Research Article

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# Statistical study on challenges faced by students during lockdown due to COVID-19

## Abstract

Due to the COVID-19 pandemic, the worldwide education system has been rigorously affected, following the shutdown of schools and colleges/universities since March 2020 in order to prevent the spread of the virus. Conventional classrooms shifted to online classrooms which profoundly impacted teachers' and students' closed interaction, making a paradigm shift in the teaching-learning process. The Covid-19 Pandemic transformed the whole education process to online which has been transited to e-learning in most universities worldwide. The transition to a new environment of education, learners need special social care to improve their concentration and motivation to online learning in such a crucial crisis. The purpose of this study was to look out for the challenges and obstacles encountered in learning during the lockdown and if they were raising the mental stress in students. The study is based on a primary data collected from Kerala, India.

**Keywords:** COVID-19, pandemics, virus diseases, online learning, challenges

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## Introduction

COVID-19, a public health crisis of worldwide importance, was announced by the World Health Organization (WHO)[1] in January 2020 as a new corona virus disease epidemic and was reported as a pandemic in March 2020. Lockdown was a necessary action and an important movement at that time, but it has challenged the normal living, work, economy, and most importantly the education of students due to closing of all the colleges and universities. The pandemic of COVID-19 caused a number of schools and colleges to remain temporarily closed. For existent education has ended by several schools, universities, and colleges.

Online e-learning is described as an education using a variety of electronic devices (e.g. computers, laptops, smart phones, etc.) with internet accessibility in synchronous or asynchronous mode. Online e-learning could be a platform that makes the development of education more students centred, innovative, and flexible; Singh and Thurman.[2] Online education can be a challenge for the reason that of the spatial and temporal distribution of students. Therefore, the screening of the extent of challenges on learning in students was much required, as if left unaddressed, it may lead to stress, nervousness, and some severe mental health issues. There is still be short of appropriate vaccine and treatment against COVID-19, and online learning requires being modified for a long time; Singh and Quraishi.[3]

Earlier, e-learning, distance schooling, and postal studies courses were included in non-formal education. Still, nowadays, it seems that it will progressively substitute the proper schooling framework if the conditions perpetually continue throughout the time. The well-known online correspondence stages that would alter the entire training framework's purpose and practice over the world in post-COVID-19situations are Zoom meeting, emails, Google Classroom, Google Meet, Moodle, G Suite and some more.There are various advantages and disadvantages of online learning; the openness of online education worldwide, saving time, money, and efforts are advantages of online learning. In education, the lecture's recording is one advantage of online learning when students ask teachers to record the classes. The teachers are reviewing and preparing well for recording, which definitely improves teaching strategies and methods. Students can right to use the lectures anytime and can be able to know better.

A number of difficulties were not all learners have good internet connectivity. Some learners suffered from network troubles, lacking high-quality learning devices; Mahyoob.[4]

These days, the confront to access online learning are fewer as both learners and teachers have been skilled the admirable chance of knowing and interacting with educational technology tools such as mobile-based learning, computer-based learning, and web- based learning. The advantage of online learning is diverse; there are still a lot of roadblocks in the way in front of making teaching a completely digital trend.

When it comes to online culture or E-Learning, rural people are not fully capable of utilities like fast internet, uninterrupted power supply and electronic devices. There have been improvements on the topic of basic infrastructural amenities but several rural areas in India are still grappling with these challenges to build education completely digital or online. Whereas we come across at the domain of digital learning, it is very important to consider the accessibility of the right devices to each student for accessing digital content. Also, data packs and their costs can be a giant limit both for teachers as well as learners, particularly for live classes. A lot of students also don't have individual laptops/smart phones or they are accessible for a limited period. Therefore, the education remains restricted with the limited availability of technological devices; Khan et al.[5]

This study is an investigation to find the students' challenges at the college level in Kerala, India during online classes in the COVID-19 situation. It might be cooperative in providing consideration to the unseen but rising challenges for the students which requires an optimistic and realistic move towards to keep the prospect of the country from some unpleasant mental health issues.

### Analysis of personal variables

The electronic opinion poll was planned on Google forms, and the invitation link for involvement in the survey was shared via mail and on social Medias. A cover note was presented on the first page of each electronic survey elucidate the intention of the study, emphasizing its importance and meaning, therefore cheering support by the respondents.

Over the phase of two weeks, 145 students of different branches of study from Kerala, India belonging to the age group of 18–27 years participated in this study, of which 102 (70%) students were female and 43 (30%) students were male. Table 1 and Figure 1 establish the associated data.

