

A Study on Student's Perceptions and Online Learning Experience During COVID-19 Pandemic

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ABSTRACT

The world has faced a major crisis because of outbreak of coronavirus and it spread to almost most of the countries and caused many lives. This pandemic affected various sectors, and education is one of the sectors. To control the pandemic government implemented lockdown, so all the educational institutions have been closed. As of 12 January 2021, approximately 825 million learners have been affected due to school closures (Nayak *et al.*, 2022). To continue education digital learning have been implemented. This research paper highlights positive and negative impacts of COVID-19 on online learning. The data was collected through google form format and 75 students had responded. To analyze Chi-square test and Henry Garrett ranking technique have been used. Other than that, charts and tables also used to show the result.

Key Words : Students, Positive impact, Negative impact, Online learning

INTRODUCTION

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, morals, beliefs, habits and personal development. Educational methods include teaching, training, storytelling, discussion and directed research. Education frequently takes place under the guidance of educators; however, learners can also educate themselves. Education can take place in formal or informal settings, and any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. The methodology of teaching is called pedagogy (Abdulelah, 2021).

Formal education is commonly divided formally into stages such as preschool or kinder garden, primary school, secondary school and then college, university or apprenticeship. In most regions, education is compulsory up to a certain age.

The school system in India has four levels: lower primary (age 6 to 10), upper primary (age 11 and 12),

high (age 13 to 15) and higher secondary (age 17 and 18). The lower primary school is divided into five "standards", upper primary school into two, high school into three and higher secondary into two. Students have to learn a common curriculum largely (except for regional changes in mother tongue) till the end of high school. There is some amount of specialization possible at the higher secondary level. Students throughout the country have to learn three languages (namely, English, Hindi and their mother tongue) except in regions where Hindi is the mother tongue and, in some streams, as discussed below. There are mainly three streams in school education in India. Two of these are coordinated at the national level, of which one is under the Central Board of Secondary Education (CBSE) and was originally meant for children of central government employees who are periodically transferred and may have to move to any place in the country. A number of "ventral schools" (named Kendriya Vidyalayas) have been established for the purpose in all main urban areas in the country, and

they follow a common schedule so that a student going from one school to another on a particular day will hardly see any difference in what is being taught. One subject (Social Studies, consisting of History, Geography and Civics) is always taught in Hindi, and other subjects in English, in these schools. Kendriya Vidyalayas admit other children also if seats are available. All of them follow textbooks written and published by the NCERT. In addition to these government-run schools, a number of private schools in the country follow the CBSE syllabus though they may use different text books and follow different teaching schedules. They have a certain amount of freedom in what they teach in lower classes. The CBSE also has 141 affiliated schools in 21 other countries mainly catering to the needs of the Indian population there (Sasi Kumar, 2022). The Central Government came up with the new education policy towards the end of July 2020. The New Education Policy aims to bring in a holistic approach to education.

National Education Policy 2020:

(NEP 2020), which was approved by the Union Cabinet of India on 29 July 2020, outlines the vision of India's new education system. The new policy replaces the previous National Policy on Education, 1986. The policy is a comprehensive framework for elementary education to higher education as well as vocational training in both rural and urban India. The policy aims to transform India's education system by 2040. Shortly after the release of the policy, the government clarified that no one will be forced to study any particular language and that the medium of instruction will not be shifted from English to any regional language. The language policy in NEP is a broad guideline and advisory in nature; and it is up to the states, institutions, and schools to decide on the implementation. Education in India is a Concurrent List subject (Venkateshwarlu, 2021; Aithal and Aithal, 2020).

The policy aims to make the Board of exams easier to test the core competencies rather than memorized facts. The NEP focuses on industry-based skill empowerment that lays importance on creativity and innovation which are the key factors for someone to excel in 21st century. The end of 2019 followed by the beginning of 2020 witnessed a turning point in the history of the world. The whole world was shaken by a small virus which led to a pandemic across the globe (Sawant and Sankpal, 2021 and Kaurav *et al.*, 2020).

