

# The transformation of education during the corona pandemic: exploring the perspective of the private university students in Bangladesh

Transformation  
of education

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## Abstract

**Purpose** – In 2020, the education system was preliminary halted by the COVID-19 crisis and went through radical improvisation, and online-based distance learning was the only plausible initiative to continue educational activities ensuring health guidelines properly. However, in reality, such desperate measure in case of a lower-middle-income developing nation lacking proper structural capabilities raised some issues and concerns for both pupils and mentors, and this study aims to explore the practice of online-based distance learning in private universities of Bangladesh and the challenges associated with it.

**Design/methodology/approach** – This exploratory research is qualitative in nature. A total number of 89 undergraduate level university students from different private universities were divided into two main clusters and interviewed in depth.

**Findings** – The findings of this paper revealed that common developing country syndromes like improper technological infrastructure development, limitation to devices or internet accessibility and financial hindrances can disrupt the harmony of the online learning experience. Also, the lack of tech literacy has created a huge tension and psychological inertia among both the teachers and the students.

**Social implications** – The coronavirus pandemic event, with its dreadful influence, is creating immense mental pressures for students to cope well with the online learning system. Comprehending the underlying challenges affiliated with online-based distance learning and enabling faculties or respected personnel with training and development programs to handle impediments better way, this learning initiative can ensure the best outcomes.

**Originality/value** – The significance of this study lies in comprehending the feasibility of online-based education regarding lower-middle-income developing nation context and the realism of such learning process's acceptability considering its actual effectiveness.

**Keywords** Corona pandemic, COVID-19, Outbreak, Online education, Qualitative research

**Paper type** Research paper



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## 1. Introduction

With its contagious nature, the coronavirus (COVID-19) affected almost every county around the world rapidly, and the number of infected people and death increased alarmingly. From March of 2020 to the later periods, countries were trying hard to slow the spread of the coronavirus by implementing appropriate measures.

As a national response to the coronavirus outbreak, many countries were strictly maintaining “lockdown,” which implied a direct governmental intervention to limit or restrict people’s free movements and interactions, because this was thought to be the best effective measure against the spread of this airborne contagious virus. Due to the growing infection rate, Bangladesh also imposed nationwide public holidays (unofficial lockdown) and restrictions on public movement during the crisis where citizens were advised to stay at home and maintain social distance strictly. Though most crucial public services, national and private health services were kept open to provide non-stop support to the people, financial organizations like banks were operating on a limited scale and employees of private organizations were asked to work from home. Even most of the manufacturing factories, corporate houses were kept closed from the last of March 2020 to the last of April 2020.

Schools, colleges, universities and all other educational institutions were ordered to remain closed during the public holiday (nationwide unofficial lockdown). Therefore, all in-person classes were canceled, exams and other on-campus activities were postponed. Later on, the government decided to conduct live lectures through national TV channels for secondary-level school students. Universities (mainly private universities) also initiated online-based distance learning or online classes for their students. On April 05, 2020, the University Grants Commission (UGC) expressed its concern that some universities were ignoring UGC’s directions regarding online classes and academic activities, e.g. online exams, grade publishing and continuing admission for the upcoming semester (Riyasad, 2020). Still, universities continued the learning process through online mediums during this COVID-19 crisis.

Although both students and teachers were accustomed to the modern-day internet-assisted learning practices, the sudden formal initiation of online-based distance learning aroused various complexities both for the learner and educator groups. Online-based distance learning was initiated to get rid of stagnation in the ongoing educational scheme but with its provoked issues, it raised questions about the quality of the education.

However, online-based distance learning was instigated with the best of intentions to mobilize the education system during the pandemic situation, but in reality, the results and effectiveness of this initiative are yet to be determined. In this study, the authors tried to look inside the current picture and discuss the scope and complications of online-based distance learning during this pandemic crisis.

## 2. Corona and its impact on global education

The effects of the COVID-19 outbreak in 2020 on the education system are also visible today; it caused an unexpected educational disruption across the planet. Due to the lockdown, all formal, informal and non-formal classroom-based activities in schools, colleges, universities and all other educational institutions had gone through unusual and unexpected inconsistencies and disturbances. According to UNESCO (2020), about 1.5 billion students and youth around the world were affected by school and university closures due to the global outbreak of coronavirus. Some counties depending on the lower rate of COVID-19-infected cases have reopened educational institutions with extra precautions, in many countries educational institutions are still closed from March 18, 2020.

According to [UNICEF \(2020a\)](#), over one billion children are at risk of falling behind due to worldwide school closures. Whereas, over 90% of the countries adopted digital remote learning, and around 463 million students worldwide have been cut off from the formal education system ([UNICEF, 2020b](#)). At the same time, this pandemic has led to sudden and drastic changes in the higher education ecosystem. Due to strict lockdowns, health and travel guidelines, international students faced trouble returning to their campus, which created uncertainty regarding the implications for higher education globally.

In Bangladesh, all kinds of on-campus activities and face-to-face educational activities were suspended till September 2020 ([The Business Standard, 2020](#); [The Financial Express, 2020a](#)) later on, the suspension was extended till June 2021.

The government was strictly monitoring the situation and imposed limitations on public movement during the public holidays (unofficial lockdown) to prevent coronavirus disease and its widespread outbreak for protecting the health and well-being of the students, teachers, officials and employees working in the educational institutions and all the citizens. However, the postponement of the result publication of the Secondary School Certification examination and arrangement of the Higher Secondary School Certification examination for an uncertain period made students, teachers, parents and all the associated concerned parties copiously worried about the educational situation in the pandemic occasion. It created an unforeseeable hazy situation for the students to define when they would be able to finish their academic life ([The Financial Express, 2020a](#)).

