

# Perceptions of University Students in Bangladesh towards the Challenges and Benefits of Online Classes: A Qualitative Approach

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## Abstract

The purpose of this study is to investigate the perceptions of students regarding the challenges and benefits of online classes based on their online classes' experiences particularly during pandemic COVID-19. Following the interpretive research paradigm and cross-sectional design, this research is qualitative in nature. Using a semi-structured questionnaire the researchers conducted 30 in-depth interviews of the 23 public and private university students who are attending their classes virtually during the pandemic. The collected data was analyzed following a content analysis approach to evaluate the relationship among the ideas, the interview data, and the theoretical context. This study finds that in developing countries like Bangladesh, the online class system is a relatively new concept, so the participants face some difficulties such as low internet connection, electricity support, teachers' capacities, and lack of institutional support as well as their technological engagement. As such participants face challenges that they do not learn as well as they would in regular classes. Moreover, the participants must comprehend the contrasts between traditional and online classrooms in order to improve their competence. However, participants are taking e-learning for extra advantages due to COVID-19 pandemic in order to reduce detachment from education and session gap. This study will be helpful to the policy-makers to develop proper rules to cope with such difficult situations, particularly when it

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comes to delivering communicative education to students particularly in a crisis situation.

**Keywords:** COVID-19, E-learning, Perceptions, Challenges, Benefits.

## **1. Introduction**

In December 2019, Wuhan, in Hubei province, China, was the origin of a disease known as COVID-19, or the corona virus disease (Wang et al., 2020). It was rapidly spreading all through the globe (Agung et al., 2020). Considering the intensity and seriousness of the epidemic, the World Health Organization (WHO) officially declared the COVID-19 outbreak a pandemic on 12 March 2020 within seven days after its first identification (WHO, 2020). As on 10 July 2021, globally over 241 millions cases of the corona virus have been reported in more than 160 countries, which have resulted in more than 4.91 million deaths and left several States dealing with severe outbreaks. At the same time in Bangladesh there were over 1.57 million cases and 27,778 deaths due to COVID-19. The COVID-19 pandemic adversely affected the progress some governments were making around increasing the education budget. Therefore, this crisis required urgent attention and collective action by all governments, stakeholders and communities. COVID-19 wreaked havoc across the world and like any critical sector, education was hit hard. Students, schools, colleges and universities were deeply impacted (Rahman, Uddin and Dey, 2021). According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), over 800 million learners from around the world were affected, 1 in 5 learners could not attend school, 1 in 4 could not attend higher education classes, and over 102 countries ordered nationwide school closures while 11 implemented localized school closure (Shammi et al., 2021).

According to the guidelines of WHO, from March 15, 2020, the government of Bangladesh (GOB) emphasized social distancing and advised people of the country to work, study, and conduct religious practices from home (Shammi et al., 2021). In such a situation, the GOB declared to close all educational institutes from 18 March 2020 to prevent the spread of this virus (Haque et al., 2020). Therefore, due to closure of schools, colleges and universities in the lockdown situation face-to-face learning was interrupted and educational institutes across the country were moving towards online learning to manage the adverse consequences in the education sector and students (Abbasi, Ayoob et al., 2020). In managing such adverse situations, GOB emphasized its attention towards online education like other countries (Hoq, 2020). Both the public and private universities in the country also attempted to adopt such online education (Haque, Hossain, Bhuiyan et al., 2020). Before 18 March in 2020, when the traditional classes were opened,

about 90% of students in Bangladesh took part in face-to-face classes. Since the COVID-19 situation creates the reality of having online classes and to implement such classes, now there is the need to know the perceptions of the university students towards the challenges and benefits of online classes. To the best of the knowledge of the researchers, there is limited documentation in the context of Bangladesh that relates to investigation of the challenges and benefits of online classes from the view of the university students in Bangladesh. Therefore, in this study, the researchers intend to fill the knowledge gap by investigating the challenges and benefits of online classes experienced by the public and private university students in Bangladesh particularly during COVID-19 pandemic. To achieve the purpose of this study, the researchers employed an interpretive research paradigm using a qualitative approach.

