



## Access to Online System in Higher Education in Bangladesh during Covid-19 Pandemic: A Sociological Review from Students' Perspective

Mt. Tania Mahzabin<sup>1</sup>, Sumaya Sultana<sup>1</sup>, Mohammad Ali<sup>1</sup>

<sup>1</sup>*Department of Sociology, Varendra University, 529/1, Kazla, Motihar, Rajshahi-6204*

**Abstract:** COVID-19 is a global pandemic. Almost all of the countries of the world are facing this challenge. The present study was conducted to explore impact of online system in higher education in Bangladesh during Covid-19 pandemic. The 35 (random basis) students of Varendra University from different faculties were selected to pick the sample of the study. The sample was collected using non-probability sampling technique (purposive sampling, convenient random sampling, snow ball sampling methods). A structured questionnaire was used to assess the impact of online system in higher education in Bangladesh during Covid-19 pandemic. The result of the study revealed that majority of the students weren't ready for online classes. Some faced problems because they either lacked computer literacy or couldn't choose online platforms when they face slow net speed and device access to their online classes. Moving away from traditional education system or face-to-face contact meant lack of interaction between teacher and students which makes the lectures difficult to conceptualize for the students. The university students also come from diverse social backgrounds. They don't have similar access to devices and net speed. This created a big challenge for them. In this COVID-19 situation students are also anxious about their career.

**Keywords:** *Higher education; Online system; Covid-19; Pandemic; Socio-economic condition.*

**Introduction:** Online education is a flexible instructional delivery system that encompasses any kind of learning which takes place via the internet. Online learning gives educators an opportunity to reach students who may not be able to enroll in a traditional classroom course and supports students who need to work on their own schedule and at their own pace. The quantity of distance learning and online degrees in most disciplines is large and increasing rapidly. Schools and institutions that offer online learning are also increasing in number. Students pursuing degrees via the online approach must be selective to ensure that their coursework is done through a respected and credentialed institution [1]. Online education is a type of educational instruction that is delivered via the internet to students using their home computers. During the last decade, online degrees and courses have become popular alternative for a wide range of nontraditional students; including those who want to continue working full-time or raising families. Most of the time, online degree programs and courses are offered via the host school's online learning platform, although some are delivered using alternative technologies. Although there are subtle dissimilarities, the main difference between online and traditional learning is the fact that online education liberates the student from the usual trappings of on-campus degree programs-including driving to school, planning their schedule around classes, and being physically present for each sequence of their coursework [2]. Online learning is when we take courses online instead of in a physical classroom. If our schedule makes it hard to attend classes, if we prefer studying at our own place or if we live far from campus, online learning might be for us [3]. eLearning is learning utilizing electronic technologies to access educational curriculum outside of a traditional classroom. In most cases, it refers to a course, program or degree delivered completely online. There are many terms used to describe learning that is delivered online, via the internet, ranging from distance education, to computerized electronic learning, online learning, internet learning and many others. We define eLearning as courses that are specifically delivered via the internet to somewhere other than the classroom where the professor is teaching. It is not a course delivered via a DVD or CD-ROM, video tape or over a television channel. It is interactive in that we students can also communicate with teachers, professors or other students in their class. Sometimes it is delivered live, where students can “electronically” raise their hand and interact in real time and sometimes it is a lecture that has been prerecorded. There is always a teacher or professor interacting /communicating with students and grading

**Article history:**

Received 22 June 2021  
Received in revised form 23 July, 2021  
Accepted 2 October, 2021  
Available online 15 November, 2021

Corresponding author details: Mt. Tania Mahzabin  
E-mail address: [mahzabintania.soc.ru.0809@gmail.com](mailto:mahzabintania.soc.ru.0809@gmail.com)  
Tel: +880 1723 349405

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their participation, assignments and tests. Elearning has been proven to be a successful method of training and education is becoming a way of life for many citizens in North Carolina [4].

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus [5]. Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS CoV-2; formerly called 2019-nCoV), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China.