At the same time, following the global trend and popularity of online-based distance learning, The Bangladesh Government and The Directorate of Secondary and Higher Education (DSHE) initiated to broadcast pre-recorded virtual lessons/lectures named “Amar Ghore Amar School” or “My School at My Home” through the state-run TV channels Bangladesh Television and Sangsad TV for the secondary school-level students of classes six to ten ([Dhaka Tribune, 2020](#); [Islam, 2020](#); [Sarkar, 2020](#)).

In this situation, online education seemed to be the best solution to maintain academic continuity. Some universities also initiated online-based distance learning or online classes for their students. On March 24, The UGC of Bangladesh also advised the universities to start online education during the corona crisis ([The Daily Star, 2020a, b](#); [The Financial Express, 2020b](#)) through a press release. On May 07, 2020, the UGC also published a guideline on conducting online classes ([Abdullah, 2020a](#)).

Immediately after getting positive responses on online education, universities, especially private universities, took the opportunity and started conducting online academic activities ([Abbas, 2020](#); [Abdullah, 2020b](#); [The Daily Star, 2020a](#)), including online classes, online exams, resulting in publishing, online admissions, etc.

Undoubtedly, the emergence of online-based education will have an impact on global education, according to [Tam and El-Azar \(2020\)](#), this pandemic could even reshape education. Though things change constantly, sometimes changes become so hard to accept, especially during any pandemic where things are changing really fast, and online education might not bring the expected result. Online-based distance learning or the use of online tools in higher education is not new; most of the teachers and students in university are quite familiar with online education, but the rapid transformation from traditional to online education has also created huge tension among all.

### 3. Purpose of the study

This paper discusses the fundamental transformation of formal education and the practice of online-based distance learning in private universities of Bangladesh and addresses the key challenges of online classes during the corona pandemic from the perspective of students of private universities in Bangladesh.

#### 4. Research method

As qualitative research helps to produce detailed findings where no previous or secondary data are available and assists in generating findings beyond the immediate margins of the specific study (Mack *et al.*, 2005), therefore, to gain a stronger understanding of the underlying insights of online learning during a pandemic situation like the corona outbreak, where the present literature is playing an insufficient role to explain the real phenomenon (Creswell, 2012); the authors decided to conduct qualitative exploratory research.

A total number of 89 undergraduate-level university students from different private universities were selected for the interview via purposeful and snowball ball sampling technique. The authors connected the respondents from private university students' groups.

The total sample group was divided into two main clusters, e.g.

Cluster A: A total number of 48 students, living in Dhaka or any suburb area during the COVID-19 phase one period (March 2020 to December 2020).

Cluster B: 41 students, living in rural areas, mainly left campus areas and cities when the lockdown was announced.

An in-depth interview technique was used to collect the data. A set of semi-structured questionnaires was installed, and the interviews were conducted through phone calls and mobile applications such as Facebook Messenger, WhatsApp, Viber. In total, 16 respondents were interviewed more than once. In total, 107 interview sessions were arranged. Among the total of 113 interview sessions, 35 interviews were recorded with the consent of the respondents.

#### 5. Analysis, research findings and discussion

##### 5.1 *The transformation of education in recent years*

The fast-moving world is shaping up to be much digitalized in terms of communication, business, education, etc. The world has witnessed a rapid transformation of the education system over the past two decades. High availability and easy access to the internet have smoothed the course of evolution not only in developed countries but also in developing countries and least developed countries.

Over the past few decades, the education system has seen significant changes, and the idea regarding the transformation of traditional or brick-and-mortar education to online-based education became a contemplative trend. Once the traditional education system used to be considered the primary source of institutional education but with the advancement of technology and internet access, online convenience unfolds newer dimensions for the learners providing a contemporary system of education, which is viable enough to alternate the traditional system.

Advancement in the information and communications technology (ICT) sector, access to the internet and the digitalization process have played major roles to evolve the education system in many countries. Technology has made it possible to create the World Wide Web (WWW) with no borders to support distance learning (Moore *et al.*, 2010; Keegan, 1996; Moore, 1990) in this global village. Now the education system is undergoing a major transformation (Greenberg and Zanetis, 2012). It has also helped to enhance the quality of education (Al-Ansari, 2006) and assisted the effective process of teaching and learning through the use of multiple resources simultaneously.

According to Benlamri and Klett (2015) "Advancements in Information and Communication Technology (ICT) over the last decade have lowered barriers to learner connectivity and facilitated access to a wide range of learning resources on the Web."

Nowadays, most of the reading materials, required information regarding any subject matter, online video-based lectures with visual representation are readily available on the

online platform. Consequently, scholarly dependency on the e-learning process from the traditional forms is increasing. Youths are now shifting toward online platforms to look for information. Factually, the traditional form of education, i.e. classroom-based teaching process, practices of physical lecture delivery, customary forms of relationships among teachers and students, students with other fellow students, has also changed in the past 10–15 years. The emergence of digital education not only promoted improving skills through the use of e-resources but also facilitated the engagement of students to develop complex thinking abilities (Kozma, 2005). Both teaching and learning processes have become smarter and interactive; students can now re-visit the study materials anytime (Bransford *et al.*, 2000). Now teachers and students can use multiple sources to evaluate the information and create a greater impact on society by sharing their knowledge on different platforms.