## **2. Literature Review**

The means of online class is the technological devices, which support to conduct a distance mode of education and learning (Hartnett, 2016). By using the settings and systems of information communication technology (ICT) infrastructure, the participants get facilities of distance learning where learners were separated by space (Dempsey & Van Eck, 2002, p. 283). In online learning, the communication between the teachers and students becomes a vital component to be effective. Before the introduction of the ICT, distance learning had been common for a long time (Mahieu & Wolming, 2013). Now, Smart devices become essential in our life, a number of applications for Google Android, Windows Phone operating and Apple iOS can be used for interfacing sensors measuring various parameters, which implies smooth progress of the use of the notion of IoT in our daily life (Gubbi et al., 2013). This new means helps the students-teachers to manage educational area using smart devices via ICT particularly at any adverse time (Benahmed & Douli, 2014). Bao et al.(2020) argued that there are some important factors that educational institutions must address which are highly integrated to the effectiveness of IoT based learning or online learning. Study by Muthuprasad, Aiswarya, Aditya and Jha (2021) showed that operating virtual classes and learning, there are some basic requirements that must be arranged for the participants. They also mentioned three primary requirements in online learning i.e. digital devices (desktop computer, laptop or at least a smartphone), internet (uninterrupted high-speed internet) and a platform (Google Classroom, Zoom, Moodle, et cetera). Moreover, Auma and Achieng (2020) and Rahman et al. (2021) have pointed out in their studies that to make effective online classes in the educational institutions particularly public and private universities the students and the teachers must have proper ICT Infrastructure, they need to

have Competencies in ICT and also to have instructor-learner interaction. Chen et al., 2020) found in their studies that the availability of ICT Infrastructure and competencies in it are the most important factors that influence online classes of students. Since the accomplishment of online education depends on students' ability, readiness and acceptance to use this system (Almaiah&Alismaiel 2019), a sort of online education system usage hinders the apprehension of well-being (Almaiah et al., 2019; Almaiah & Al-Khasawneh 2020). In addition, Rahman et al. (2021) showed that merit of communication between teachers and students; ICT based infrastructure and competencies in the use of the ICT have an effect on online learning. They further stated that students' motivation for accepting online learning is a simple access to online classes, convenience. Mishra et al., 2020) argued that to keep hold of participants in online classes, there is the need to retain their online class platforms usage.

Several studies have been conducted to determine the challenges and benefits of online classes. It is being promoted as a teaching approach by many colleges throughout the world, and it is well received by students (Blas & Fernandez, 2009). Without a doubt, an online class is an excellent idea for continuing to learn and teach during this pandemic (Kim, 2020). However, students and professors must contend with various difficulties in transitioning to online classes (Kim, 2020). Due to the fact that an online class is relatively new in our educational system and we are unfamiliar with the process, both students and teachers experience challenges during online sessions (Gopal et al., 2021). For the first time, students and teachers in developing nations like Bangladesh are adopting virtual technology to organize educational activities instead of traditional face-to-face classrooms (Ramij & Sultana, 2020; Al-Amin et al., 2021). The new online class and test systems provide several issues for both teachers and students (Al-Amin et al., 2021). Students from rural regions make up the bulk of those who attend universities. Students returned to their homes after the public holidays were declared, and they now had to engage in online lectures and tests from other places (Ramij & Sultana, 2020). To engage in online classes and other educational activities, the majority of students utilize smartphones and laptop computers (Ramij & Sultana, 2020; Al-Amin et al., 2021). In Bangladesh, internet costs are extremely high, and most rural regions lack high-speed internet connections such as broadband internet (Al-Amin et al., 2021).