The virus has now been detected in several areas throughout China, along with countries across Asia, North and South America, Europe, Africa and Oceania [6]. Like other countries educational institutions in Bangladesh have been shut down where social distancing matters. To ensure uninterrupted education among the students, the Ministry of Education (MoE) has encouraged the teachers to conduct online classes and apart from this, for the free flow of education the concerned authority has started telecasting distant learning programs for the students of schools and colleges. Online education has been mainly focused at higher level of education in the country. In Bangladesh there are 46 public and 105 private universities offering higher education for the students. Besides almost 1500 colleges affiliated to national university of Bangladesh are offering a wide range of courses and programs in higher education. In these unprecedented days online teaching learning is the only way of solving academic crisis happening across the globe due to the pandemic of coronavirus [7]. The COVID-19 pandemic has created the largest disruption of education systems in history, affecting nearly 1.6 billion learners in more than 190 countries and all continents. Closures of schools and other learning spaces have impacted 94% of the world's student population, up to 99% in low and lower-middle income countries [8]. The crisis is exacerbating pre-existing education disparities by reducing the opportunities for many of the most vulnerable children, youth, and adults – those living in poor or rural areas, girls, refugees, persons with disabilities and forcibly displaced persons – to continue their learning [9]. Learning losses also threaten to extend beyond this generation and erase decades of progress, not least in support of girls and young women's educational access and retention [10]. Some 23.8 million additional children and youth (from pre-primary to tertiary) may drop out or not have access to school next year due to the pandemic's economic impact alone. Similarly, the education disruption has had and will continue to have, substantial effects beyond education [11]. Closures of educational institutions hamper the provision of essential services to children and communities, including access to nutritious food, affect the ability of many parents to work, and increase risks of violence against women and girls. As fiscal pressures increase, and development assistance comes under strain, the financing of education could also face major challenges, exacerbating massive pre-COVID-19 education funding gaps. For low-income countries and lower-middle-income countries, for instance, that gap had reached a staggering \$148 billion annually and it could now increase by up to one-third [12].

However, this pandemic changes everything and it will probably never be the same again. This crisis has changed all the societal institution. There is a necessity of adequate policy building on the part of the government to successfully expertise higher education infrastructure.

From the view point of literature review, it is showed that there is no specific work on the "Access to Online System in Higher Education in Bangladesh during Covid-19 Pandemic" in the selected university. So, there is an ample scope of work on this topic and that is the main justification for undertaking this research.

Education is considered a vital element in the development of a society, a system and a country. It is the main driving force to build a nation as well as to be a successful in the competitive employment sector individually. An education system in rural communities has the opportunity to build capacity and knowledge in the rural populace, helping them to make informed decisions about their farms and to innovate in agricultural affairs. Education also exposes the masses to information and helps prevent the misinterpretation of information. Education can lead to many positive outcomes, such as an improved ability to understand policies, procedures, rights, duties, government schemes, legislation, available benefits and protection laws. During this covid-19 situation the education sector has affected so much in Bangladesh. To reduce the problems in this sector the government establish online education and try to engage the students of all levels with this. The private university students are effectively engaged with this online education. So, it is an important fact to conduct a study. Because we are used to the traditional education method. But this digital education method has created some important factors which lead a researcher to analyses a

new situation of a society. This study is trying to figure out and explore the impact of covid-19 in higher education, especially in private university.

In this study, attempt will be taken to find out the actual scenery of the feasibility, available access and effectiveness of online education in the selected university. Therefore, this study is expected to provide valuable information and may be useful for formulation appropriate policy for widespread improvement of the quality education and effectiveness which could be a lifeline for the university. It might introduce a new window of thinking for the development of online education and its effectiveness for the proper educational development of Bangladesh.

This study is an attempt to understand the underlying impact of online education during Covid-19 situation. But any experimental design was not followed in the study. Although it is easy to find respondents with this sampling technique, but in many cases the information provided by the first and second sample group is often the same. On the other hand, the study was conducted on a small group of samples (35) which is not representative. And from this sample, generalization of result is very difficult. In this study university students were taken as samples. As a result, it was very difficult to collect information due to the closure of the university. However, future studies may yield more knowledge from this research and may design their study in order to get more realistic and fruitful findings.

The main objective of the study is to assess the impact of online system in higher education in Bangladesh during Covid-19 pandemic. In doing so, the study will try to know about the socio-economic condition of the university students, assess students' technical knowledge or ability to access online classes, their class satisfaction during online class, understand how they accept the new-normal education system and to explore how covid-19 have impacted their educational career.