**Table 1** Gender distribution

| Gender | No. of students | Percentage |
|--------|-----------------|------------|
| Male | 43 | 30 |
| Female | 102 | 70 |
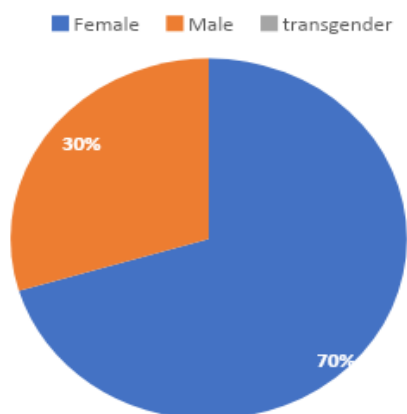


**Figure 1** Gender distribution.

The socio-economic environment of the students' parents is consolidated in Table 2 and Table 3. From Table 2 it can be seen that the majority of the respondents' parents were occupied in small industry or works in private firms (62.57%), 17.2% were working as daily wage workers and only 20.6% had a government job. Figure 2 depicts this data graphically.
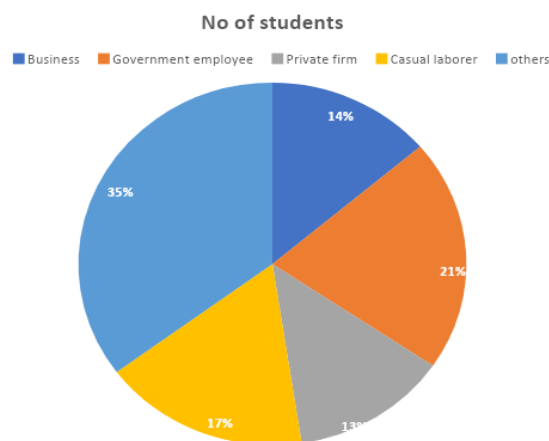
**Table 2** Occupation of parent

| Occupation of parent | No. of students | Percentage |
|----------------------|-----------------|------------|
| Business | 20 | 13.7 |
| Government employee | 30 | 20.6 |
| Private Firm | 19 | 13.1 |
| Casual labour | 25 | 17.2 |
| Others | 51 | 35.17 |

**Table 3** Annual income

| Annual Income | No. of Students | Percentage |
|---------------|-----------------|------------|
| Below 1 Lakh | 75 | 51.7 |
| 1-5 Lakh | 49 | 33.79 |
| Above 5 Lakh | 21 | 14.4 |

From Table 3 and Figure 3, total of 51.7% of the respondents belong to the family annual income below 1 lakh, while 33.79% belong to annual income between 1-5 lakhs. This shows that the mainstream of the students are from the lower strata of society.

Table 4 and Table 5 list data on the type of educational institution and course the respondents are undergoing. 81.3% of the informants were studying for undergraduate.



**Figure 2** Occupation of parent.
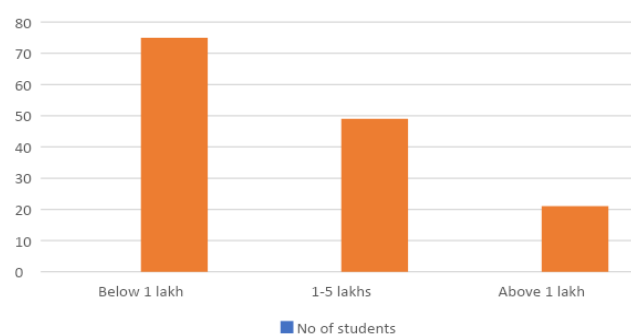


**Figure 3** Annual income.

**Table 4** Status of Educational institutions

| Educational institute | No. of Students | Percentage |
|-----------------------|-----------------|------------|
| Aided college | 86 | 59.3 |
| Unaided college | 37 | 25.5 |
| Autonomous college | 11 | 7.5 |
| Government college | 8 | 5.5 |
| Others | 3 | 2.0 |
| **Course** | **No. of Students** | **Percentage** |
| Undergraduate | 118 | 81.3 |
| Postgraduate | 22 | 15.17 |
| Research | 5 | 3.4 |

**Table 5** Undergoing courses

| Course | No. of Students | Percentage |
|--------|-----------------|------------|
| Undergraduate | 118 | 81.3 |
| Postgraduate | 22 | 15.17 |
| Research | 5 | 3.4 |

## Analysis of variables associated with online learning

This section tries to identify and analyse diverse variables associated with the online learning which the student community is forced to be a part of, due to the Covid-19 lockdown. Subsequently,

it tries to identify the challenges faced by the students during the unwanted but compelled situation. Majority of the students (83.4%) use mobile phones as the tool used for attending online classes.

The students felt that accessing online classes on mobile phones distracts their focus due to the want to open social media sites, and to have a glance on messages, which leads to loss of interest in ongoing classes. From Table 7, a total of 77.2% of the students opined that there is a low motivation for study in online classes due to a lot of distraction by other social media.

**Table 6** Device assistant for online class

| Device | No. of students | Percentage |
|---|---|---|
| Mobile Phone | 121 | 83.4 |
| Laptop | 23 | 15.8 |

**Table 7** Distracted during online classes

| Distracted during online classes (Opinion) | No. of students | Percentage |
|---|---|---|
| Yes, completely | 27 | 18.6 |
| Yes, sometimes | 85 | 58.6 |
| No | 33 | 22.7 |

From Table 8, Google Meet is the most used app (35.17%) for online classes, whereas 26.8% of the students used a Google classroom group. Zoom is the third preferred tool (20%) for taking/attending online classes.