Although online learning or online-based education brought new horizons in the learning environment like vast flexibility and distance learning, one might argue that it lacks the traditional educational system's elements of learning environment like discipline, social interactions and conventional learning methods; hence, the quality of education may differ under the online system. Despite such altercations, the continuous progress of online education and its popularity stress out the questions regarding the feasibility concerning the conversion of traditional to the online-based education system.

More and more people's life is getting engaged with online materials, learners now heavily rely on many online assistances to comprehend studies. Many speculate that the transformation of the traditional educational system to an online-based system might be gradual but inevitable. But what made this issue imminent is the 21st century's most significant pandemic event COVID-19.

This COVID-19 or outbreak of this deadly contagious coronavirus throughout the world changed the way of life and required some specific measures to minimize its spread. Among them, social distancing proved to be an effective measure. Nevertheless, the idea of social distancing brought forth remote work or work from home, virtual courts, online classes, etc. to continue essential affairs without engaging socially so that the virus cannot spread. Online-based education got wind in its sail during this pandemic event now more than ever. Previously, online-based education was (mostly) limited to pre-recorded videos and online courses (both using institutional learning management system and massive open online course platforms), but in the desperate times of pandemic, it transformed physical classrooms into virtual classrooms, connecting the teachers and students live through the internet and necessary devices. Though for a lower-middle-income developing nation, which is going through a transforming period to officially achieve the status of a developing country like Bangladesh, such action might seem like a desperate measure without deliberate consideration to maintain educational quality, similarity or resemblance, reach and interaction or the same teaching method of the live online classes made the virtual classes parallel to physical ones.

The transformation of the educational system from traditional to online-based, or in this case, physical classes to online virtual classes, saw the initiation on a larger scale during a pandemic event. Even though some might say it was an improvisation to keep the educational system vibrant in stressful times, but the approach provokes insights as well as opportunities and scopes for the further conversion of education in permanent terms. This might require consideration of how well students and the teachers perform in the online environment, how they are adapting to the system, how the online-based interaction works, whether mentors and pupils both parties are well equipped to participate in the online classes or any technical or systematic difficulties are holding the teachers back to perform in the online environment, whether they need some training or not, etc. also checking students' and teachers' preferences, feedbacks and their inputs while designing online-based classes should be taken under advisement.

Considering the dominance of the internet and online-based networks in the globe it would be wise to presume that future of the education system lies in online-based education. It is high time the education system saw a metamorphosis, from brick and mortar to internet-based learning ecosystem.

### *5.2 The emergence of online education during COVID-19*

With the spreading of coronavirus speedily and transversely in many countries from Asia, Europe, the Middle East to the USA, all these countries took quick and vital measures to alleviate the progress of a full-scale pandemic (Tam and El-Azar, 2020). To deaden the impairment of pandemic events in the case of economic, educational, judicial, etc. type activities, countries adopted improvised measures like work from home, online-based distance learning, virtual courts and so on.

In the event of the educational situation amid this crisis, according to a report by [Hundred \(2020\)](#), students along with their guardians, teachers around the globe felt the unprecedented far-reaching consequence of the novel coronavirus since schools got closed down and isolated strategies were being requested to adapt to the worldwide pandemic. Besides, based on the report published by the United Nations, it was noticed that in total to 166 countries declared the closing of all schools and universities to reduce the intensity of being affected through coronavirus ([United Nations Sustainable Development Group, 2020](#)). So, due to such unwanted predicaments, 1.5 billion children and young students' academic life had become grievously affected ([Thomas, 2020](#)).

Therefore, governments as well as the healthcare authorities tried and did their best to intercept the flare up, and consequently, worldwide educational systems started working together as a response to ensure quality education to all during the troublesome periods ([Hundred, 2020](#)). The novel coronavirus possessed as a catalyst to alter the old lecture-based educational mode within the classroom to the innovative solution by letting faculties applying different creative online learning tools to gather students in the virtual classroom within a short time ([Tam and El-Azar, 2020](#)).

As the COVID-19 broke out through the nation, the government reportedly turned off all the social gathering places to ensure social distancing, including all the government, non-government offices, manufacturing and retail sectors, restaurants, public transports, shopping malls and, most significantly, all the educational organizations. For a long period, the physical, on-campus, institutionalize activities of all types of educational institutions come into the stable. As the pandemic situation aggravated throughout the country, the prime minister of Bangladesh indicated the potential full closure of all educational institutions for a prolonged period unless the situation progressed better way.

But, in another scheme, based on a report published by [The Financial Express \(2020a\)](#), it portrayed some steps that had been implemented by the Bangladesh Governments to let the students recover the losses of their academic activities, and one of the solutions proposed was about taking an online class. The Government of Bangladesh is encouraging digital learning and the DSHE of Bangladesh broadcasting recorded class lessons/lectures for the students of class six to ten (secondary school level) through the state-run TV channels until May 30. Because of the lengthened shutting down of educational institutions and postponement of classes due to the outbreak of COVID-19, the students of different levels were badly affected throughout the whole country. It was noticeable that two large general board examinations' regular activities were largely obstructed.

To cover up this mass bygone period in the academic life of the students, under the guidance of the University Grand Commission authorized by the government and the universities (especially private universities), the authority took initiatives together to run their teaching and educational services for the students over online, which was a sudden yet

unexpected approach in the stereotype educational system of Bangladesh over the history. Such measure also makes sense considering the students' perspectives as it is a very customary wish for students starting from schools to universities, to accomplish their respective degrees and academic careers within the given particular timeframe from their respective educational institutions.