Additionally, the present research focuses on overall socio-economic scenario of online education at this present pandemic situation.

**Methodology:** This study has been conducted according to the following methodology:

**Methods of the Research:** In the present study, Varendra University is representing most of the private universities in Bangladesh which has selected as research area. The main reason for choosing Varendra University as a research area is that no such previous research has been done in this university. To achieve the research objectives, the required research unit is available here.

**Sampling and Sample Size:** In order to determining sampling size, statistical representation was not considered in the present study. The researcher collected data from 35 respondents. The researcher used Non probability sampling technique (purposive sampling, snow ball sampling) for the collection of data.

**Variables:** The variables used in each study are identified and specified. The key concept used in the present study is "the impact of online education" which is a dependent variable. In addition, the independent variables are the social factor, socio-economic factor and technological factor of the sample.

**Data Sources:** The present study has mainly collected data from the primary source i.e. the respondents. But here the secondary data source used for the purpose of the format of the research methodology and the analysis of the primary data. In this case, the help of various books, journals, articles and periodicals has been taken as secondary data.

**Research Instruments:** In this study, the researcher used mobile phone, face to face interview, computer, books, internet, newspaper etc as research instruments.

**Techniques of Data Collection:** University students were the respondents of the research. Necessary information was collected through face to face interview with structured schedule written in Bengali language. In this study

structured questionnaires have been used as a structured schedule. Both closed and open-ended type of questions are inserted here.

**Data Processing and Analysis:** As the data collected from the field level, it has been edited and encoded to use in computer. On the other hand, these data have presented through various tables, diagrams, charts, bars, etc. In the present study, the data collected from the field stage are analyzed through SPSS, MS Excel and MS Word programs.

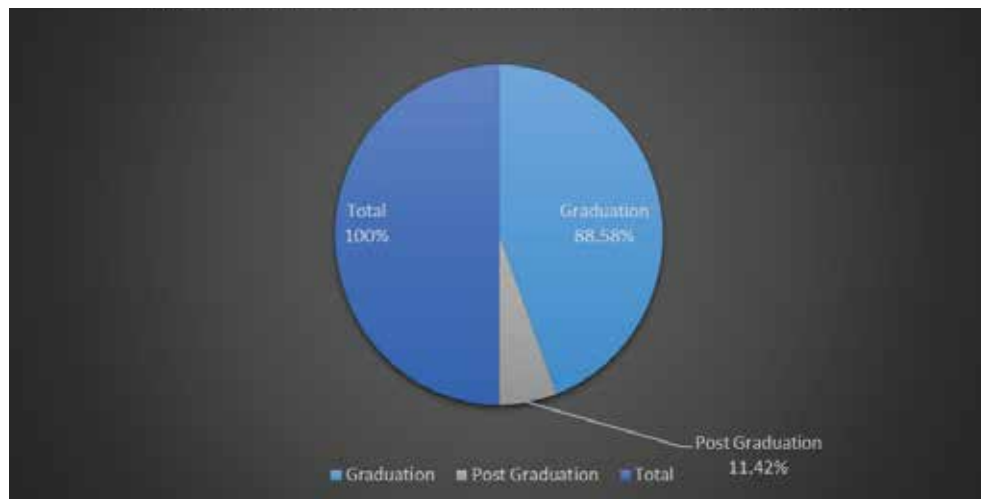
**Demographic Characteristics of the Respondents:** In this study a total of 35 respondents (who were the private university student) were selected to know the impact of online education in higher education during COVID-19 pandemic [13]. The demographic characteristics of the respondents have been stated below.

**Table-1:** Age of the respondents.

Age	Frequency	Percentage(%)
Above 20 year	07	20.00%
23 year	12	34.28%
24 year	13	37.14%
Above 24 year	03	8.58%
<b>Total</b>	<b>35</b>	<b>100%</b>

The above mentioned table-1 stated that from the entire 35 respondents, 07 (20.00%) were from the age range above 20 year, 12 (34.28%) were from the age range 23 year, 13 (37.14%) were from the age range 24 year, 03 (8.58%) were from the age range above 24 year. So, it can be said that the highest 13 (37.14%) respondents were taken from the age range 24 year.

The following figure-1 shows that the entire 35 respondents 31 (88.58%) were from graduation level, 04 (11.42%) were from post-graduation level. So, it can be said that most of the respondents were from the graduation level.



