

'Students' Perception of Online Education during Covid-19: A study on the Students of University of Dhaka

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ABSTRACT

Due to the global pandemic, there has been an emergency shift in higher education of Bangladesh from face-to-face to fully online mode. This quick and somewhat unplanned change in the mode of teaching-learning has created a lot of challenges for both the teachers and the students. It is evident that the students, especially the public university students are mostly suffering because of this change. This qualitative study thus focuses on the perceptions of the students of University of Dhaka about this new way of teaching and learning and its effects on their lives. The finding reveals that most of the challenges are regarding infrastructural conditions, economic condition, mental wellbeing and teacher-student relationship. This study also explores possible solutions for these challenges and ways to incorporate online or blended education strategies in the higher education system of Bangladesh.

Key Words: Covid-19, Online Education, University students

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Introduction

The concept of education has changed rapidly in the past few years and has shifted from traditional physical teaching-learning to e-learning (Josep, 2021). With the level of technological advancement and the needs to cope up with the 21st century skills and competencies, it was already high time for the education systems throughout the world to shift from physical classes to virtual synchronous and asynchronous teaching-learning. The global pandemic of Covid-19 has created the opportunity (though somewhat forcefully) for a lot of countries including Bangladesh to explore education beyond the age-old face-to-face teaching-learning methods (Li & Lalani, 2020). However, the impact of the pandemic in education sector would be long term (Wadud, 2020) and educational institutions will have to consider online or blended teaching-learning for even more time than planned and in a better way. This study thus looks into the students' perspective and readiness about fully online or blended education based on their experience of online learning during this Covid-19 situation.

Context

In December 2019, the first case of Covid-19 has been identified in Wuhan, China. Soon the situation accelerated and in January 2020, it was declared a global public health emergency, which was then identified as a global pandemic in March 2020 (WHO, 2021). Due to the Covid-19 pandemic, the education system in most of the countries is suffering a lot. Ensuring quality education has become difficult as most educational institutions around the globe had to shift immediately from face-to-face teaching-learning to emergency remote teaching-learning (Khan & Abdou, 2020; Chattaraj & Vijayaraghavan, 2021; Khlaif et al. 2021). Higher education, especially in the public universities of Bangladesh has arguably suffered and still is suffering the most in this current situation (Wadud, 2020). The shift from traditional teaching-learning to this sudden fully online setup had adverse impacts not only on the students, but also on the teachers (Baird et al. 2020).

However, the shift from traditional off-line classroom to e-learning or digital teaching-learning has been a demand of the 21st century and due to Covid-19, Bangladesh has finally stepped into it. Though planned transition from face-to-face to online education needs at least from six to nine months of rigorous background work (Hodges, 2020) and at present Bangladesh is conducting emergency remote teaching, yet, students now have an idea of the challenges and the advantages of online learning if universities plan to continue this in a planned way post pandemic. Thus, it is now a great opportunity to learn about the students' opinion about online learning and incorporate that learning in further education plans.

There has been a lot of research studies in this past one and a half years regarding Covid-19 and education, focusing on primary, secondary and tertiary level of education. This study however focuses specifically on the perception of the students at University of Dhaka on online teaching-learning during the Covid-19 situation and. This study explored the challenges and difficulties the students of University of Dhaka faced and are still facing because of the

online classes and how they plan to overcome the situation. Another aspect of this study is to determine if the students are ready for online or blended teaching-learning in post pandemic time.

Objectives of the study

The main purpose of this study was to explore the challenges and scopes of online or digital learning scopes from the perspective of the Public University students of Bangladesh. The specific objectives were-

1. To explore the challenges of online education for the students of University of Dhaka
2. To find out ways to overcome these challenges

Review of Related Literature

Emergency Remote Teaching

In emergency situations the focus is generally on survival and continuing education in such situation is sometimes felt like a waste of time and energy. Yet, it is very important to continue educational activities during emergency situations as this can help the students and the teachers to shift their focus away from the emergency and thus foster mental wellbeing (Nicolai, 2003). Emergency Remote Teaching (ERT) means a quick, sudden and somewhat unplanned temporary shift of instructional delivery methods and techniques to an alternative virtual delivery mode due to some crisis (Hodge et al. 2020; Chattaraj & Vijayaraghavan, 2021). ERT consist of fully remote teaching-learning facilities for every aspect of education whether it was face-to-face or blended or hybrid prior to the emergency (Hodge et al. 2020). ERT does not mean reshaping the educational system of a country or an institute, rather it provides minimal support to continue education and to shift back to the regulars once the crisis is over (Means & Neisler 2020).