COVID-19: Challenges and Opportunities Created for Education:

COVID – 19 has affected a large number of students across states, class, caste, gender and region. By the end of March 2020, the epidemic had spread to over 185 countries and resulted in the closure of over 90 per cent of all schools, colleges and universities impacting close to 1.38 billion students.

The speed of the spread of the epidemic, the closure of higher education institutions and the transition to online teaching was so swift that it hardly gave any time to plan and to reflect on the potential risks or the potential opportunities that such a sudden change could bring. Given such a situation it is important to look at the impact and reflect on what has transpired and what is likely to happen as we move forward in the field of global education (Olasile and Emrah, 2020; Adnan and Anwar, 2020; Gopal *et al.*, 2021 and Hafeez *et al.*, 2021).

Impact of the COVID-19 Pandemic on Education:

COVID – 19 brought in lot of changes in the working of the different sectors of the economy. Educational sector experienced many changes at different levels. The COVID-19 pandemic has affected educational systems worldwide, leading to the near-total closures of schools, early childhood education and care (ECEC) services, universities and colleges. Most governments decided to temporarily close educational institutions in an attempt to reduce the spread of COVID-19. As of 12 January 2021, approximately 825 million learners are currently affected due to school's closures in response to the pandemic. According to UNICEF monitoring, 23 countries are currently implementing nationwide closures and 40 are implementing local closures, impacting about 47 per cent of the world's student population. 112 countries schools are currently open (Nayak *et al.*, 2022; Jena, 2020).

In general, having fewer education options has globally impacted people with less money, while people with more money have found education. New online programs have shifted the labor of education from schools to families and individuals, and consequently, people everywhere who relied on schools rather than computers and home life have had more difficulty accessing their education. Early childhood education and care (ECEC) as well as school closures impact not only students, teachers, and families, but have far-reaching economic and societal consequences. School closures in response to the pandemic have shed light on various social and

economic issues, including student debt, digital learning, food insecurity, and homelessness, as well as access to childcare, healthcare, housing, internet, and disability services. The impact was more severe for disadvantaged children and their families, causing interrupted learning, compromised nutrition, childcare problems, and consequent economic cost to families who could not work. In response to school closures, UNESCO recommended the use of distance learning programmes and open educational applications and platforms that schools and teachers can use to reach learners remotely and limit the disruption of education (Policy Brief: Education during Covid-19 and Beyond, UN, 2020; Kara, 2019)

COVID – 19 accelerated the adoption of digital technologies to deliver education. Education institutions moved toward blended learning and encouraged teachers and students to acquire technology savvy. Online platform became the mode of operation right from kindergarten up to university education. With this background the present study tries to assess the “Impact of COVID-19 on Education in India” with following objectives.

- To study socio-economic profile of the respondents
- To assess student’s experience in online learning during lockdown and
- To examine the attitude of the students about online learning

METHODOLOGY

In the present study snowball technique was used to collect the necessary data. A Google form questionnaire was designed and it was sent through WhatsApp and e-mail. The respondents after submitting their responses, they circulated it among their friends to fill the form who is currently attending online classes. In this way, the responses of 75 students were collected from various students all over the India. Data were collected on socio – economic status, followed by students experience in online learning, advantages, disadvantages, perceptions on benefits and constraints in online learning during COVID – 19 pandemic periods. Besides frequency and percentage Henry Garrett ranking technique was used for evaluate the benefits and constraints of online learning.

RESULTS AND DISCUSSION

Socio – Economic Profile of the respondents:

- Out of 75 respondents surveyed about 24% of

the respondents were male and 76% of the respondents were female.

– Among 75 respondents, 1.3% of the students were at the age of 15 – 17, 25.3% of the students were at the age of 18 – 19, 66.7% of the students were at the age of 21 – 23 and 6.7% of the students were at the age of 24 – 26.