**Fig. 1:** Educational qualification of the respondents.

**Table-2:** Marital status of the respondents.

Marital Status	Frequency	Percentage
Married	02	5.71%
Unmarried	33	94.29%
<b>Total</b>	<b>35</b>	<b>100%</b>



The above mentioned table-2 stated that from the selected 35 respondents, 02 (5.71%) were married, 33 (94.29%) were unmarried. So, it can be said that most of the respondents were unmarried.

**Table-3:** Religion of the respondents.

Religion	Frequency	Percentage(%)
Islam	33	94.28%
Hindu	02	5.72%
Buddhism	00	00.00%
Cristian	00	00.00%
Total	35	100%

The above mentioned table-3 stated that the entire 33 (94.28%) respondents were belonged to the religion of Islam and 02 (5.72%) respondents were belonged to the religion of Hindu.

**Table-4:** Profession of the respondents.

Profession	Frequency	Percentage(%)
Service Holder	02	5.72%
Businessman	02	5.72%
Others	31	88.56%
Total	35	100%

The above mentioned table-4 stated that from the 35 respondents 02 (5.72%) were service holder, 02 (5.72%) were businessman and 31(88.56%) were from others profession.

**Table-5:** Number of family member of the respondents.

Member Range	Frequency	Percentage(%)
1-3	10	28.58%
4-6	16	45.71 %
6-8	06	17.14 %
Above 8	03	8.58 %
Total	35	100%

Table-5 stated that the family members of 10 (28.58%) respondents were within 1-3, the family members of 16 (45.71%) respondents were within 4-6, the family members of 06 (17.14%) respondents were within 6-8 and lastly the family members of 03(8.58%) respondent was above 08. So, we can say that most of the respondents were picked up from such a family where their number of the members lays within 4-6.

**Table-6:** Family income of the respondents.

Income Range	Frequency	Percentage(%)
Bellow 10,000	0	00.00%
10,001- 30,000	18	51.42%
30,001- 70,000	17	48.58%
Total	35	100%

From the table-6 we can say that the family income of 18 (51.42%) respondents were within 10,001-30,000 taka, the family income of 17 (48.58%) respondents were within 30,001-70,000 taka. So, it is clear that most of the respondents were taken from the middle-income group. On the other hand, 17(48.58%) respondents were from high income level.

Table-7: Number of working people of family.

Member Range	Frequency	Percentage(%)
1-3	31	88.58.%
4-6	03	8.58%
6-8	00	0.00%
Above 8	01	2.86%
Total	35	100%

From the table-7 we can say that the number of working people of 31 (88.58%) respondent's family were within 1-3, the number of working people of 03 (8.58%) respondent's family were within 4-6 and lastly the number of working people of only 01(2.86%) respondent's family was above 8.

**Class Satisfaction of the Students:** The following figure-2 shows that the entire 35 respondents 15(42.86%) fully satisfied with online class, 20 (57.14%) were dissatisfied during online class. So it can be said that most of the participants (20 out of 35) of the university students were not satisfied during online classes.

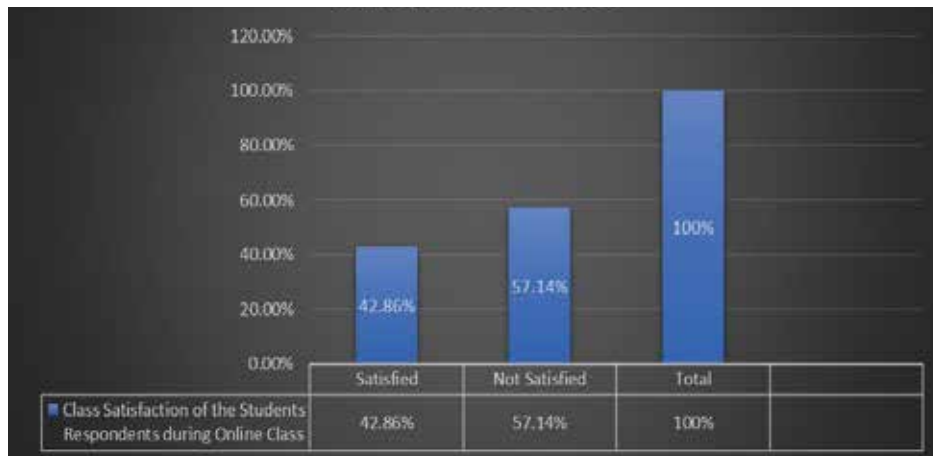


Fig. 2: Class satisfaction of the students respondents during online class.