Online Education

Online teaching-learning vastly refer to instructions provided synchronously or asynchronously to the students through internet where students learn directly from the teacher using computers and other electronics devices. Distance learning or remote instructions, though quite similar to online teaching-learning, also include instruction delivery techniques that might not always use internet facilities, such as print materials sent via email or lessons broadcasted through radio or television (Means & Neisler, 2020). The umbrella term for all these is online education which combines all these aspects and also focuses on some other trends in 21st century education such as blended learning, technology-enabled self-paced learning, adaptive instructions and competency-based learning (Means et al. 2014). Unlike ERT, online education is a well-thought and planned transition of education from traditional styles to e-learning methods (Hodges, 2020).

Higher education in Bangladesh at present is continuing ERT and is planning to shift to some mode of online education in post pandemic time (Majed et al. 2020).

Importance of Online Education

Josep (2021) discussed that the future of education lies on online learning and has pointed out five reasons for it. Firstly, online education is flexible and gives the students copes to learn at their own pace. Secondly, it enables the students to explore a wide range of subjects to choose from. In today's world there is scope for learning from performance art to quantum physics through online education facilities. Thirdly, it saves time and money as teachers and students do not have to leave the comfort of their home for teaching-learning, therefore the time for commuting is saved as well as the expenses of travelling. Fourthly, it can offer customized learning experience for the learners as there is more scope for teacher-student one-to-one interaction. Teachers can focus on individual students' problems more as study materials can be provided as e-books and videos lectures. There are also discussion forums that enables the students to discuss with other students and understand the subject matter better. Finally, online education is cheaper than traditional education as the resources and materials can be shared electronically and teachers and students do not have to commute to the educational institutions.

Online Education during Covid-19 Pandemic

Prior to the Covid-19 pandemic, online education was non-existing in most developing countries like Bangladesh (Ramij & Sultana, 2020, Gopal et al., 2021 and Al-Amin et al, 2021). During the pandemic, almost every country has shifted all their educational activities from face-to-face to online (Basilaia, & Kvavadze, 2020 and Mulyanti et al., 2020). This somewhat unplanned and abrupt shift made access to education and the teaching-learning process challenging to a good number of students in most developing countries (Basilaia, & Kvavadze, 2020 and Mondira & Mahtab, 2021). A good number of research have been carried out during this pandemic to find out the challenges faced by the students and the way out from this situation. Most research findings suggest that the most challenging issue for the students were infrastructural facilities such as internet connectivity, availability of devices etc. (Emon et al., 2020, Kapasia et al., 2020, Mollah & Parvin, 2020, Ramij & Sultana, 2020, Subedi et al., 2020, Al-Amin et al, 2021, Gopal et al., 2021, Khlaif et al., 2021 and Sarkar et al., 2021). Another relevant reason for students struggles during online education was their financial status due to which they could not afford digital technology for online education (Mollah & Parvin, 2020 and Khan et al., 2021).

Methodology

This is a mixed method study using sequential explanatory design. The population for this study were the students of different departments and institutes of University of Dhaka who have received education through remote learning techniques (e.g., different LMSs, Zoom, Google Classroom etc.). Data was collected firstly through an online survey and then from the survey respondents, selected participants were virtually interviewed for better understanding

of their perspectives. Convenient sampling was used for the survey and a total of 120 students participated. From the survey respondents, 10 students were selected purposively for the interview. Data was collected during the two months period May 2021 to July 2021. Thematic analysis was employed for data analysis.

Ethical Considerations

No name or means of identification of the respondents have been used anywhere in this study to ensure privacy. Any information used from other sources have been referenced properly to avoid plagiarism.

Analysis and Findings

For this study data has been analyzed thematically and the findings are presented according to the themes and sub-themes. However, prior to presenting the data according to the themes and sub-themes, background of the respondents, their demographic information, infrastructural situation is analyzed to reveal a complete picture of the situation which the respondents were dealing in. This information is particularly important because there has been found important patterns directly linked with the demography of the respondents as well as the infrastructural facilities that they have.