– The data relating to religious status of the respondents reveals that about 93.3 % of the respondents were belonged to Hindu religion, 2.7% of the respondents were belonged to Muslim and the remaining 4% of the respondents were belonged to Christian.

– The data regarding the employment status of the head of the households reveals that about 6.7% were government employees, 18.7% were private employees, 44% were doing own business and 30.7% were doing other occupation.

– Among 75 respondents, 26.7% of the respondent’s family income per month was between Rs.1000 – 10000, 34.7% of the respondent’s family income per month was between Rs.10000 – 20000, 24% of the respondent’s family income per month was between Rs. 20000 – 30000 and 14.7% of the respondent’s family income per month was between Rs.30000 – 40000.

– The data regarding place of Residence reveals that about 70.7% of the respondents were living in rural areas and the remaining 29.3% of the respondents were living in urban areas.

– About 32% of the respondents’ study at the college which is located at rural areas and 68% of the respondents’ study at the college which is located at urban areas.

– About 48% of the respondents were arts students, 38.7% of the respondents were science students, 8% of the respondents were engineering students and 5.3% of the respondents were other course students.

– Among 75 respondents, 48% of the respondents were under graduate students, 49.3% of the respondents were post graduate students and 2.7% of the respondents were Ph.D. students.

Students experience in Online Learning during lockdown:

Among 75 respondents, 73.3% of the respondents had access to the device for online learning, 20% of the respondents had the device but it doesn’t work well and 6.7% of the respondents don’t have the device and they share with others (Table 1).

Table 1 : Details on Possession of Device for Online Learning

Possession of device for online learning	Frequency	Percentage (%)
Yes	55	73.3
Yes, but it doesn't work well	15	20
No, I share with others	5	6.7
Total	75	100

Source: Online survey (2021)

Among 75 respondents, 10.7% of the respondents using laptop for online learning, 1.3% of the respondents using desktop for online learning, 2.7% of the respondents using tablet for online learning and 85.3% of the respondents using smartphone for online learning (Fig. 1).

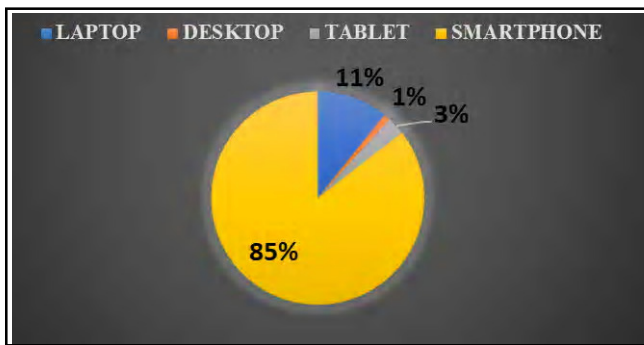


Fig. 1 : Device used for online learning by the respondents

Details about the time spent for online learning every day by the respondents. Among 75 respondents, about 44% of the respondents usually spent 1 - 3 hours per day for online learning, 36% of the respondents usually spent 3 - 5 hours per day for online learning and 20% of the respondents usually spent more than 5 hours per day for online learning (Table 2).

Table 2 : Time Spent for Online Learning Everyday

Time spent for online learning	Frequency	Percentage (%)
1 – 3 hours	33	44
3 – 5 hours	27	36
More than 5 hours	15	20
Total	75	100

Source: Online survey (2021)

Fig. 2 represents about 40% of the respondents had participated in e-learning before pandemic and 60% of the respondents had not participated in any type of e-learning before the pandemic.