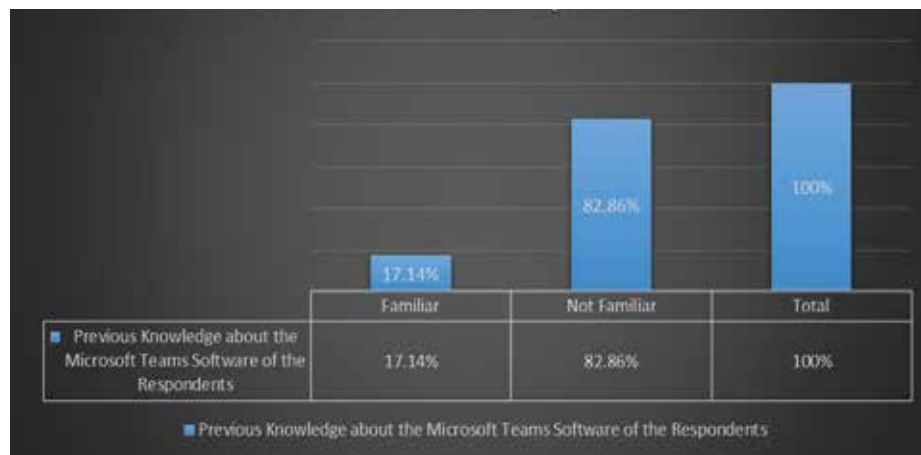
Table-8: Factors behind the dissatisfaction of online class.

Condition	Frequency	Percentage(%)
Network problem	12	34.29%
Expensive Data Package	06	26.08%
Not similar with the Traditional Education System	03	8.58%
Excessive Use of Technology	02	5.71 %
Total	23	74.66%

In this indicator to measure the satisfaction status of the respondents there was the prospect to provide multiple answers. That's why from the above mentioned table-8 we can see that although the respondents were 35 but the frequency is 23 as the respondents (20 out of 35) provided multiple answers about their dissatisfaction.

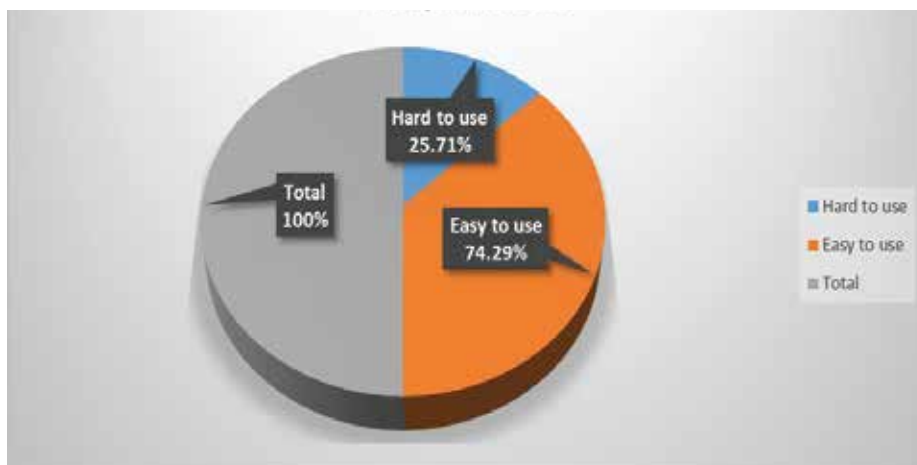
The said table stated that 12 (34.29%) out of 35 respondents were facing network problem during their class time. 06 (26.08%) out of 35 respondents were not satisfied with online class because of the expensive data packages. 03(8.58%) out of 35 respondents were not satisfied as the class system was not similar with the traditional education system. 02 (5.71 %) out of 35 respondents were not satisfied as they felt that there was excessive use of technology.

The following figure-3 shows that the entire 35 respondents 29(82.86%) do not have any knowledge about the software based class before online class. Only 06(17.14%) respondents were familiar with that software. So, most of the participant of this study do not familiar about the software-based classes.