- ***Background and demographic information***

A total of 120 students from University of Dhaka completed the survey from which 57 were female and 63 were male students. From the female students only 14 have been living in the urban areas of the country during this Covid-19 educational institution closure, whereas 43 have been living in rural areas and from the male students 48 were in rural areas and only 15 were in urban areas. The demographic breakdown has been made clear in **Table 1**.

Table 1:

Demographic information of the survey respondents

	Male		Female	
	Number	Percentage	Number	Percentage
Total	63	52.5%	57	47.5%
Living in Urban Area	15	23.8%	14	24.6%
Living in Rural Area	48	76.2%	43	75.4%

As the demographic information revealed that most of the survey respondents were from the rural parts of the country, therefore, 4 male students and 4 female students from rural areas and only 1 male and 1 female student from the urban areas have been selected for the interview.

As the survey was conducted using convenient sampling techniques, the number of male and female students and students living in urban and rural areas does not reflect the actual situation or representation of the population. Nevertheless, this information is crucial as the themes and

sub-themes emerging from the data show some similarities within the demography. This has been discussed further in the discussion part of the study.

- ***Infrastructural condition***

Findings show that one of the major problems for the students during online classes was electricity and internet connectivity issues. Among the 120 respondents of the survey, 92 responded that there was low or no electricity failure / load-shedding problems prevailing in their areas during this Covid-19 period and only 28 responded otherwise and had complaints about the electricity condition of their area which hampered their online learning.

Table 2:

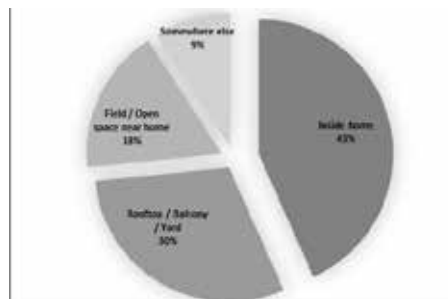
Infrastructural condition of the respondents

	Yes		No	
	Number	Percentage	Number	Percentage
Electricity Problem	92	76.66%	28	23.33%
Wifi Connectivity	29	24.2%	91	75.8%
Internet Connectivity Issue	111	92.5%	09	7.5%
Personal Smartphone	120	100%	0	0%
Personal Laptop / Desktop	18	15%	102	85%
Shared Laptop / Desktop	11	9.2%	109	90.8%

From the analysis of the number and type of devices the students use, their wi-fi connectivity, and access to internet, it has been found that though all the students have a personal smartphone, however, they had to face severe internet connectivity issues and trouble accessing google classroom and other modalities of online learning through their smartphones due to poor network and mobile data issues.

Figure 1:

'Students' location of attending online classes



This was particularly the main problem for the students during Covid-19 emergency remote education as a good number of them had to attend classes from outside the comfort of their home and own room (figure 1).

To address this issue properly, the respondents opined that the electricity facility and internet connectivity need to be available and accessible from anywhere throughout the country. They have also stated that the internet service needs to be faster and within a limited cost.

- ***Financial Status***

Though not completely related to online education, yet it has been found that the family life and financial status of the students and their parents had some correlation with the way the students perceive online education scopes. More than 70% of the respondents declared that their family financial condition has decreased due to the Covid-19 lockdown which has impacted their education. The reasons for this impact, as analyzed from that data are- unrest situation at home due to decrease of household income, no tuition or part-time income source for the students, inability to pay for internet facilities, inadequate infrastructural support (due to expenses) to continue online classes etc.

Nonetheless, the respondents were optimistic that this situation will likely to be overcome in post pandemic time if the economic condition of the household as well as of the whole country improves.

- ***Educational Context***

Though all the respondents were students of University of Dhaka, educational contexts (subject areas, class sizes, prior experience of online learning etc.) were all different. This impacted on their perception and the challenges that they have faced during online classes and assessments. Survey data revealed that among the respondents 34% were from STEM background and their experience with online education was totally different from the rest of the respondents. The STEM education students had to face more difficulties as most of them had practical classes prior to Covid-19 face-to-face teaching-learning and for the past one and a half years they are being unable to complete those courses as there is low or no scope for practical classes during this emergency remote learning phase. One of the interview respondents opined that it has been difficult for them to understand even the theoretical part of the courses as the practical parts are now missing.

