

Closure of Educational Institutions due to Covid-19: Study on Higher Education Students

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Abstract

The Covid-19 pandemic is not only distressing the health of people but is also seen hampering various industries and sectors across the world. In India, the government as a part of the nationwide lockdown has closed all educational institutions, as a result, school to postgraduate students are affected. This disruption during the middle of the academic semester for higher education students forced them to adopt online classes to complete their syllabi. This study examined the challenges and constraints faced by higher education students during online classes. The results of the study found that respondents did not find online classes effective, they faced technical issues and constraints, including internet connectivity, voice quality and lack of interaction. Respondents usually have access to limited data plans, many of them sharing the same network with family members working from home. However, online education appears to be need of the hour for educational institutes, to retain their connect with the students and ensure continuous learning though technical challenges may persist for a while.

Keywords: Covid-19 pandemic, Higher education students, Online classes, Constraints

1. Introduction

Coronavirus disease (COVID-19) is an infectious disease first found in Wuhan, China, during December 2019. It was declared as a pandemic by the World Health Organization (WHO) on 11 March 2020 (**Gupta & Goplani, 2020**). Many countries around the world resorted to lockdowns to control the spread of infection, leading

public restricted at home, closure of businesses and almost all economic activity at stall. This pandemic has grave global implications on production and supply chain, disruption in market, firms and financial markets (**Parth, 2020**). International Monetary Fund (IMF) estimate of negative growth of global economy of -4.9 percent in 2020 depicts financial crisis created due to Covid-19 (**IMF, 2020**). In order to

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prevent the spread of virus and to implement social distancing measures most of the Governments around the world have temporarily closed educational institutions, gyms, theatres, swimming pools, museums and places with large gathering (**Sahu, 2020**). It has been estimated by the UN Educational, Scientific and Cultural Organization that 107 countries had implemented national school closures related to COVID-19, affecting 862 million children and young people, roughly half the global student population (**Viner et al., 2020**).

Similarly, India also has not been an exception, the nation's economy has been affected severely creating new challenges. The pandemic would probably impact on three important contributors to GDP namely, Private Consumption, Investment, External Trade. Implementation of nationwide lockdown to restrict the spread of pandemic resulted in seizure of economic activities leading to a possible impact on consumption and investment (Parth, 2020). The pandemic has significantly affected students as well. The UNESCO estimates reveal that in India, 32 crores students including those in schools and colleges are affected due to closure of schools and colleges. In India, schools and colleges were temporarily closed during the month of March. Usually, many academic activities including board examinations, school admissions, entrance tests of various universities and competitive examinations are held during the same period (Choudhary, **2020**). But disruption in the sector bought every activity on halt. Especially universities shut during the middle of the academic semester were unable to complete the syllabi. However, educational institutions were permitted and advised to adopt online learning to continue education for a period of three to four months while minimizing

the chances of any infection to students until classes resume (Kasrekar & Tapaswi, 2020). India's higher education regulator, the University Grants Commission (UGC) also recommended for online courses on digital platforms to maintain social distance (Hindustan Times, 2020). Institutions focussed on e-learning methods on digital platforms, however, digital learning has its own limitations and challenges. Students are facing problems like internet connectivity and unpredictive power cuts. Absence of spare computer or a laptop at home, as parents are busy working from home is posing another problem for students to struggle with attending the classes over smartphones (The Hindu, 2020). Furthermore, absence of written and handy material, distractions like gaming consoles, social media and digital safety pose a challenge for online learning. In case of rural areas, students do not have the required infrastructure nor are financially strong to avail the resources required for digital education (Kasrekar & Tapaswi, 2020). However, students are forced to take up online classes to have uninterrupted learning amidst this pandemic. This paper, therefore, studied the challenges and constraints faced by students during online classes.

2. Review of literature

The practice of social distancing to prevent spread of Corona virus has resulted in closure of markets, corporate offices, businesses and events. Increased number of lockdown days, domestic and international travel restrictions has impacted economic activities and stock prices of stock market indices (**Ozili & Arun, 2020**). The influence of coronavirus epidemic on Indian economy is estimated to be maximum on chemicals sector, textiles and apparel, automotive sector, electrical machinery, leather products, metals and metal products, wood products and furniture (**Kumar, Thombare, & Kale, 2020**). However, another important sector that has been affected is the education sector.