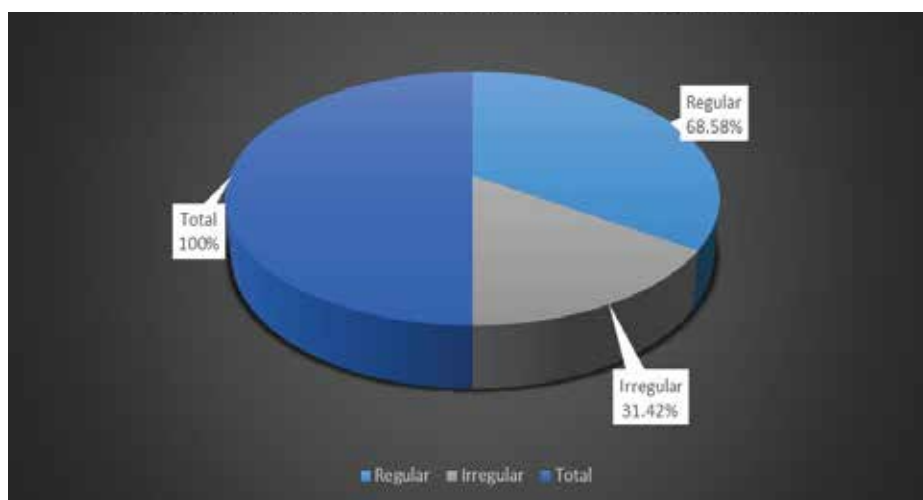
**Fig. 3:** Previous knowledge about the Microsoft Teams software of the respondents.

In this indicator to measure the opinion about the use of the software of the respondents, there was the prospect to provide yes/no answers. That's why from the following figure-4 we can see that 09 out of 35(25.71%) respondents think the method was hard to use. But most of the respondents 26 (74.29%) think the method was easy to use by provided their yes/no answers.



**Fig. 4:** Opinion about the use of the software by the respondents.

The following figure-5 shows that the entire 35 respondents 24(68.58%) were regular in their online classes, 11(31.42%) were irregular in their online classes. So, it can be said that the most of the respondents attend the online classes.



**Fig.5:** Regular class attendance of the respondents.

**Table-9:** Per week expenses for the online class of the respondent.

Expense Range	Frequency	Percentage(%)
Bellow 100 BDT	05	14.29%
101-300 BDT	30	85.71%
Total	35	100%

The above mentioned table-9 stated that from the entire 35 respondents 05(14.29%) were spent bellow 100 taka internet charge for online class and 30(85.71%) were spent within 101-300 taka for their online classes. So it can be said that the most of the respondents spent high range money for online classes every week.

**Table-10:** Reasons behind not attending the online classes regularly.

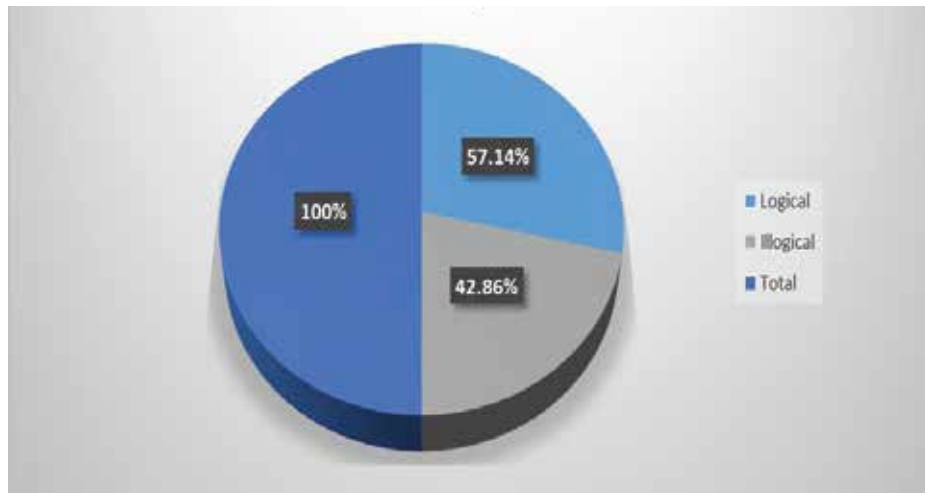
Reasons	Frequency	Percentage(%)
Network Problem	08	22.86%
Technical Inefficiency	01	2.86%
Purchase Data Package is Expensive	02	5.71%
Total	11	31.43%

In this indicator to measure the reasons behind irregularity in online class of the respondents there was the prospect to provide multiple answers. That's why from the above mentioned table-10 we can see that although the respondents were 35 but the frequency is 11 as the respondents (11 out of 35) provided multiple answers about their not attending the online class regularly.