During the COVID-19 epidemic in Bangladesh, the study aims to look at how students felt about online classes at public and private universities. A convenience sample of Bangladeshi University students participated in an online survey. The study begins by analyzing the challenges and barriers

that students in urban and rural areas experience while pursuing online classes during the coronavirus epidemic. The researchers also compared and contrasted our findings with those of other similar global researches.

### **3. Objectives of the Study**

- A. To investigate the student's perception of online classes of both public and private universities in Bangladesh.
- B. To analyze the challenges and barriers that students in urban and rural areas experience while pursuing online classes during the coronavirus pandemic.

## **4. Methodology**

### **4.1 Research Design**

In this paper, the researchers present a qualitative investigation of the challenges and benefits into online classes experienced by the public and private university students in Bangladesh particularly during COVID-19 pandemic. Qualitative method is used to address questions about comprehension, meaning, and interpretation from the participants' point of view (Goedeke et al., 2015; Wyverkens et al., 2014,). Under this method, an online survey with open-end questions was conducted for having better understanding and exploring research subjects' opinions, behavior, experiences. The semi-structured questionnaire was designed and developed by considering literature review. Convenience sampling was employed in this research. In both qualitative and quantitative research, the process of convenience sampling is valid (Etikan et al., 2016). Therefore, personal contacts-based convenience sampling was applied (White, Lansky, Goel, Wilson et al., 2012)

### **4.2 Sample and Data Collection Procedure**

Data are collected from the Tertiary level (Undergraduate and Masters) students. The sample of this study is the students of public and private universities in Bangladesh. Since data were not possible to collect in following face-to-face interview due to COVID-19 pandemic, therefore, researchers used Google Forms. Moreover, data were collected following snowball sampling. A self-reported questionnaire was developed, generating a Google Forms link and sent to the teachers of different universities who shared the link with their students using Facebook, LinkedIn, Twitter, WhatsApp, and Messenger. To have a representative sample size to conduct this study, 30 in-depth interviews were conducted from students of 23 both public and private universities throughout the country during 15 July 2021 to 15 September 2021. According to Robinson

(2014), the sample size of 10 to 50 is sufficient to discern its necessary constituents in qualitative research.

### 4.3 Sample Distribution

**Table 1: Sample distribution**

University name (Public University)	UoR	BAU	UoD	UoC	KU	NU	HSTU	MBSTU	RUET	JU	CU	JSTU
No. of Sample	3	1	1	1	1	1	2	1	1	1	1	1
University name (Private University)	IUBAT	EWU	AUB	DIU	BU	BaU	SIU	SEU	DIU	SU	RUD	
No. of Sample	1	2	1	1	1	2	1	1	1	1	3	

UoR= University of Rajshahi, BAU=Bangladesh Agricultural University, UoD=University of Dhaka, CoU=University of Chittagong, KU=Khulna University, NU=National University, HSTU=Hajee Mohammad Danesh Science & Technology University, MBSTU= Mawlana Bhashani Science & Technology University, RUET= Rajshahi University of Engineering & Technology, JU= Jagannath University, Comilla University=CU, JSTU= Jessore University of Science & Technology, IUBAT= International University of Business Agriculture & Technology, EWU= East West University, AUB= Asian University of Bangladesh, DIU= Dhaka International University, BU= BRAC University, BaU= Bangladesh University, SIU= Sylhet International University, SEU= Southeast University, DIU= Daffodil International University, SU= Stamford University Bangladesh, RUD= Royal University of Dhaka

### 4.4 Data Analysis

To analyze the in-depth interviews gathered from the field study using NVivo software, this software is computer-aided which helps in transcribing the collected data, coding, and developing the central theme of the research (Zamawe, 2015). To analyze the data gathered from the field study, first the interviews were transcribed by using the verbatim data of mobile records and the notes written down during the interviews. Then, to examine and evaluate the collected data, the content analysis approach was used to investigate the challenges and benefits of online classes experienced by the public and private university students in Bangladesh (Lune & Berg, 2017). The data gathered from interviews was consolidated and subjected to open coding and inductive analysis, as recommended by Merriam (Merriam, 2002). Moreover, secondary data were collected from the published documents and websites for this research.