### *5.3 Online-based distance learning during the corona crisis: students' perspective*

The unprecedented lockdowns around the world to prevent the rapid spread and transmission of the COVID-19 have created significant disruption in formal education. Undoubtedly, if the lockdowns continue, it might also have a long-term impact on the education system worldwide. Some even stated that this COVID-19 pandemic could even reshape education (Tam and El-Azar, 2020). In this situation, online-based distance learning, however, could be the best solution to the problem. Through online-based learning, students can connect with the teachers and peers of the same class from anywhere and learn their class lessons. Distance learning facility is the key feature of online education that makes it increasingly essential to continue academic activities during the pandemic. Students and teachers only need an internet connection, any device like a computer or a smartphone to access any virtual class.

Bangladesh has made incredible progress in the ICT sector and brought the digital revolution in almost every sector during the past 10–12 years, and the country is now on its way to achieve the status of “Digital Bangladesh” by 2021, but it could not promote online-based distance learning in the case of formal education, especially in universities. All universities have their own websites, and they regularly publish updates on their websites, but most of them do not have any e-learning platform.

Though both, the teachers and the students mentioned that they really appreciate the initiative of online-based learning as it will help them to complete their syllabus and the semesters on time; nevertheless, they are not comfortable with the online classes.

The interviews revealed myriad underlying problems and issues associated with online-based distance learning or online classes, and the authors have classified these problems as mainly three different contexts related, which are typically subject to access, psychological situation and technical comprehension affiliated.

*5.3.1 Access-related problems.* Here are some access-related issues that students mentioned during the interview sessions:

- (1) **Device-related problems:** As mentioned before, to access the online classes, students require devices like a desktop computer, laptop, tablet computer or smartphones, but at the time when the public holidays were announced, many students immediately left the campus areas, university halls and dorms, temporary residences of the cities and went back to their permanent residences to stay with their families. Most (around 61%) of the respondents from Cluster B and around 39% of respondents from Cluster A reported that they faced devices-related problems.

Around 17% from Cluster B and around 2% of respondents from Cluster A said that they do not have a personal laptop or desktop, they mostly depend on their smartphones to access the internet. Respondents from both clusters reported that their devices, especially smartphones, are not as much as powerful or updated in terms of camera, network or other functionalities as per the requirement of most online classes, so their devices do not function well during the online classes.

The sudden announcement of online classes struck many students with surprise as lots of them were unprepared and unequipped with proper devices. For instance, a

respondent from Cluster A, a dorm dweller and a student of a university in the capital (Dhaka), who went to his village hometown after the lockdown event mentioned:

After hearing the lockdown announcement, I left Dhaka in a hurry. I thought it's (lockdown) going to last only a few days so I left my laptop in my dorm room. But when the university declared the initiation of online classes I was baffled, because lockdown was still going on and I had no way to bring my laptop nor had a smartphone of my own to attend the classes. Luckily, somehow, I managed to attend the classes by borrowing my younger brother's old smartphone, but the experience was terrible (Mamun, 24).

Few students expressed that they do not even have smartphones or any appropriate device to participate in distance learning efforts, and some disclosed their adverse situations due to device accompanied problems. Like Nabila from Cluster A noted:

I don't have any personal computer or laptop and to be honest, my smartphone is of minimal features with low configurations. Whenever I attend online classes with it, it often hangs and I have to restart it. This frequent leaving and joining embarrass me, also I miss important parts of lectures in these lost times. . . (Nabila, 21).

(2) **Internet-related problems:** Access to the internet is mandatory for attending an online class. Most of the students living in cities and sub-urban areas have a broadband or Wi-Fi internet connection, but students living in rural areas do not have such facilities. Students living in rural areas are largely dependent on mobile internet connections. According to the data of the Bangladesh Telecommunication Regulatory Commission (BTRC, 2020), till February 2020, the total number of internet users in Bangladesh is 99.984 million, and among them, 94.236 are mobile internet users.

Though the mobile operators claim to provide flawless 4G network coverage and uninterrupted internet services over the whole country, nevertheless, the reality is much different according to the respondents, and this is one of the main reasons that students are much worried about participating in online classes. Almost every respondent from both the clusters (around 66% of total respondents) said they are experiencing poor internet speed and network (as online educational tools require better internet connection); therefore, they face challenges such as slow streaming or buffering and even sudden disconnection-type problems during the classes. The tools that most of the universities using for online education are:

- (1) Zoom;
- (2) Google Meet;
- (3) Google Classroom;
- (4) Skype;
- (5) Google Hangouts;
- (6) Slack; and
- (7) Lifesize.

The interviews shed light on the country's underlying internet services. Though the government took many initiatives to make internet services thoroughly available through the country as a part of their Digital Bangladesh campaign, in reality, it seems, in many geographical locations, internet network strength and service quality are still substandard and appalling that impeding online-based distance learning opportunities.



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Maruf from Cluster B, a student who went to his hometown in the lockdown event, said:

I live in a rural area and there are no broadband internet services here. So, my only way of internet source is mobile data but unfortunately, I don't get much strong internet signals here either. No 4G neither 3G is available here I merely connect to classes with 2.5G and it's embarrassing to share that, I have to keep my audio-video switched off in the classes for low internet speed and often need to go to the rooftop for getting the best reception to attend the classes (Maruf, 23).

Generally, the country is lagging behind in internet quality compared to its neighboring countries. Even though the telecommunication operators continuously promote their success of covering the full country with fourth- or third-generation internet quality, in reality, many areas are still not under the proper coverage. Moreover, flawed and poor-quality internet services also hinder online learning or class experience.