The said table stated that 08 (22.86%) out of 35 respondents were facing network problem during their class time. 02 (5.71%) out of 35 respondents were irregular in online class because of the expensive data packages. Lastly 01(2.86%) out of 35 respondent was not efficient about online class.

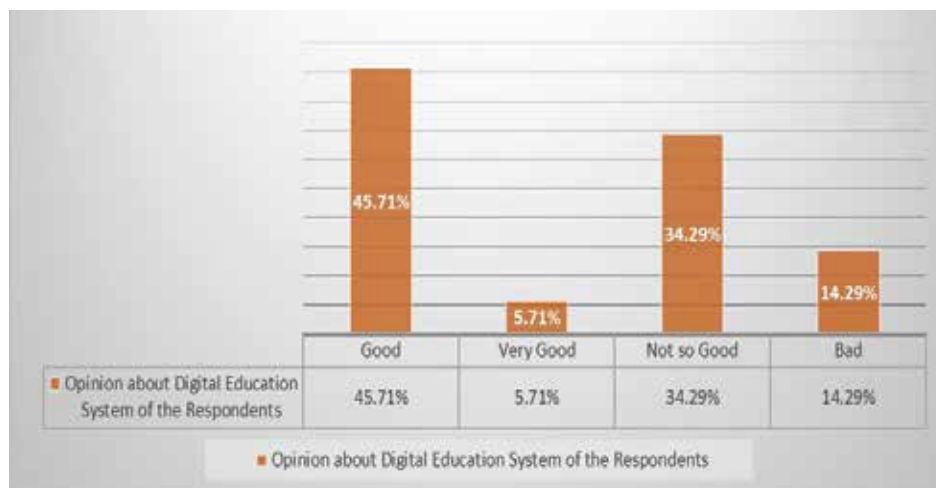
The following figure-6 shows that the entire 35 respondents 20(57.14%) have logical aspects about online class and 15(42.86%) have illogical aspects about online classes. So it can be said that the most of the respondents accept this neo-normal education system positively.





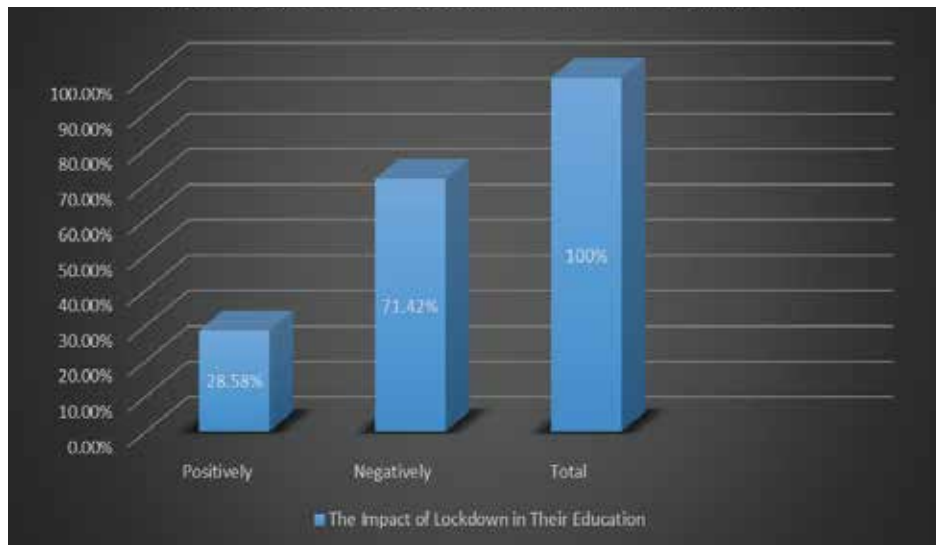
**Fig. 6:** Attitude towards neo- normal education system of the respondents.