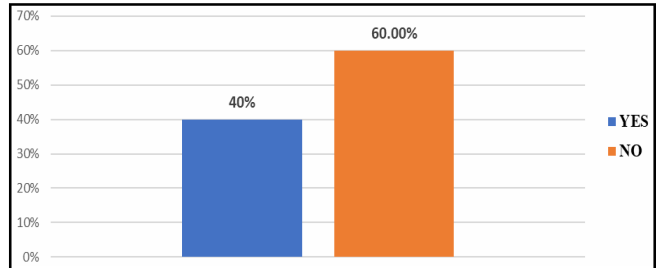


Fig. 2 : Respondents Participated in any Type of E-Learning before Pandemic

Among 75 respondents, 85.3% of the respondents attend live online class, 8% of the respondents attend recorded class that is uploaded at university website/ you tube/ any other applications and 6.7% of the respondents receive reading materials (Table 3).

Table 3 : Teaching Method during Online Class

Method of Teaching	Frequency	Percentage (%)
Live online class	64	85.3
Recorded class that is uploaded at university website/ YouTube/ any other applications	6	8
Sending reading materials	5	6.7
Total	75	100

Source: Online survey (2021)

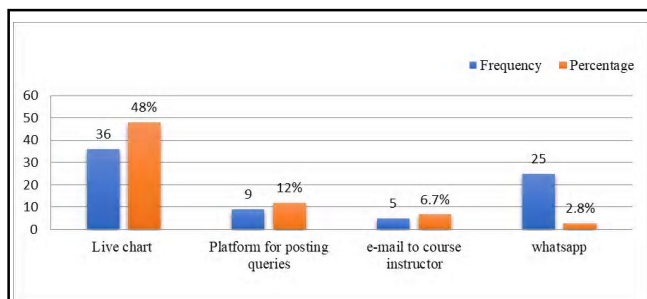
Among 75 respondents, 57.3% of the respondents were used to study with reading materials, 37.3% of the respondents have video content supplemented with reading materials and 5.3% had video content for studying (Table 4).

Table 4 : Nature of Course Material for the Respondents

Nature of course material	Frequency	Percentage (%)
Reading materials	43	57.3
Video content supplemented with reading materials	28	37.3
Video content	4	5.3
Total	75	100

Source: Online survey (2021)

Among 75 respondents, 48% of the respondents clarify their queries in live chat, 12% of the respondents clarify their queries in platform for posting queries, 6.7% of the respondents clarify their queries through e-mail to the course instructor and 33.3% of the respondents clarify their queries through WhatsApp (Fig. 3).



Source: Online survey (2021)

Fig. 3 : Details about the Methods used for Clarifying Queries

Among 75 respondents, 22.7% of the respondents had less than 10 minutes break between two classes, 18.7% of the respondents had 10 minutes break between two classes, 26.7% of the respondents had 15 minutes break between two classes and 32% of the respondents had more than 15 minutes of break between two classes (Table 5).

Table 5 : Nature of Course Material for the Respondents

Nature of course material	Frequency	Percentage (%)
Reading materials	43	57.3
Video content supplemented with reading materials	28	37.3
Video content	4	5.3
Total	75	100

Source: Online survey (2021)

Attitude of the students about online learning:

Among 75 respondents, 12% of the respondents felt online learning not at all effective, 40% of the respondents felt online learning slightly effective, 41.3% of the respondents felt online learning moderately effective and 6.7% of the respondents felt online learning was extremely effective (Table 6).

Table 6 : Effectiveness of Online Learning

Effectiveness Online learning	Frequency	Percentage (%)
Not at all effective	9	12
Slightly effective	30	40
Moderately effective	31	41.3
Extremely effective	5	6.7
Total	75	100

Source: Online survey (2021)

Among 75 respondents, 8% of the respondents felt that college or university is not at all helpful in offering resources to learn from home, 26.7% of the respondents

felt that college or university is slightly helpful in offering resources to learn from home, 46.7% of the respondents felt that college or university is moderately helpful in offering resources to learn from home and 18.7% of the respondents felt that college or university is extremely helpful in offering resources to learn from home (Table 7).