A computer science engineering student from Cluster A, unwilling to disclose her name, living in a suburban area shared her experience like this:

I usually join classes with my broadband connection but my internet connection is horrific. There is constant packet loss, random disconnect problem and other issues which I regularly complain to my internet service provider but see no improvement. This has cost me greatly, I had an online presentation and suddenly got disconnected while presenting. This was really the worst experience for me . . . also, I often get buffering, disconnection audio lag and other issues for this dull internet provider which is really annoying and disappointing. . . (Respondent X1, 23).

(3) **Cost of access:** Attending online classes is only a reality to continue the schooling and academic activities during the corona pandemic. The study found that around 63% of the respondents (from both the clusters) are using mobile data (mobile internet) as a mode of getting internet services. A strong internet connection is required to attend an online class, and these mobile data users revealed that the cost of data (internet) access has become a big problem for them. Since many of the university students manage their day-to-day expense, including internet expense through various part-time jobs and tuitions and the lockdown has deprived them of such opportunities, their access to good internet connection seems to have become limited for economic reasons.

Like a final year, an undergraduate from Cluster A noted in this context:

I used to teach a lot of students and earn much by my tuition services. Not only myself, but I also used to support my family with this income but this pandemic event took away my income source and now this additional data cost for online classes really is harsh on me. . . (Aliya, 22).

Internet traffic or required data volume for distance learning is not too trivial, and the cost associated with it is perceived much higher and unaffordable by many students since most of them are using mobile data to attend online classes. For instance, sophomore year accounting undergraduate Iqbal depicted the situation as:

I can usually afford two to three gigabytes of data per month but since the online class started, as I have four courses, some days I had to attend three classes and in a week my data requirement became about four gigabytes. This means monthly my data requirements increased by about five times and as I have no job and no income now, it's getting hard for my family to bear this cost since they are not doing well in this pandemic situation (Iqbal, 23).

Economic hardship is a common scenario in the lower-middle-income developing country context. The pandemic circumstances have hit harder mostly the middle- and lower-class communities, and many students belonging to this community are underprivileged to

participate or cope with in accordance with distance learning or online classes. This sudden shift to distance teaching, however, has highlighted and the contemporary inequalities in education (Stanistreet *et al.*, 2020).

Most of the students reported that they have faced some technical problems, including compatibility issues, browser and apps-related issues, during attending the online classes, which also affected their online learning experiences. Many students expressed their concern that they are not well accustomed to the technology and the procedures required for the online classes. Some mentioned that different classes require different software and Web portals, and they found the procedures and systems requirements confusing as well as inconvenient.

*5.3.2 Stress, anxiety and mental health-related issues.* Within the pandemic period, the whole world had gone through a horrific time with unforeseen circumstances, which are not encountered before. In a recent study on public “Tweets” conducted over the course of three weeks in April, Ewing and Vu (2021) found that the government of Australia implemented some health and economic policies in response to COVID-19; however, their inability to agree with the states on those policies caused a significant level of confusion and anxiety; they also suggested that people had begun to lose their sense of humor. While narrating the reflections within the educational and healthcare perspective in a time with the corona crisis, Damsgaard and Phoenix (2020), Blanco-Donoso *et al.* (2021) and Chen *et al.* (2020) also mentioned the concerns related to mental health, stress, due to COVID-19 pandemic and in the lockdown period of 2020.

These are some regular stress and anxiety-related issues that the respondents mentioned they are dealing with each day during the lockdown.

- (1) Coronavirus disease is an infectious disease, and people can easily catch the disease from any others who have the virus. Later on, experts suggested that many infected even might not develop any symptoms. As of December 2020, the number of new cases (infected) is increasing, it is a frightening time living in fear about getting infected by the disease.

Of the total respondents, 89.8% from both clusters mentioned that they have been suffering from stress and anxiety due to the situation. Around 62% of the total respondents said that they have been facing difficulties in sleeping. A lot of them said that they feel stressed about the pandemic situation and are panicked by continuous death and suffering news broadcasted through global media. They are losing focus toward education, and they think education should not be the priority in this severe condition, rather staying safe and sound mentally and physically should be a grave concern.

- (2) Due to lockdown, the nation is going through economic disruption, many people have lost their jobs, many are at risk of losing jobs and there are certain restrictions on operating businesses during the lockdown. Therefore, many families are dealing with stressful thoughts about their current and future livelihood. The research findings suggested that students, as a part or members of their families, are also much worried about their future. Final-semester students are grievously worried about their graduation and the future of the job market. While a lot of students worry about the current situation, many of them expressed their frustrations about the consequences and potential outcomes of the pandemic as they think that the global and national economy will go through significant changes and job opportunities, higher education, and scholarship opportunities, entrepreneurship opportunities will see a greater decline in the future after the pandemic. Some of them are also quite upset about their current and future financial well-being.
- (3) Due to restrictions from local administration and law enforcement agencies, they are not allowed to go outside during the lockdown. Respondents mentioned that staying

at home is not an easy job as it leads to overthinking and panicking since there are fewer ways to handle stress, and 77% of total the number of respondents from Cluster A, and 48% from Cluster B mentioned that it creates heavy anxiety for them and puts them in fierce mental pressure. Due to less restriction at the union level and rural areas, around 92% of the respondents from Cluster B mentioned that during the lockdown period, they violated instructions and went outside to spend time with friends.

Respondents from both clusters reported that they are facing much trouble with their mental health. About 70% of the total respondents said that they are considering online classes as an extra pressure at this time and due to lack of concentration, confidence and energy, it can be difficult for them to bear with the classes, and they might not be able to achieve the expected result this semester.