The following figure-7 shows that the opinion about the online education system from the entire 35 respondents 16 (45.71%) said this system as good, 02(5.71%) said it as very good system, 12(34.29%) said it as not so good, 05(14.29%) said this system as bad. So it can be said that the most of the respondents have a positive aspect for this online education system. But we can't neglect that it is excepted less positively by the maximum respondents.



**Fig.7:** Opinion about digital education system of the respondents.

The following figure-8 shows that the impact of lock down in their education. 10 out of 35 respondents (28.58%) have positive impact on their education during lock down and 25 out of 35 respondents (71.42%) have negative impact on their education during lock down.



**Fig. 8:** The impact of lockdown in their education.

**Table-11:** Factors about their negative aspects of neo- normal education system.

Reasons	Frequency	Percentage(%)
Not Having Own Device	02	5.71%
Device Related Problem	01	2.68%
Network Problem	06	17.14%
Dissimilarity with Traditional System	01	2.86%
Inadequacy of Gaining Knowledge	05	14.29%
Lack of Traditional Class Environment	01	2.86%
Do Not Understand Class Lectures Appropriately	03	8.58%
Total	19	54.30%

In this indicator to measure the factors behind illogical aspect about online class of the respondents there was the prospect to provide multiple answers. That's why from the above mentioned table-11 we can see that although the respondents were 35 but the frequency is 19 as the respondents (19 out of 35) provided multiple answers.

The said table stated that 02 (5.71%) out of 35 respondents were not have own device. 02 (2.68%) out of 35 respondents have device related problem during class time or after class time. 06(17.14%) out of 35 respondents were facing network problem. 01(2.86%) out of 35 respondents found some dissimilarities with traditional education system. 05(14.29%) out of 35 respondents said there was inadequacy of gaining knowledge. 01(2.86%) out of 35 respondents felt the lack of traditional class environment and 03(8.58%) out of 35 respondents did not understand the lecture topic during online class.

**Table-12:** Factors that make anxious about their educational career.

Conditions	Frequency	Percentage (%)
Spending time Leisurely during Lock Down	14	40.00%
Get panic about COVID -19	05	14.29%
Stay off university campus	03	8.58%
Semester Drop	02	5.71%
Long Duration of class Lecture	02	5.71%
Device problem	01	2.86%
Total	27	77.15%

In this indicator to measure the factors which make anxious about educational career of the respondents there was the prospect to provide multiple answers. That's why from the above mentioned table-12 we can see that although the respondents were 35 but the frequency is 27 as the respondents (27 out of 35) provided multiple answers.

The above mentioned table-12 stated that from the entire 35 respondents 14(40.00%) were not concerned about their career as they spend most of the time leisurely during lock down, 05 (14.29%) were panicked about COVID-19, 03 (8.58%) were not study well because of the closure of university campus, 02(5.71%) were worried about semester drop, 02 (5.71%) were thought that the class lectures were about long duration as it's not have appropriate impact on them. Finally, only 01(2.86%) were thought device problem have negative impact on their career. So, it can be said that the ratio of being not concerned about their educational career was spending most of the time leisurely during lock down.

**Conclusion:** It can be undoubtedly established that this neo-normal education system is not adapted properly by the university students of all level in Bangladesh. During this crisis time online education is necessary for the higher-level students. To adapt this education system students face many problems such as device problem, network problem, expensive data packages, inefficiency about technical knowledge etc. But the students are still trying to cope up with all these problems. Above all barriers most of them are trying to attend the classes regularly. COVID-19 pandemic has wreaked havoc across the world and it also create a new situation for the people of every society. As students are the future of a nation, they should be expertise themselves on every step to integrate with the pandemic situation.

However, technical knowledge factors that have been identified in the study are already threatening for the higher education level due to COVID-19 in Bangladesh. The Covid-19 challenge has given us a unique opportunity too. Our vision 2021 encompasses a digital Bangladesh which has hitherto not been possible to achieve. Overcoming the current challenge will bolster government's capacity towards achieving the goal.

To achieve this goal, government should seriously consider providing subsidy for "internet in education" alike other sectors who have received motivation during Covid-19. The subsidy will in turn develop the digital capacity in university level apart from keeping the education going, thereby enabling our universities to take similar challenges in future.

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