Regarding the class sizes, 55 respondents stated that they have less than 50 students in each class, whereas the 65 declared that they have more than 50 classmates in each online class. The learning experience of the students with a large class size thus differ from that of a small class size. One of the interview respondents from a larger class size described,

‘It is already difficult to understand the classes in an online setup, where teachers are not trained enough and students can’t concentrate fully due to external disturbances. The large class size adds to this problem as we now get even lesser scope to raise our questions and ask for clarification of different contents from the teachers. Also, in Zoom classes, teachers have to continuously focus on turning on and off students

microphones as most students do not mute themselves and weird noises come from their end. This hampers class time and teachers' and students' concentration from the topic of discussion.'

This study also found that students prior experience with online classes is another important factor that shaped their perception of online education. Only 10% of the respondents had prior online learning experiences and all of those respondents had positive opinions regarding continuing online education after the pandemic is over. All of those 10% respondents opined that online education can give them more flexibility and control over their learning and can save their time, expenses and energy. All other respondents had somewhat negative opinions regarding continuing online education. They argued about not understanding the topics properly, getting lesser marks in the examinations, infrastructural issues and wellbeing issues while opining negatively about online education.

- ***Motivation and Concentration***

The greatest challenge for the students in online classes was to keep themselves motivated and concentrate on the topic. Most online classes are conducted via Zoom app and both the teachers and students keep their videos turned off.

As there is less or no monitoring from the teachers, most male students accepted that they join the classes and do some other work or browse the social media or play games without concentrating on the lectures and discussions.

Interestingly, the reason of motivational and concentration issues of female students are different from that of the male students as they have declared that they cannot concentrate on classes due to household chores. More than 80% of the female students stated that during the day they have to juggle between their online classes and household work such as cleaning, cooking and taking care of the elders.

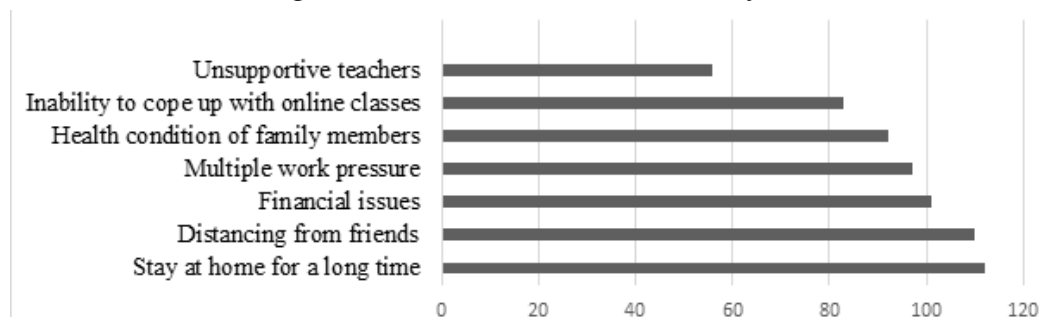
Students also revealed that teachers' behaviors are also important factors to keep their motivations for the classes. More than 50% of the students agreed that they get demotivated to attend most of the classes as the teachers fail to make the teaching-learning environment enjoyable and student-friendly.

- ***Physical and Psychological Status***

In question regarding physical and mental wellbeing and how online classes are affecting health, all the respondents stated that they themselves or some of their close friends have been suffering from severe depression and unstable mental health conditions. The reasons for these problems, according to the respondents are- staying home for a long time due to social distancing and lockdown, uncertainty of the situation, health issue of family member(s) due to Covid-19, inability to cope with online classes properly, unsupportive behavior of the teachers, and many more. Figure 2 shows the number of frequency of students addressing the reasons of their depression and mental health issues.

Figure 2:

Reasons behind depression and mental health issues of the students



Though 100% of the respondents opined about mental health issues, however, from the interviews it has been found that most of these problems are directly related with Covid-19 situation and not so much with online learning. One of the interview respondents stated that,

'I think, the depression is mainly because of the Covid-19 lockdown. We are not being able to meet or see our friends and relatives, staying inside home for a long time and dealing with a lot of psychological pressure due to this situation. On top of that, we left our residential halls in a hurry and all our books are still there. Without proper materials and with limited internet facilities we are being unable to cope with the pressure of online classes. This is adding even more to our depression. But if we had a proper guideline for online classes and assessments, a planned transition from offline to online, then I don't think it would have been this difficult for any of us.'

Another respondent agreed to this and added that the universities need to develop proper guidelines and train teachers effectively to continue online teaching after the Covid-19 situation. Otherwise, students' wellbeing will still be at stake.