The COVID-19 epidemic marches through Bangladesh within the lockdown measures rising tensions and uncertainties, so the issues related to the social and psychological well-being of students become gravely concerning. The expected psychological distress, depression and anxiety were worrisome in the student population, and the pandemic adversities worsened the situation more. In Bangladesh, usually, there are no systematic measures of the mental health of students. Educational institutions are not obliged to have psychological counseling programs or other measures for monitoring and managing the mental health of their students, rather only a handful of educational institutions main the practice of such initiatives.

So, in most cases, students who are having financial difficulties, with little social support, and are pressured or stressed to perform academically are at greater risk of falling into serious psychological distress and dementia. The university closures and social distancing measures adversely affected the social interactions, congregations of some individuals, partly leaving them isolated, while more social support might be necessary to cope with the additional stress factors (Elmer *et al.*, 2020). Moreover, a reduction of social interactions, which is likely to be caused by the crisis event and distancing measures, can lead to lower mental health (Kawachi and Berkman, 2001).

*5.3.3 Technical knowledge and quality of education.* Though the concept is not new for educators, students and parents as they are already much used to many of the online education tools, still, there is much hesitancy among the different parties about the effectiveness of online education.

- (1) According to the respondents from both clusters, most of their teachers are not used to online education tools as Google Meet, Google Classroom, Zoom. About 92% of the students mentioned that they never used any of these online educational tools before; therefore, they were not much comfortable with the online classes initially.

Interestingly, all of the respondents are on social networking sites (SNSs), i.e. Facebook and Facebook Messenger. Of the total respondents, 51% have a LinkedIn account. About 77.5% of them use voice calling and messaging apps like WhatsApp, Viber. They access their emails and visit video-sharing sites on YouTube regularly. Even due to the high use of SNSs, researchers like Momen *et al.* (2020) mentioned Bangladesh as a ground of opportunities for social media. So, there is a clear mismatch between statements and real-life experience on the uses of online tools among this particular group of students.

- (2) About 73% of students mentioned that they are not satisfied with the online classes and do not understand many important lessons during the class. Interestingly, among them, 66% said that they do not ask any questions to the teachers or their peers and do not have their doubts clarified. However, some teachers regularly upload their class lectures

on their private websites and these help students to watch the videos, again and again, to understand the lessons better. Most of the students said they are much used to learn from YouTube, Google and other free and easy-to-access learning websites.

In their study, [Chen and Gilchrist \(2013\)](#), also found several applications of digital video content for individual improvements, they also suggested that online contents are appropriate for scholars, who have previous knowledge of those. So, it seems due to having little experience and adequate expertise with educational tools, students faced such a level of discomfort or psychological inertia, which they overcome gradually.

As most teachers have no experience in conducting online classes or teaching online, they are also struggling with the process. The UGC, university authorities and teachers also need to understand that creating class lesson content for online education is a bit different from preparing classroom presentations. However, exclusive training on subjects like “effective online class management” might help the teachers to learn the ins and outs of online-based distance learning.

*5.3.4 Attendance and academic performance.* Though the previous studies, i.e. [Brazendale et al. \(2017\)](#), suggested that students are more inspired by self-learning, they concur that online courses are more appropriate to them. Nevertheless, Bangladeshi private university students had not left behind exploring the online learning ecosystem of their formal studies. During this difficult period of the coronavirus pandemic, students do not have adequate freedom to make psychological and cognitive strategies to accomplish their educational objectives.

- (1) Again, around 84% of the total respondents (89.5% respondents from Cluster A and 78% of Cluster B) said that they feel less connected with the study materials, due to less concentration and no practical or lab classes, they forget whatever they learn; thus, they are getting poor grades.
- (2) This research finding revealed that about 90% of respondents mentioned that they were always trying to be present in the class, despite their network issues due to formal obligations, as in most of the private universities, a minimum of 75–80% attendance rate is mandatory for being allowed to attend the final exams. As suggested by [Marburger \(2006\)](#), mandatory attendance policy reduces absenteeism and improves students’ academic performance; hence, universities are implementing similar approaches.
- (3) The authors requested data regarding attendance records or trends from the respondents, but most of them refused to provide it as they thought it was sensitive and too personal to share. However, a small number of respondents confessed that they did not pay heed to the lectures as they were busy doing other chores and attended the online classes simultaneously.

In the COVID-19 situation, the results of this online-based learning program are still questionable for this new distance-based educational system, and the respondents confirmed that they are enjoying a certain level of flexibility on online exercises and Web-based quizzes or tests. Although it may seem that a kind of revolution has taken place in the education ecosystem over the past year, a prolonged evaluation throughout a few more years can be essential for reaching such conclusions.

## 6. Conclusion

In a developing country context, distance-based online education raised some concerns, like participation of many students became uncertain because of their economic unaffordability

to meet technological requirements (internet, smartphone, PC, etc.) of online education. Also, as in Bangladesh, many students reside in remote rural areas and lack the necessary technological facilities to get proper online education compared to the urban students. Due to these circumstances, maintaining balance or ensuring all students' equal participation in online class became a pressure for the faculties, authorities, government, education ministry and all concerned parties of the country. Moreover, fear and tensions risen by this dreadful pandemic event's consequences are taking a heavy toll on people's mental health. Pupils are gravely impacted by this as their attention to learning and education is now baffled with anxious thoughts about life-and-death concerns and the uncertainty of post-pandemic future life. With this dire state of mind and ailing mental condition, the efficacy of sudden online-based education or online classes is debatable, and the effectiveness of such a learning process becomes questionable. However, considering the circumstances, online psychotherapy sessions in parallel with online learning could help students achieving mental stability.