## 5. Data Analysis and Interview Result

The motive of this study has a look at students’ perceptions of the online classes based on online learning reviews they had. Students’ perceptions in the direction of online classes, primarily based totally on their very own reviews, were examined. The elements, which formed the students’ online classes’ reviews, have additionally been investigated.

### Q-1: As a student, how does your experience of online classes compare with traditional class instruction? How do you like or dislike it?

**Participant (P)1,2,6,9,10,13,14,15,19,21,22,28 and 30** states that “we dislike the online classes because this learning system is less effective than

traditional classes. Because there is a lot of communication gap between teachers and students. In addition, we miss personal communication with teachers. In a traditional class, the eye contact of all students is great. Nevertheless, in online classes yet our teachers and we the students are not skilled in its process and technologies”.

**P3,5,7,9,11,17 and 26** states that “we want to cope up with the situation. We think, online class is not comparable with traditional class instruction, but in corona situation, every educational institution should continue their class regularly. Traditional classes are the best of all. But in this pandemic, there are no options without online classes. Because they are sitting idle, this harms our both knowledge & mental health”.

**Moreover, P5,12,16,20,23,24,25,27 and 29** opines that “we have a good experience with online class because in traditional classes we study in 100 s of students so in 100 s of students they can not give our feedback nicely plus in traditional classes we cannot ask question freely to our course teachers if we do not understand a lesson but in online classes we can give our feedback freely and ask questions freely that’s why love online classes very much. For getting class materials online classes are best. But for understanding the topic more clearly traditional classes are the best. I feel the same experience while having online classes but a little less effective. Especially in this pandemic online class are better for giving guidelines to us about what should we read or not. Even teachers can monitor our study by giving homework and assignments. Because I can understand my learning topic more easily than online method.

## **Q-2: In what ways could online class serve your educational needs?**

**P4,5,6,7,9,11,13,14,15,16,17,18,22,23,24,25,26,28** tells that “in many ways could online classes serve my educational needs. Giving the opportunity to learn and also providing strong teaching material and regularly giving some assignments were great. Time, Place, and Independence are the best reasons students are going for Online Medium. Secondly, I personally prefer online examinations; thirdly, all of our class documents need to be provided prior to classes. And finally, we can say the foreign lecturer's best part of online discussion. They think, they need assignments based on online class. They can get proper instructions about our semester. Besides if we can't understand any topic regarding the course, we may ask our teacher in online class. Professor can give us PDF file by email or other media. Thus, we may continue our study. Engaging Students at a Deeper Level Improve Digital Literacy Offer Flexibility No Need for Actual Classrooms to Get to Know

Students Better. Online classes make my course to finish in time. This online system is making a bridge between teachers and students”.

**P1,2,3,8,10,12,19,20,21,27,29,30** thinks that “online class didn’t fulfill their educational needs. Many teachers did not send class lectures before the class, internet was not functioning well, and class time was too short. We suggest taking class test, viva after completing a chapter”.

**Q-3: As a student, how do you feel about the communication between yourself and the instructor? Between you and other students?**

**P1,6,7,8,14,18,21,27,28,29,30** states that “communication between me and my instructor is not so good. In online platform, we think it is quite easier than before. We assume that we should be in communication with both our teachers and classmates. This makes our minds even a little well, we will be able to get news about what others are doing. What we should do about our studies talking with teachers. Moreover, if we talk to each other regularly, our mental stress maybe a little better”.

**P2,5,9,10,13,15,16,19,20,26** provide their opinions that “the communication between ourselves and the instructor is some time possible when the instructor gives us an opportunities to say something. Feeling good but not best as like physical presence. But most of the times all together are not so easy to face to face discussion so communications are not good. If it is possible to rate we will rate 7 out of 10 in the matter of communication. Use appropriate style and language for school”.

