findings that are found considering the research question that are reported below:

Quantitative Results

Table 4 : Quantitative Results

No	Statement (Cronbach's alpha Value= 0.77) (CVR=0.93)	Scale (%)					Mean	Mode	Standard Deviation (SD)
		1	2	3	4	5			
7	Online classes in COVID-19 situation can be an alternative to face-to-face classes	0	3	3	58	36	4.27	4	.67
8	Online Classes enhances problem solving skills and allows the students to acquire in-depth knowledge.	0	22.0	26.0	41.0	11.0	3.4	4	.95
9	Students in online classes can concentrate on lessons with enjoyment and is it easy to implement successfully.	0	22	26.0	41.0	11.0	3.02	2	1.10
10	Online Classes enables the students to participate in collective activities.	2	32.0	21.0	30.0	15.0	3.24	2	1.12

Table 4 shows the results of statistical tests on 4 items (item 7-10) representing theme 2.

Examining the value of CV from item 7 to 10 here, it is seen that item 9 has the highest value of CV which is 36.42% and the minimum value of CV goes to item 7 which is 15.60. But applying the formula compared to other values, the value of item 7 is comparatively less, so item 7 is more consistent here. Because it represents the students' biggest argument that with this statement, "online classes in COVID-19 situations can be an alternative to face-to-face classes." On the other hand, the mode value for item 7 and 8 is 4, for both item 9, 10 the value is 2. The Comparison between the modes shows that items 7 and 8 are more important than 9 and 10 items. Among them, the CV value of item 8 is higher than the value of 7, so in case of item 7, the value of CV is less, so item 7 is more significant and coherent according to the research question.

Qualitative Findings

Findings from FGD

Table 5: Code-document table for FGD

Code	FGD-1	FGD-2	FGD-3	Totals
Current Practice	5	2	1	8
Student's attitude	4	5	3	12
Teacher's attitude	2	1	2	5
Merits of online classes	3	1	2	6
Demerits of online classes	12	7	4	22
Online vs. Face-to-face class	4	2	2	8
Steps to be taken	5	4	7	16
Totals	36	22	19	77

The code-document table above contains the codes derived from the data gathered from the FGDs according to different FGDs

Student's attitude

All the students are enjoying but they are missing face-to-face classes. They also miss their friends, who lives in remote area of villages are unable to attend the classes due to internet network problem.

Merits of online classes

In Pandemic situation, online classes have kept students involved with their lessons. One student said, *"In one special situation we are doing online classes and getting acquainted with new technologies."*

Challenges of online classes

The challenge of online classes has come up 22 times in student discussions. The biggest challenge is connecting all students to online classes. Due to the lack of suitable devices and strong internet network, many students are staying out of online classes. On the other hand, assessment system is weak in online class. Moreover, some students are concerned about health risks in online class.

Findings from the Interviews (IV)

Table 6: Code-document Table for the Interviews (IV)

	IV (1)	IV (2)	IV (3)	IV (4)	IV (5)	IV (6)	IV (7)	IV (8)	IV (9)	IV (10)	Total
Current practice of online classes	3	4	6	5	1	2		1	2	3	29
Ways of conducting online classes	3	1	2	5	2	1	2	2	2	2	22
Equipment	1	2	1	4	1	1	0	1	1	1	13
Merits of online classes	3	3	1	2	5	1	1	1	1	4	22
Demerits of online classes	3	1	0	1	1	1	1	1	1	4	14
Online vs. face-to-face class	2	2	1	1	1	1	1	1	1	1	12
Student attitude	3	2	2	0	0	4	2	2	0	0	15
Teacher's attitude	1	6	0	7	5	5	4	0	0	0	28
Steps to be taken	1	0	1	0	0	1	1	2	3	3	12
Challenges of online classes	1	1	1	3	1	2	3	6	1	1	20
Assessment of online classes	0	1	0	1	2	1	2	1	1	1	10
Total	21	23	15	29	19	20	19	18	13	20	197

The code-document table above contains the codes derived from the data gathered from the interviews according to different interviews.

Teachers' Attitude

In the observation, of teacher the attitude of students towards online classes is mixed. Interviewee-9 informed, *"The student doesn't seem to be active or going to be activated. Since the classes are on record, the teachers are going to class with adequate preparation;"* There are some students who have taken it as a platform for good exchange, as if they are exchanging anti-academic sentiments during the class. According to (Dutta & Smita, 2020) there is a lack of seriousness in all cases.