This study also suggests that most online classes have consistently failed to be compelling in light of the fact that there is regularly little to zero accountability of the students for remaining engaged with the lecture. In physical classes, students are directly connected with instructors and feel some commitment to engage in the lecture session. But, in an online class, students are much out of touch, disoriented and somewhat reluctant about the lecture sessions. Moreover, for the faculties, motivating and getting feedback from all the students in online classes to become much more challenging as excepting the students of upscale educational institutions, majority of the general students panic to be deprived of this new learning method.

The universities and educational institutes have implemented and are running online classes without having any previously developed framework, and the technicality issues associated with this abruptly initiated learning process are systematically making the learning scenario inconvenient in some cases. Furthermore, many faculties or pedagogues are not well trained enough to carry out their teaching services online, and this impromptu initiation of an online-based distance learning system is making the effectiveness of the whole learning process controversial and, hence, further research studies can explore more regarding the implementation and efficacy of online-based distance learning in consideration of a lower-middle-income developing nation's socio-economic settings.

## References

- Abbas, S.M. (2020), "Covid-19: educational institutions engaging in online, virtual classes", *Dhaka Tribune*, available at: <https://www.dhakatribune.com/bangladesh/education/2020/05/02/covid-19-educational-institutions-engaging-in-online-virtual-classes> (accessed 20 August 2020).
- Abdullah, M. (2020a), "Bangladesh decides to keep all educational institutions closed till Dec 19", *Dhaka Tribune*, available at: <https://www.dhakatribune.com/bangladesh/2020/11/12/all-educational-institutions-to-remain-closed-till-december-19> (accessed 8 December 2020).
- Abdullah, M. (2020b), "Dipu Moni: private universities can conduct exams, admissions online", *Dhaka Tribune*, available at: <https://www.dhakatribune.com/bangladesh/education/2020/04/30/dipu-moni-students-need-to-be-kept-engaged-to-prevent-depression> (accessed 20 August 2020).
- Al-Ansari, H. (2006), "Internet use by the faculty members of Kuwait University", *The Electronic Library*, Vol. 24 No. 6, pp. 791-803.
- Benlamri, R. and Klett, F. (2015), "Emerging trends for open access learning", *Research and Practice in Technology Enhanced Learning*, Vol. 10 No. 11, pp. 1-7, doi: 10.1186/s41039-015-0010-4, (Editorial).

- Blanco-Donoso, L.M., Moreno-Jiménez, J., Amutio, A., Gallego-Alberto, L., Moreno-Jiménez, B. and Garrosa, E. (2021), "Stressors, job resources, fear of contagion, and secondary traumatic stress among nursing home workers in face of the COVID-19: the case of Spain", *Journal of Applied Gerontology*, Vol. 40 No. 3, pp. 244-256, doi: [10.1177/0733464820964153](https://doi.org/10.1177/0733464820964153).
- Bransford, J.D., Brown, A.L. and Cocking, R.R. (2000), *How People Learn; Brain, Mind, Experience and School*, National Academy Press, Washington.
- Brazendale, K., Beets, M.W., Weaver, R.G., Pate, R.R., Turner-McGrievy, G.M., Kaczynski, A.T., Chandler, J.L., Bohnert, A. and von Hippel, P.T. (2017), "Understanding differences between summer vs. school obesogenic behaviors of children: the structured days hypothesis", *International Journal of Behavioral Nutrition and Physical Activity*, Vol. 14 No. 1, pp. 1-14.
- BTRC (2020), "Internet subscribers in Bangladesh February", available at: <http://www.btrc.gov.bd/content/internet-subscribers-bangladesh-february-2020> (accessed 1 May 2020).
- Chen, H. and Gilchrist, S.B. (2013), "Online access to higher education on YouTubeEDU", *New Library World*, Vol. 114 Nos 3-4, pp. 99-109.
- Chen, Q., Liang, M., Li, Y., Guo, J., Fei, D., Wang, L., He, L., Sheng, C., Cai, Y., Li, X., Wang, J. and Zhang, Z. (2020), "Mental health care for medical staff in China during the COVID-19 outbreak", *The Lancet Psychiatry*, Vol. 7 No. 4, pp. e15-e16, doi: [10.1016/S2215-0366\(20\)30078-X](https://doi.org/10.1016/S2215-0366(20)30078-X).
- Creswell, J.W. (2012), *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, 4th ed., Pearson, Boston, MA.
- Damsgaard, J.B. and Phoenix, A. (2020), "World of change: reflections within an educational and health care perspective in a time with COVID-19", *International Journal of Social Psychiatry*. doi: [10.1177/0020764020979025](https://doi.org/10.1177/0020764020979025).
- Dhaka Tribune (2020), "BTV, Sangsad TV to air lessons for secondary level students from Sunday", available at: <https://www.dhakatribune.com/bangladesh/2020/03/28/btv-sangsad-tv-to-air-lessons-for-secondary-level-students-from-sunday> (accessed 1 May 2020).
- Elmer, T., Mepham, K. and Stadtfeld, C. (2020), "Students under lockdown: comparisons of students' social networks and mental health before and during the COVID-19 crisis in Switzerland", *PLoS ONE*, Vol. 15 No. 7, p. e0236337, doi: [10.1371/journal.pone.0236337](https://doi.org/10.1371/journal.pone.0236337).
- Ewing, L.-A. and Vu, H.Q. (2021), "Navigating 'home schooling' during COVID-19: Australian public response on twitter", *Media International Australia*, Vol. 178 No. 1, pp. 77-86, doi: [10.1177/1329878X20956409](https://doi.org/10.1177/1329878X20956409).
- Greenberg, A.D. and Zanetis, J. (2012), "The impact of broadcast and streaming video in education", San Jose, available at: <http://www.cisco.com/web/strategy/docs/education/ciscovideowp.pdf>.
- Hundred (2020), "Quality education for all during coronavirus", available at: <https://hundred.org/en/collections/quality-education-for-all-during-coronavirus> (accessed 16 May 2020).
- Islam, S. (2020), "Sangsad TV to broadcast lessons for primary students", *Bdnews24.com*, available at: <https://bdnews24.com/education/2020/03/30/sangsad-tv-to-broadcast-lessons-for-primary-students> (accessed 16 May 2020).
- Kawachi, I. and Berkman, L.F. (2001), "Social ties and mental health", *Journal of Urban Health*, Vol. 78 No. 3, pp. 458-467.
- Keegan, D. (1996), *Foundations of Distance Education*, 3rd ed., Routledge, London.
- Kozma, R. (2005), "National policies that connect ICT-based education reform to economic and social development", *Human Technology*, Vol. 1 No. 2, pp. 117-156.
- Mack, N., Woodsong, C., MacQueen, K., Guest, G. and Namey, E. (2005), *Qualitative Research Methods: A Data Collector's Field Guide*, Family Health International (FHI).
- Marburger, D.R. (2006), "Does mandatory attendance improve student performance?", *The Journal of Economic Education*, Vol. 37 No. 2, pp. 148-155, doi: [10.3200/JECE.37.2.148-155](https://doi.org/10.3200/JECE.37.2.148-155).