**P3, 11,17,22,24,25** tell that their teachers are so much helpful and their friends are very impressive and friendly. Therefore, they fell great. They all are supportive and their classmates are very friendly. It has become very helpful for most of the students. They can see each other, they can communicate easily. Teacher and student relations become more focused.

**Q-4: As a student, do you think your learning outcomes could be achieved through online education? Why? How?**

**P1,4,5,7,9,10,12,18,21,23,24,26,27,28,29** states that “we think our learning outcomes couldn't be achieved through online education. We also add online class outcomes are not as much effective as traditional one. Online education may have some benefits but we don't think our learning outcomes could be achieved 100%. But the online platform is also a great way to achieve a good outcome if the instructor and the students helps each other. Though living far from institution these online classes saved our time and hassle. Knowledge can be achieved from this system but evaluation should



take conventional way. We think our learning outcomes could be few achieved through online education, because of distance learning”.

**P2,3,6,8,11,13,14,15,16,17,19,20,22,25,30** views that “in this way we will learn to use the best & good sides of modern technologies as well as attaining class regularly, giving presentation, submitting assignments from far away. Because the COVID-19 disease is the most dangerous all over the world, class is off all over the word that’s why we try in online to create our knowledge. We think our learning outcomes could be achieved through online education with the help of technology. Our learning outcomes could be achieved through online classes. In foreign countries we already can see why the online education platform is expanding because it's easy to learn at any time and from anywhere. At present time we are learning many things online and also it is possible to achieve outcomes but it is not like our traditional classes”.

**Q-5: As a student, how do you view the feedback from instructor? Is it in a timely manner? Constructive? Please give some examples.**

**P2,5,10,12,13,15,16,20,22, 26,27** tell that “*some teachers’ teaching material is strong and some teachers’ teaching material weak. We believe that weak teaching material from the instructor is not in a timely manner and not constructive like traditional classes. Feedback should be very specific to the students and written in a way we know they will understand. Online class is both difficult for students and teachers. The response is very difficult to understand*”.

**P1,3,4,6,7,8,9,11,14,17,18,19,21,23,24,25,28,29,30** states that “*instructor feedback must be constructive and in a timely manner. We must need to be in online classes like we attend our random classes in our university. Manner is so softly for all the students. It's impressive and constructive. Instructor should take attendance so that students can be more serious*”.

**Q-6: As a student, how do you think about the technical support provided from the university? Do you receive any other types of support, such as enrolling in online class, electronic database, and written information about the program?**

**P1,2,6,7,8,12,13,14,15,17,18,21,24,28,29** views that “*the technical support is not good at all. The database and written information are important to our course. But we didn't receive any support from the University. But it should be necessary for both students and teachers to get every type of support to attend*

*online classes from University. We are confused about how many students get technical support provided from the university.*

**P3,4,5,9,10,11,16,19,20,22,23,25,26,27,30** also viewed that *our respected teachers give us class notice and all type of notice on facebook. They conduct our class on zoom. University upgrades some technology for online classes. We get our entire needs through our class CR which is provided by our teachers. Online support was quite helpful for us. Our university takes a smooth action to make us familiar with this zoom app system”.*

**Q-7: How do you view your online class environment? E.g., Quality of graphics, layout, user-friendly, navigation, etc.?**

**P4,5,11,25,29** mentions that *“it can be a little tedious at times, and it isn't always excellent. We don't think of zoom as an internet educational tool. They have also included some network issues that hamper attention. We already recommended Microsoft Teams because we have a system for taking exams, uploading files, and many other things”.*

**P1,2,3,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,26,27,28,30** tell that *“online class environment, views layout were user friendly and efficient. We are satisfied about the lecture and classroom environment. We think that Google meet is more user friendly, it has high quality of graphics and navigation”.*

**Q-8: As a student, what could you do to improve the quality of your online class?**

**P15,19** views that the interaction between the teacher and the student assisted the instructor in properly instructing us.