Merits of online classes

Almost all the interviewee respondents express their opinion that While human mental health is threatened in this pandemic situation, online classes are helping to keep students engaged with their studies which is also found by (Dutta & Smita, 2020). Moreover,

Interviewee-8 stated “The students are getting something more than not getting anything at all, so they are attached to the lesson. moreover”

Challenges of online classes

Interviewee-8 observed “One of the big challenges of online classes is to involve all the students with it. We have a lot of poorer background students; we can't activate them with this activity.” Students cannot be formatively assessed in online classes. Online classes are not accessible to all students due to network problems and for being expensive.

Research question #3: What is the TA towards online classes at three BGCs?

The findings that are found considering the research question that are reported below:

Quantitative Results

Table 7: Quantitative results

Theme 3: Teacher attitude of online classes at three Bangladeshi Govt. Colleges.									
No	Statement (Cronbach's alpha Value= 0.77) (CVR=0.93)	Scale (%)					Mean	Mode	Standard Deviation (SD)
		1	2	3	4	5			
11	Online Classes is the most preferred teaching method to most of the teachers	0	46.0	37.0	15.0	2.0	2.73	2	0.79
12	There is a need for training of teachers to conduct and implement online classes	0	0	10.0	52.0	38.0	4.28	4	.63
13	The current practice of Online Learning is satisfactory, and it can be implementable in Bangladesh.	0	16.0	32.0	44.0	8.0	3.44	4	.86
14	There is a need for training of students to participate appropriately in online classes	0	5.0	5.0	57.0	33.0	4.18	4	0.74

Table 7 shows the results of statistical tests on 4 items (item 11-14) representing theme 3

Among the items 11 to 12, Highest value (CV) is 25 for the items 13 and lowest value (CV) is 14.72 for the items of 12. A comparison of the value items shows that the items of 12 CV is lowest, so this value is more significant which proves (38%) respondents strongly agree with the statement that "teacher training is required to conduct and implement online classes" And the same item. the maximum number of respondents agreed with 52% of the statements, where 10% of the respondents responded neutrally with the statement that means they are confused about the statement. On the other hand, items 11 mode value is 2 where SD is 0.79 and items 12,13, and 14 mode value is 4 whereas SD is (.63), (.86) and (.74). The lowest value of SD is .63 among the items of 12,13 and 14. This proves that the value of SD for the 12 is lower which is closer to the average value and the item 12 is compatible according to the research question.

Qualitative findings

Findings from the FGD

Teacher's Attitude

Teachers' attitudes about online classes have come up in the words of one student. She said, “I can't find any negative aspects in the online class. Because the teachers are trying hard enough to continue the class. The students are not taking the classes with attention.”

Steps to be taken

Students have made some recommendations for the development of online classes, saying that teachers' classes should be more organized; constructive; standard device should be available and Internet network should be strengthened across the country. Classes can be made more interactive by using applications like Zoom App or Microsoft Team to overcome the monotony of class Dutta & Smita, (2020) and Dhawan, (2020) also suggest this earlier. Moreover, must ensure students attendance records.

Findings from the Interviews

Teacher's Attitude

Interviewee-4 has mentioned teacher attitude 7 times he mentioned “I have observed a mixed reaction among teachers regarding online classes. There are many teachers who are very skilled in using technology and they are taking classes with great interest.

Again there are many teachers who are not so good at using technology, but are very interested in taking classes; They are learning to use of different software with interest from technology skilled teachers. Teachers have taken it as positive.”

Steps to be taken

Interviewee-8 noticed “If you want to implement online classes all over the country, you need to have high speed internet connection not only in the city but all over the country. Curriculum editing should bring online classes into a policy”. Teachers need to be trained to get used to the class using technology which have shown (Sepulveda-Escobar & Morrison, 2020). in his article. Students need to provide a smartphone or laptop to join the class. Above all, high-speed 4G Internet networks need to be launched across the country, and students need to be provided with cheap internet data.