- Momen, M.A., Shahriar, S.H.B., Hassan, M.K. and Sultana, S. (2020), "Determinants of using social networking sites toward entrepreneurial success: experience from a developing nation", *Emerging Economy Studies*, Vol. 6 No. 2, pp. 191-200, doi: [10.1177/2394901520977425](https://doi.org/10.1177/2394901520977425).
- Moore, M.G. (1990), "Background and overview of contemporary American distance education", *Contemporary Issues in American Distance Education*, Pergamon Press, New York, pp. 12-26.
- Moore, J.L., Dickson-Deane, C. and Galyen, K. (2010), "e-Learning, online learning, and distance learning environments: are they the same?", *Internet and Higher Education*, Vol. 14, pp. 129-135.
- Riyasad, N. (2020), "COVID-19 and the conundrum of online classes", *New Age*, available at: <https://www.newagebd.net/article/104657/covid-19-and-the-conundrum-of-online-classes> (accessed 19 June 2020).
- Sarkar, S. (2020), "Attending classes on TV screen", *The Financial Express*, available at: <https://thefinancialexpress.com.bd/views/attending-classes-on-tv-screen-1586186174> (accessed 13 June 2020).
- Stanistreet, P., Elfert, M. and Atchoarena, D. (2020), "Education in the age of COVID-19: understanding the consequences", *International Review of Education*, Vol. 66 Nos 5-6, pp. 627-633, doi: [10.1007/s11159-020-09880-9](https://doi.org/10.1007/s11159-020-09880-9).
- Tam, G. and El-Azar, D. (2020), "3 ways the coronavirus pandemic could reshape education", available at: <https://www.weforum.org/agenda/2020/03/3-ways-coronavirus-is-reshaping-education-and-what-changes-might-be-here-to-stay/> (accessed 1 June 2020).
- The Business Standard (2020), "Educational institutions may remain closed till September if virus does not fade: PM", available at: <https://tbsnews.net/bangladesh/education/all-educational-institutions-remain-closed-till-september-pm-74221> (accessed 14 September 2020).
- The Daily Star (2020a), "Conduct academic activities online during closure: UGC to universities", available at: <https://www.thedailystar.net/country/news/conduct-academic-activities-online-during-closure-ugc-universities-1884748> (accessed 14 May 2020).
- The Daily Star (2020b), "UGC urges univs to continue classes online", available at: <https://www.thedailystar.net/city/news/ugc-urges-univs-continue-classes-online-1885063> (accessed 14 May 2020).
- The Financial Express (2020a), "Corona time educational sector", available at: <https://www.thefinancialexpress.com.bd/editorial/corona-time-education-sector-1589127415> (accessed 16 May 2020).
- The Financial Express (2020b), "UGC suggests universities introducing online education", available at: <https://thefinancialexpress.com.bd/national/ugc-suggests-universities-introducing-online-education-1584975932> (accessed 14 May 2020).
- Thomas, C.J. (2020), "Coronavirus and challenging times for education in developing countries", available at: <https://www.brookings.edu/blog/education-plus-development/2020/04/13/coronavirus-and-challenging-times-for-education-in-developing-countries/> (accessed 21 May 2020).
- UNESCO (2020), "Global education coalition", available at: <https://en.unesco.org/covid19/educationresponse/globalcoalition> (accessed 6 May 2021).
- UNICEF (2020a), "Education and COVID-19", *UNICEF DATA*, available at: <https://data.unicef.org/topic/education/covid-19/> (accessed 12 June 2021).
- UNICEF (2020b), "COVID-19: are children able to continue learning during school closures?: a global analysis of the potential reach of remote learning policies", *UNICEF DATA*, available at: <https://data.unicef.org/resources/remote-learning-reachability-factsheet/> (accessed 12 June 2021).
- United Nations Sustainable Development Group (2020), "Shared responsibility, global solidarity: responding to the socio-economic impacts of COVID-19", United Nations, p. 9, available at:

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<https://unsdg.un.org/resources/shared-responsibility-global-solidarity-responding-socio-economic-impacts-covid-19> (accessed 06 September 2020).

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