Table 7 : Perception about Study Resources Offered

College or university helpful in offering resources	Frequency	Percentage (%)
Not at all helpful	6	8
Slightly helpful	20	26.7
Moderately helpful	35	46.7
Extremely helpful	14	18.7
Total	75	100

Source: Online survey (2021)

Among 75 respondents, 20% of the respondents absolutely enjoy online learning, 41.3% of the respondents enjoy online learning but they would like to change few things, 21.3% of the respondents don't enjoy online learning as there were quite a few challenges and 17.3% of the respondents not at all enjoy online learning (Table 8).

Table 8 : Respondent's Perceptions about Online Learning

Perceptions about online learning	Frequency	Percentage (%)
Yes, absolutely	15	20
Yes, but I would like to change few things	31	41.3
No, there are quite a few challenges	16	21.3
No, not at all	13	17.3
Total	75	100

Source: Online survey (2021)

Among 75 respondents, 4% of the respondents felt that their teachers are not at all helpful while studying

Table 9 : Support of the Teachers for Online Learning

Teachers helpful while studying	Frequency	Percentage (%)
Not at all helpful	3	4
Slightly helpful	21	28
Moderately helpful	26	24.7
Extremely helpful	25	33.3
Total	75	100

Source: Online survey (2021)

online, 28% of the respondents felt that their teachers were slightly helpful while studying online, 24.7% of the respondents felt that their teachers were moderately helpful while studying online and 33.3% of the respondents felt that their teachers were extremely helpful while studying online (Table 9).

Among 75 respondents, 68% of the respondents were satisfied with the technology and software they are using for online learning and 32% of the respondents were not satisfied with the technology and software they are using for online learning (Table 10).

Satisfied with the technology and software using for online learning	Frequency	Percentage (%)
Yes	51	68
No	24	32
Total	75	100

Source: Online survey (2021)

CHI Square Analysis :

In this section, an attempt was made to examine relationship between effectiveness of online learning and satisfaction of technology used for online learning by using chi square test. The hypothesis framed was

H_0 : There is no relationship between effectiveness of online learning and satisfaction of technology used for online learning.

H_a : There is relationship between effectiveness of online learning and satisfaction of technology used for online learning

The estimated chi-square values reveal that effectiveness of online learning significantly related with satisfaction of technology used for online learning (Table 11).

Sr. No.	Variables	X ² value	Degrees of freedom	Level of significance	Inference
1.	Effectiveness of online learning	29.907	3	0.000	Reject H_0
2.	Satisfaction of technology used for online learning	9.720	1	0.002	Reject H_0

Source: Estimation based on field survey, 2021

Among 75 respondents, 21.3% of the respondents felt access to online materials was the advantage of e-learning, 34.7% of the respondents felt that learning on your own pace was the advantage of e-learning, 24% of the respondents felt that ability to stay at home was advantage of e-learning, 6.7% of the respondents felt that ability to record a meeting was the advantage of e-learning and 13.3% of the respondents felt that the comfortable surrounding was the advantage of e-learning (Table 12).

Advantages of online learning	Frequency	Percentage (%)
Access to online materials	16	21.3
Learning on your own pace	26	34.7
Ability to stay at home	18	24
Ability to record a meeting	5	6.7
Comfortable surrounding	10	13.3
Total	75	100

Source: Online survey (2021)

About 42.7% of the respondents felt that the technical problems were the major disadvantage of online learning, followed by 33.3% of the respondents felt that online learning reduced interaction with the teachers and the remaining 24% of the respondents felt that the poor learning conditions at home was the disadvantage of online learning (Table 13).

Disadvantages of online learning	Frequency	Percentage (%)
Reduced interaction with the teachers	25	33.3
Technical problem	32	42.7
Poor learning conditions at home	18	24
Total	75	100

Source: Online survey (2021)

Among 75 respondents, 8% of the respondents felt that face-to-face communication is not important while learning remotely, 21.3% of the respondents felt that face-to-face communication is slightly important while learning remotely, 24% of the respondents felt that face-to-face communication is moderately important while learning remotely and 46.7% of the respondents felt that face-to-face communication is very important while learning remotely (Table 14).