Regarding physical health conditions, around 30% of the survey respondents stated that they are facing physical problems such as headaches, eye-sight issues and puffy eyes due to focusing on the screens for a long time.

● ***Overall Perception about Online Education***

After analyzing all the data from the survey and interviews, it has been found that the students are more concerned about the physical aspects of online learning, rather than the learning aspect. Very few students in their responses mentioned about the teaching-learning conditions, teachers' involvements and teaching-learning methods and techniques. Their main focus is on infrastructural issues. All the interview respondents were assertive that if the infrastructural barriers could be addressed, then online education could be a reality for University of Dhaka and they will all welcome this new method of education.

Discussion

From the analysis of data, it has been found that the most crucial issue for the students to continue online education is the infrastructure. Adequate electricity supply, uninterrupted internet connectivity and a well-performing device is a must for smooth online education, which most of the students lack. This finding is similar to the findings of Emon et al. (2020), Mollah & Parvin (2020), Khlaif et al. (2021) and Sarkar et al. (2021) as they have also found that students suffer most in terms of communicating with the teachers via remote media and both the teachers and students throughout the country need powerful technological devices, adequate technical support and fast and smooth internet facilities to conduct online classes. Moreover, this finding can be supported by research findings from other south Asian countries such as India (Kapasia et al., 2020), Nepal (Subedi et al., 2020).

Second most common issue for the students of University of Dhaka is that they need financial support and stability to continue education online (at least during this Covid-19 situation). This supports the findings of Emon et al. (2020) as they have also found that most public university students are reluctant to pay their semester fees and want scholarship or fee waiver during Covid-19. Also, more than 90% of their respondents opined that internet prices for online classes are high and they along with their families are unable to bear such high expenses.

One of the vital aspects for the students taking online classes are their physical and mental wellbeing. This is perhaps the most discussed topic in the studies related to Covid-19. Islam et al. (2020); Mollah & Parvin (2020); and Khan et al. (2021), all have found that Covid-19 lockdown has increased anxiety and depression among university students which directly impacts on their education. This study also has the same finding regarding students' mental health. This is probably the most severe issue that needs to be addressed immediately in order to confirm students' wellbeing and prepare them for future online education.

One major finding of this study is that fully online education may not be suitable for every subject area and for every class size. This is also the finding of Mondira & Mahtab (2021) where they interviewed the teachers and found out that their opinions are the same as the students regarding online education and class size and online education and subject matter. However, both the respondents of this study and Mondira & Mahtab's study opined considering the current situation of online learning with limited resources and no prior experience or training or support. The situation will be different if there are well established guidelines, proper planning and trained teachers.

One interesting finding from the study is that the students who have prior online learning experience are assertive about future online education while others are not. This finding reveals that most of the respondents have made a fixed mindset about online education and are thinking that the way they are receiving online education now is the only way and the situation will be the same post pandemic. This mindset needs to be changed with proper counselling and training for both the teachers and the students. Also, the university and UGC need to establish proper guideline if University of Dhaka goes further into online or blended or hybrid

education after the pandemic.

Keeping the students motivated and concentrate on learning is a challenge in online education not only in Bangladesh but also in India (Kapasia et al., 2020), Nepal (Subedi et al., 2020), Poland (Bączek et al., 2021) and many other Developing and Developed Asian and European countries. This issue needs to be addressed by the teachers and the educators through applying different methods and techniques of online teaching-learning which can be found from the examples of successful online teaching-learning practices from around the globe.

This study, though not fully representative, expresses a positive approach of the students towards online education. As the sample size was quite small and not representative of the whole population, the findings might not be generalized. Yet, authorities could conduct further studies similar to this one and combine the findings to plan further about online education in higher education sector of Bangladesh.

Conclusion

Students are the most important components of any education system; their needs are most vital and should be considered with topmost priority in any type of educational decision making. Therefore, sound understanding of the students' perception is a must to bring about any change in the education system. Online education, a reality in this 21st century is still a long way to achieve in many countries including Bangladesh. As the pandemic has given the education system of Bangladesh the opportunity to consider online education in coming future, we should grab this opportunity and think out way forward. Considering the students opinions should be the first step towards this direction. By addressing the challenges, the students are facing now regarding online learning, we can shape the future of our online education plans and prepare ourselves for the post pandemic education reformation.

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