**P2, 3,9,12,14,21,22** opines that *“quality is a matter for online class but most important is how many students can participate at a time. Some of us live in village, some live in city. Students may not be able to participate at a time while taking online class. So it could be better to create a facebook group with the particular batch and course teacher. Many poor students are in our class as well as internet problems. If our department provides Internet and improve speed, it will be more helpful”.*

**P1, 4,5,6,7,8,10,11,13,16, 20, 25,26,27,28,29,30** think that *“we need some creative task which help us with academic as well as future job sector. The main part is discussion to understand the whole part of the studies, for example, Online class quizzes, pop quizzes, class assignments, open book exam system for all”.*

**P17, 18, 23, 24** view that *“our classes are on laptops and then listen afterwards, but it's very difficult to improve the quality, because we need digital devices. So everyone should have laptop system, better devices, high rang internet service, to teach like a live class.*

**Q-9: What do you think are the important factors determining the quality of the online instruction you receive?**

**P1,4,7,8,10,13,18,19,21,24** tell hat providing lecture sheets and books and asking questions after completing the lecture are necessary. PDF file of class lecture, Live course PPT, related videos and pictures in real-time are also required. After class teachers should also be available in phone and social media to solve our problems.

**P3, 5, 6, 18, 20** also tell that the most essential catalyst is network bandwidth, fast internet connection and a good network.

**P11, 12,15,20,23,26,29,30** mention the dedication, technological knowledge, and a positive attitude toward students. *“We have the ability to operate electronic equipment, and remote learning technologies.*

**Q-10: What factors would lead you to choose online educational programs rather than traditional in-class instruction?**

**Table 2: Factors distribution**

<i>Factors</i>	<i>Participants</i>
<i>Distance learning that saves time and join class form anywhere of the country.</i>	<i>P2,5,10,17,18,19,24,25</i>
<i>Reduce session jam and continue study regularly that eliminate depression</i>	<i>P4,6,8,9,11,12,13,14,20,21,22, 23,</i>
<i>Continuing students and teacher friendly environment</i>	<i>P15,</i>
<i>Technological advancement</i>	<i>P26,30</i>
<i>Didn't like online education</i>	<i>P7,16,27,28</i>
<i>No responses</i>	<i>P1,3,29</i>

**Q-11: As a student, how would you rate the overall quality of the online education you receive? Very good, good, moderate, not good? Why?**

All the participants mentioned that the respondents rate the overall quality of the online classes as follows 10% very good quality, 30% good quality, 38% moderately good quality and 22% not good quality of education. The online class is good, actually not very good. Because online learning is not

better than physical presence learning. They are very much grateful to the University authority to take proactive decision for them. Some of them think it is moderate but can be good if teachers and students cooperate together. Because, the internet quality is not good, lack of previous experience, lack of quality PowerPoint slides and educational resources, lack of good devices, affect the online education.

## **6. Finding of the Research**

This research examined university students' impressions of online classes and the differences between them in terms of where they live, the device they use, institutional support, and the sorts of networks they utilize to access online education. In this study, researchers investigated the students' perceptions about online classes and the challenges faced for quality education. The major findings on the basis of respondents' interview are as follows-

a) Many students are disliked online classes due to communication gaps and lack of personal interaction between teachers and students. Traditional classes provide better eye contact and interaction, but online classes may not be as effective due to the pandemic. Despite this, online classes offer a more flexible learning environment, allowing students to give feedback and ask questions freely. While online classes provide class materials and guidance, traditional classes are preferred for clearer understanding of topics. Despite these drawbacks, online classes are essential for maintaining knowledge and mental health during the pandemic.

b) Online education may not achieve the same learning outcomes as traditional methods, but it can be beneficial if instructors and students collaborate. Distance learning can save time and hassle, but evaluation should follow a conventional method. Despite the challenges of COVID-19, online education can help students learn to use modern technologies, attend classes regularly, and submit assignments from far away. The expansion of online education platforms in foreign countries demonstrates the potential for learning at any time and from anywhere.

c) Participants come from wide range of areas and are confronted with several environments at the same time.

d) Due to their inability and apathy, some instructors are unwilling to teach online classes. As a result, there is a significant communication gap between the students and teachers. Effective instruction in online classes relies on teacher-student interaction, internet speed, and effective digital devices.