Globally, the education system has affected enormously as nationwide close down for educational institutions was imposed by most of the countries (Nicola et al., 2020) as social distancing has been implemented (Stanley, Nkporbu, & Stanley, 2020). Sahu (2020) studied that universities across the world have either postponed or cancelled all campus events such as workshops, conferences, sports, and other activities. Faculty members have also shifted to online teaching platforms. Study suggested universities to implement measures to provide counselling services to support mental health and well-being of students along with measures to control the spread of virus. Allo (2020) examined the learners' perception on online learning in the midst of a COVID-19 pandemic. They perceived online learning as helpful in the middle of pandemic but internet access posed a problem. Al-Mohair and Alwahaishi (2020) made an attempt to understand the experience of online classes among the students during pandemic situation. Online teaching is found to be satisfactory amongst majority of the students. However, certain students had a negative experience, mainly due to submission of many assignments on a timely basis. Arora and Srinivasan (2020) focused on the rate of adoption of online classes, benefits, constraints and reasons for non-adoption of online classes. Lack of awareness and interest was considered as the major constraint amongst those who did not adopt virtual classes. Attendance, lack of personal touch

and interaction due to connectivity was found to be certain significant constraints of online education.

Objective

To review the challenges and constraints faced by higher education students in online classes.

Hypothesis

The study framed following hypothesis in order to check the relationship between educational stream and their understanding level –

H₀: There is no relationship between educational stream and their understanding of online classes.

3. Research methodology

The national lockdown to prevent spread of Covid-19 pandemic leading to closure of educational institutions had an impact on students. The students were forced to adopt online learning, this paper studied the problems faced by students due to online classes. The study is based on both primary and secondary data. Primary data were collected through unstructured questionnaire from 70 higher education students who have attended online classes. Secondary data have been collected from journals, newspapers and websites. The analysis of primary data has been done using excel and represented using appropriate tables.

4. Data analysis

The primary data on the challenges and constraints faced by students in attending online classes have been presented in the following tables –

Among 70 respondents, 31.43% are studying in B.COM, 40% are B.SC, 12.85% are engineering students, 2.85% are nursing students, 1.42% are pharmacy students and 11.42% are post graduates students. Majority of respondents are from B.COM and B.SC stream (Table 1).

The below table describes the respondents understanding of online classes. It is observed that 15.72% students are very dissatisfied, 25.71% respondents are dissatisfied, whereas, only 8.57% respondents are satisfied with online classes. This implies that the students are finding it difficult to cope up with online classes with satisfaction level very low. Furthermore, 50% respondents have expressed neutrality implying state of confusion (Table 2).

The respondent's opinion on effectiveness of online classes can be observed from the below table. Among 70 respondents, 44.29% respondents opined that online classes are not effective, 14.29% respondents have positive opinion about online

TABLE 1 Educational stream

Particulars	Number	Percentage
B.COM	22	31.43
B.SC	28	40
BE	9	12.85
Nursing	2	2.85
Pharmacy	1	1.42
PG	8	11.42
Total	70	100

TABLE 2.	Level of understanding	of
online class	es	

Particulars	Number	Percentage
Very dissatisfied	11	15.72
Dissatisfied	18	25.71
Neutral	35	50
Satisfied	6	8.57
Very satisfied	0	0
Total	70	100

TABLE 3.	Opinion on effectiveness of
online edu	cation

Particulars	Number	Percentage
Strongly	8	11.43
disagree		
Disagree	23	32.86
Neutral	29	41.43
Agree	10	14.29
Strongly	0	0.00
agree		
Total	70	100

classes. It is revealed that majority of the respondents are of the opinion that online classes are not much effective (Table 3).

The below table depicts problems faced by respondents while attending classes. It is observed that internet connectivity (78.57%) is the major constraint, followed by voice quality (60%) and technical issues (60%). Lack of interaction (52.86%) is also one among important challenges (Table 4).

The below table depicts the respondent's opinion on shortcomings of online learning. Majority of respondents opine lack of atmosphere for studying (71.43%) and distraction (57.14%) (ex. Gaming consoles) as a drawback of online classes, whereas, 42.86% and 41.43% respondents feel Impersonal experience and absence of written and handy material as the aspects

TABLE 4 Problems faced during online classes

Problem	Number	Percentage
Voice quality	42	60.00
Internet	55	78.57
connectivity		
Lack of	37	52.86
interaction		
Uncertainty in	19	27.14
power supply		
Technical issues	42	60.00
Submission of	19	27.14
assignment		

that make online learning different from classroom learning (Table 5).

Particulars	Number	Percentage
Impersonal	30	42.86
experience		
Lack of	50	71.43
atmosphere for		
studying		
Distraction (ex.	40	57.14
Gaming consoles)		
Absence of	29	41.43
written and handy		
material		

TABLE 5 Opinion on online learning

The below table depicts that 95.71% respondents use smartphone for online classes, 25.71% use laptop, whereas 7.14% and 5.71% respondents use desktop and tab respectively for online classes (Table 6).

TABLE 6Resource for online class

Particulars	Response	Percentage
Smart phone	67	95.71
Laptop	18	25.71
Desktop	5	7.14
Tab	4	5.71

From the below table, we can observe that majority of respondents, i.e., 87.14% use 3G/4G network to access online classes, 8.57% respondents uses hotspot, where as 4.28% use broad band (Table 7).