Figure 7: Research process for this study; *Source:* Self Compilation

Quantitative and Qualitative Discussion

After Analyzing the data according to research questions and based on the themes, it is seen that online classes are being conducted in government colleges in this epidemic situation. However, due to lack of internet connection and devices, urban students are getting more opportunities than students in remote villages agreeing with the researchers’ results (Dutta and Smita, 2020; Lembani, Gunter, Breines, & Dalu, 2020); Choose its results. However, the classes are very one-sided and speech dependent. Again, some students are experiencing health risks. On the other hand, according to the literature, students learn through behavior but the interaction between teachers-student and student-student in the online class is not happening that way (Weegar, & Pacis, 2012; Unger, & Meiran, 2020). As a result, there remains a lack of proper education for trainers. However, to cope with the pandemic, teachers and students think that online classes may be an alternative to face-to-face classes. But they are learning to use technology from experts. Teachers, like students, prefer online face-to-face classes (interviews). The current online class is not satisfactory, (FGD and interviews) teacher students felt the need to revise the curriculum and training in classroom development (FGD and interviews).

In this study, data were collected from various sources which were analyzed to increase reliability and validity. In almost all cases the results obtained from different sources produce the same results or complement each other with a deeper and holistic understanding of the situation. The behaviors in the literature are like the behavioral theories and attitudes of teachers and students regarding online classes that we have also found in research. Although different types of work can be observed in different fields, the objectives of the work are one and the same, as a result, the results obtained from different sources have enriched each other and successfully triangulated.

Conclusions

Keeping students in class in this situation is a very challenging issue with the problems of slow bandwidth, power problems, poor financial condition of students, teacher-student interaction, etc. To continue education system online classes were started in government colleges in Bangladesh in this Pandemic situation. The purpose of this study is to find out the current state of attitudes of teachers-students towards online classes. From the research we have tried to know the status and teacher’s student attitude of online classes in three BGCs which will also give an idea about other colleges in the country. It has been used the mixed method to find out the results of this study by collecting quantitative data from students through online surveys. Besides, we have collected

qualitative data from teachers through interviews and FGD from three BGC participants(students). Analyzing the collected data, we got the following results.

The finding according to three research questions are as follows:

RQ#1: In this pandemic situation, online classes are being conducted routinely in three BGCs. Classes are being promoted live on the college's Facebook page, and sometimes recorded classes are being uploaded. Not all classes are well-organized all the time. However, teachers are trying to keep students engaged.

RQ#2: Although the classes are broadcast online, the classes are not reaching all the students. The urban students can take the classes due to the good bandwidth speed and the good financial condition of the parents of the students. There is also the opposite picture of many people having Computer Vision Syndrome (CVS) causing headaches, neck pain, nausea, and other physical problems. That is why they do not care about the classes. On the other hand, village students, have a desire to take classes but are unable to do so due to poor bandwidth speeds and the inability of many to purchase internet data.

RQ#3: There has been a mixed reaction among teachers about online classes. Although the young teachers took it easy, the teachers who are not proficient in technology could not take it well. However, due to government guidelines for taking classes in online, teachers who are inexperienced in modern technology are learning the use of various applications from technology experts. In addition, teachers are getting the opportunity to watch other teachers' classes in online, creating an opportunity to enrich themselves more. In fact, there is a healthy competition among many teachers to take good classes.

Now online classes are running regularly. Students can share classes with their classmates during the class. After reading the comments of the students, the teacher can give his reaction. In addition, many times the low speed of the Internet, the problem of electricity is a big obstacle to the occurrence of classes.

The first and main limitation of this study was the time constraint in the Covid-19 situation. Addressing three research questions using the online platform in this short time was a very difficult task. Due to adverse conditions, it was not possible to take the sample according to the correct formula. However, we were quite careful about the representative sample.

In this COVID-19 pandemic, after studying the whole situation in these organizations regarding using online classes possible recommendation to improve for future research can be as follows:

Ensure online classes for all students. Classes are limited to 30 minutes. Adequate budgets should be allocated to provide world-class technical training for teachers and students in colleges. In addition, providing smartphones or laptops for students to connect absent students with online classes. Increasing Internet and Wi-Fi services and providing free or inexpensive Internet packages for students is also needed (Mahmud, & Gope, 2009; Parvin, 2013; Dutta, & Smita, 2020). On the other hand, for best results, the curriculum needs to be streamlined. While we have studied teacher-student attitudes in online classes, there may be many more studies on this topic. There may be research on the health or economic aspects of the online class, or the teacher-student attitude in the online class, which will further enrich the area.

So, the study was conducted to find out the attitudes of students and teachers regarding online classes in three BGCs colleges affiliated to the National University of Bangladesh. After conducting the study, it can be concluded that in the changed education system, teachers and students have some problems adapting to online classes, but they are slowly becoming accustomed to it and better results can be achieved if challenges are properly addressed which mentioned earlier.

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