Facebook groups, creative tasks, and high-speed internet can improve online classes.

e) The study suggests that providing lecture materials, real-time videos, and online resources is crucial for effective online education. The most important factors are network bandwidth, fast internet connection, and a good network. Teachers should be dedicated, technologically knowledgeable, and have a positive attitude towards students.

However, such online class platform brings some benefits to both the students and teachers as well as blocking the education sector of Bangladesh during the pandemic. From the in-depth interviews, the researchers chalk out some benefits of online classes, such as:

The advantages of taking an online class are including recorded classes, digitally stored class materials, effective student participation and monitoring, and quick submission of course presentations, term papers, and class assignments are among them.

- Online classes allow students to complete their courses on time and allow them to learn from the comfort of their own homes.
- Online learning improves each students knowledge of new technologies and helps them to enter the modern world.
- Online learning is easy and convenient, and it is the most effective method for participating in classes and enhances skills.
- Every student may ask a question without hesitation, which helps to improve teacher- student interaction.

## **7. Implications**

The focus of this research was to understand more about how students feel about online classes. This study's qualitative research methodologies were well suited to achieving this purpose. The depth of knowledge gleaned via interviews, observations, and archive data has brought a degree of comprehension that quantitative approach could not provide (Yang & Cornelius, 2018). Our study group assessed that e-learning enabled them to increase their knowledge to the extent as traditional learning. Students are taking it for extra advantages due to COVID-19 pandemic in order to reduce session gap. However, they do not want to continue it for a long time because they have faced some difficulties such as low internet connection, electricity support, teachers' capacities, and lack of institutional support as well as their technological engagement.

Teachers should receive sufficient training in order to teach online. They must comprehend the contrasts between traditional and online classrooms in order to improve their competence. Prerecording video lectures, testing the content, and always having a Plan B on hand can all help to ensure that the teaching–learning process is not impeded. Dynamic, engaging, and interactive online classes should be the norm. To keep kids aware and focused, teachers should create time limitations and reminders for them. To the greatest extent possible, attempts should be made to humanize the learning process. Students should be given attention in order to help them adjust to this new learning environment. Students can be communicated through social media and numerous group forums. The government should take the initiative to develop a powerful network. While online lessons are beneficial, there should be more initiative as well.

In developing countries like Bangladesh, the online class system is a relatively new concept (Gopal et al., 2021). According to the outcomes of this study, most students believe that they are not as challenged in online classes and that they do not learn as well as they would in regular classes. There is no formal guideline or strategy in place to assist educational institutions in taking long-term efforts to maintain education services running during a pandemic (Sanker, et.al, 2021). As a result, researchers recommend that decision-makers develop proper rules to cope with such difficult situations, particularly when it comes to delivering education to students.

## **8. Limitation and Future Study Direction**

The study's main limitation was that only a small percentage of participants in Bangladesh taken part in the survey. During the COVID-19 pandemic, the survey focused mainly on major university students' perceptions toward online classes using online survey. Other considerations that could influence online classes, such as students' emotional and economic circumstances during the epidemic, and other relevant provisions, were also overlooked. The researchers also fail to explain how to cope with the problems and how students can do so. Further study needs to be conducted on larger respondents and consider the face-to-face interview for obtaining information will be helpful to enrich the generalization of the study findings. Here the researchers have used a qualitative method for collecting data, analyzing data, and exploring findings so the future study either may be considered a quantitative approach using the developed conceptual model of this study or may apply the mixed-method approach to assemble the credibility of the overall result.

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