Table 14 : Perception about the Significance of Face-To-Face Communication during Online Class

Face-to-face importance	Frequency	Percentage (%)
Not important	6	8
Slightly important	16	21.3
Moderately important	18	24
Very important	35	46.7
Total	75	100

Source: Online survey (2021)

Among 75 respondents, 13% of the respondents felt that distance learning is not stressful during COVID-19 pandemic, 28% of the respondents felt that distance learning is slightly stressful during COVID-19 pandemic, 37.3% of the respondents felt that distance learning is moderately stressful during COVID-19 pandemic and 21.3% of the respondents felt that distance learning is very stressful during COVID-19 pandemic (Table 15).

Table 15 : Opinion about Distance Learning during Covid-19 Pandemic

Distance learning stressful	Frequency	Percentage (%)
Not stressful	10	13.3
Slightly stressful	21	28
Moderately stressful	28	37.3
Very stressful	16	21.3
Total	75	100

Source: Online survey (2021)

Benefits and Constraints in Online Learning :

In this study Garrett’s ranking technique was used to find out the most significant factor which influences

the respondent perception on benefits and constraints in online learning.

Benefits of online class:

On the basis of the ranks assigned by the sample respondents, the benefits of online classes are analysed through Garrett Ranking Techniques. It is evident from above table that flexible schedule and convenience (62.67 score) was the main benefits of online class, followed by more comfortable environment (59.2), improves your technical skills (50.87), more interaction and greater ability to concentrate (41.53) and self-discipline and responsibility (35.73) (Table 16).

Constraint of online learning:

On the basis of the ranks assigned by the sample respondents, the constraints of online learning are analysed through Garrett Ranking Techniques. It is evident from above table that lack of connectivity (62.52 score) was the main constraint of online learning, followed by data limit (59.95), data speed (54.76), Little/ no face-to-face interaction (51.09), Intense requirement for self-discipline (47.35), lack of device (39.97) and poor learning environment (36.36) (Table 17).

Conclusion:

To conclude that COVID-19 pandemic on Education has created many changes to Education sector throughout the world. Learning takes the new form as digital learning. Although most of the teachers, students and even parents were faced problems when digital

Table 16 : Estimated Garrett’s Ranking for Benefits of Online Class

Sr. No.	Factors	Total score	Garrett Mean score	Mean Rank
1.	Flexible schedule and convenience	4700	62.67	I
2.	More comfortable environment	4440	59.2	II
3.	Improves your technical skills	3815	50.87	III
4.	More interaction and greater ability to concentrate	3115	41.53	IV
5.	Self-discipline and responsibility	2680	35.73	V

Table 17 : Estimated Garrett’s Ranking for Constraints of Online Class

Sr. No.	Factors	Total	Average	Rank
1.	Lack of connectivity	4689	62.52	I
2.	Data limit	4496	59.95	II
3.	Data speed	4107	54.76	III
4.	Little/ no face-to-face interaction	3832	51.09	IV
5.	Intense requirement for self-discipline	3551	47.35	V
6.	Lack of device	2998	39.97	VI
7.	Poor learning environment	2727	36.36	VII

learning takes place. As this digital learning is new for everyone both teachers and students face some issues in this type of learning. Students have both benefits and constraints in online learning. Most of the students are satisfied and benefitted by learning many new digital works with online education. Even though there are many advantages of online learning such as students can consume time by studying at home and not travelling, students can record the meeting and replay if they have any doubts, etc., there are also some disadvantages students face such as network problem during class time, students can't interact with teachers frequently and many poor can't afford smart phone, tablet, laptop or desktop. So, they faced problems for learning.

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