**Table 8** Online platform

| Online platform | No. of students | Percentage |
|---|---|---|
| Google meet | 51 | 35.17 |
| Google classroom | 39 | 26.8 |
| Zoom | 29 | 20 |
| Whatsapp | 10 | 6.8 |
| Telegram | 2 | 1.3 |
| Others | 14 | 9.6 |

Regarding the opinion on favouring online classes or traditional classes, the highest response rate was 77.9% as the students said that online classes are not comfortable when compared to offline classes.

In online classes, students felt isolated because of the absence of group activities such as group projects, lack of interaction, can't conduct practical works etc. From Table 10, 44.1% students feel discomfort due to lack of interaction with teachers and friends.

Major Issues encountered during online learning are network issues, where about 73.1% of learners face this problem. The learners who did not encounter any problem during e-learning are 13% only.

**Table 9** Online classes vs traditional class

| Opinion | No. of students | Percentage |
|---|---|---|
| Online class | 32 | 22.1 |
| Traditional class | 113 | 77.9 |

**Table 10** Problems in online class

| Problems in online class | No. of students | Percentage |
|---|---|---|
| Lack of interaction | 64 | 44.1 |
| Can't conduct practical work | 17 | 11.7 |
| Can't concentrate | 29 | 20 |
| Clarity issues | 20 | 13.7 |
| Others | 15 | 10.3 |

From Table 12, around 75% of the students opined to facilitate in online classes it is tough to stick to a study schedule due to health issues while spending too much amount of time on online class; eye strain problems, headache and social media disruption.

**Table 11** Issues encountered during online learning

| Issues encountered during online learning | No. of students | Percentage |
|---|---|---|
| Network issues | 106 | 73.1 |
| No problem | 19 | 13.1 |
| Unavailability of smart phone or computer | 6 | 4.13 |
| Lack of digital expertise | 6 | 4.13 |
| Others | 8 | 5.5 |

**Table 12** Health issues due to online class

| Health issues due to online class | No. of Students | Percentage |
|---|---|---|
| Yes | 38 | 26.2 |
| No | 36 | 24.8 |
| Sometime | 71 | 48.9 |

The students are in front of challenges to study during the lockdown which is causing the growth of mental stress due to uncertainty over the studies and end of syllabus along with the understanding of subjects. This anxiety itself may lead to increased panic forcing the students to take unhealthy and unsympathetic decisions to avoid disappointment or breakdown. From Table 13, total of 79% students feel stressed in lockdown period.

**Table 13** Disruption of your studies make you stressed

| Disruption of your studies make you stressed | No. of students | Percentage |
|---|---|---|
| Yes | 44 | 30.3 |
| No | 30 | 20.6 |
| Sometimes | 71 | 48.9 |

Assessing a student in the exact way is an essential part of the education scheme. Under regular situation, students are ready to take a test or appear in an examination on college premises; unfortunately that's not an opportunity now. In online learning, assessing students through online examinations and evaluations this is one of the major challenges faced. From Table 14, 53.1% students are not preferred online examination and evaluation for the completion of the present course in case of continuing lockdown.

**Table 14** Online examination and Evaluation

| Prefer online examination & evaluation | No. of students | Percentage |
|---|---|---|
| Yes | 68 | 46.9 |
| No | 77 | 53.1 |

The conducted is a primary data study based on a sample of 145 respondents using a structured questionnaire and the findings are as follows. All of them were students mainly enrolled in undergraduate and postgraduate programs. This study analyzed the challenges faced by them towards online education in the ongoing COVID-19 pandemic. The majority of the respondents supposed there is a lack of interface with teachers in online classes and short inspiration for learning due to lots of distractions at home. Several students feel socially remote for the reason that of restrictions on outside activities and group assignment to avoid the spread of the virus. In addition to found that increased screen moment in time affect the physical condition of the students. However, students faced obstacles and issues in online classes, together with problems in submitting their assignments and attending online classes because the majority of the students are with mobile phones for taking online classes, which is not an appropriate gadget for effective classes. Following the pandemic, for the most part of the student's preferred usual classes in college, instead of online classes and some of the respondents favoured a collective approach of both normal and online classes in their learning. Moreover, the study illustrated experiences of students to online classes during the COVID-19 outbreak and about 77.9% of the students were not fulfilled with online learning due to connectivity issues, eye strain or belonging to low socio- economic family.

## Conclusion

The global pandemic abruptly caused a shift from the traditional classroom to online learning. The study concluded that poor connectivity issues, lack of favourable environment to study at home, poor quality lectures, lack of participation and interaction among students, increased feeling of nervousness and social isolation etc. have an adverse effect on the social-economical and mental well-being of the individual and this adversely affects the holistic development so it can be concluded that online learning ignores or forsakes holistic development to a large extent. Educational institutions should make sure that their students have a favourable environment to study at home. Create and implement a curriculum that keeps the students engaged and ensures participation among students and thereby the feeling of social isolation could be reduced. Standard timings should be set up for online classes on consultation with health experts in order to reduce the health issues caused by increase screen time. A well-developed system of online learning can take a developing country like India to greater heights.

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