TABLE 7	Type of network of	onnectivity
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Particulars	Number	Percentage
3G/4G	61	87.14
Broad band	3	4.28
Hotspot	6	8.57
Total	70	100

It is observed that 81.43% respondents have limited data plans, while, 18.57% have access to unlimited data for attending online classes (Chart 1).





The above chart depicts respondents' access to power back up at home. It can be noticed that 75.71% respondents do not have any source of power back up. While 21.43% respondents have UPS facility, 2.86% use power banks (Chart 2).

CHART 2 Access to power back up.



The below table depicts number of people using the same network as of respondent. It is noticed that 70% are sharing the network with one person, 24.29% with 2 and 4.29% with 3 people (Table 8).

The above chart indicates the preference of students on online exams. It shows that 65.71% students are unhappy to take up

No. of people	Response	Percentage	Re
1	49	70	D
2	17	24.29	iss
3	3	4.29	N
More than 3	1	1.43	Ty
Total	70	100	ar

TABLE 8. Other people using samenetwork

TABLE 10.Reason for non-preference

Reason	Number	Percentage
Due to technical	38	54.29
issues		
Not so tech savvy	8	11.43
Typing long	24	34.28
answers difficult		

online exams and only 34.29% are preferring online examinations (Chart 3).

CHART 3. Preference over Online Exams.



The below table indicates that 79.17% respondents have preferred online exam due to fear of Corona, whereas 20.83% have stated other reasons. The reasons include respondents' perception of online as ineffective, its process (Table 9).

TABLE 9. Reason for preference

Particulars	Number	Percentage
Fear of Corona	19	79.17
Others	5	20.83
Total	70	100

The below table portrays the causes of non-preference of online exams by respondents. 54.29% respondents have experienced technical issues during submission of assignments, hence fear the same during exams, 34.28% respondents explain that lengthy answers as a problem, whereas, 11.43% explain that they aren't tech savvy (Table 10).

From the below table, we can observe that 51.43% respondents are well equipped to take up online exams, but 48.57% are not equipped to take online exams (Table 11).

TABLE 11.	Equipped to take up exams
online	

Particulars	Number	Percentage
Yes	36	51.43
No	34	48.57
Total	70	100

Testing of hypothesis

 H_0 : There is no relationship between educational stream and students understanding of online classes.

Chi-square test at 5% level of significance has been conducted using the data collected to verify the significant relationship between educational stream and students understanding of online classes. The below table reveals that chi-square value (13.91) is lesser than table value (25) at 0.05 significance level. Hence, H_0 accepted, there is no significant relationship between educational stream and understanding level (Table 12).

TABLE 12.	Chi-square test statistics
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Chi-square value	df	Chi-square value tabu- lated value
13.91	15	25

5. Findings

The study attempted to evaluate students view on online classes and challenges and constraints faced by them. The findings are as under:

- 1. The study reveals that amongst 70 respondents who have attended online classes and submitted assignments online, 8.57% respondents are satisfied with online classes.
- 2. The respondents opined online classes are not effective, they faced technical issues and constraints including internet connectivity, voice quality and lack of interaction.
- 3. According to respondents, lack of atmosphere for studying, distraction are the major obstacles for online learning as compared to classroom learning in addition to impersonal experience and absence of written material.
- 4. The study also assessed about resources available with respondents for online learning. It is found that most of them use smartphones for online learning with limited data access and no access to power back-up. In addition, respondents are sharing the data with their family members. This reveals that, respondents, are facing a problem with internet connectivity due to the abovementioned reasons.
- 5. Respondents (34.29%) have preferred online exams over offline due to fear of corona (79.17%). However, 65.71%

respondents revealed that they do not prefer due to technical reasons and other issues. Furthermore, it is found that 48.57% respondents are not equipped to take online exam.

6. Chi-square test was conducted to check if the educational stream (Science, commerce, medical and engineering) have any relationship with the level of understanding of online classes. It was found that there existed no relationship between the two variables.

6. Conclusion

This research study was conducted to understand the challenges and constraints that students face during online classes. The respondents opined online classes are not effective, they faced technical issues and constraints including internet connectivity, voice quality and lack of interaction. Respondents usually have access to limited data plans, many of them sharing the same network with family members working from home. Chi-square test revealed that there exists no significant relationship between educational stream and level of understanding of online classes. Though, respondents are not at ease with online classes and exams due to fear of spread of Covid-19 pandemic they are preferring online exams. The timely decision of closing educational institutions during this pandemic played a vital role in controlling the spread of virus. Furthermore, online learning also is important to have uninterrupted learning to students, however, it is important to adopt appropriate platforms with provides seamless learning overcoming issues faced by students. UGC is also encouraging online learning with various e learning programs through

various platforms like UG/PG MOOCs, Swayamprabha, CEC-UGC YouTube channel, National Digital Library, Vidhwan.

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