

E-LEARNING DURING COVID PANDEMIC IN INDIA-AN EMPIRICAL STUDY ON STUDENTS PERCEPTION

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Abstract

Educational Institutions all across the world were being pushed to adopt online learning as a result of the COVID-19 pandemic, which was forcing them to fast transition to distant and online learning. The situation was in a state of change, and learners must respond with readily accessible learning methods like e-learning platforms and mobile learning applications. However, COVID-19 was reviving the need to explore online teaching and learning opportunities. The Present paper has analysed the satisfaction of online method of learning from the opinion of students and problems faced by the students of e-learning during pandemic period. The study result found that satisfaction of the students in e learning during the pandemic are not significant for age, educational qualification, location and type of educational institutions. The academic studying experience of the students during this period of COVID-19 are not significant for age, educational qualification, location and type of educational institution.

Introduction:

Every freak incident that occurs in the world has an impact on education. COVID 19 pandemic has left its footprints on education. The outbreak of this virus worldwide has forced educational institutions to close down to control the spread of this virus. This event made the education industry to think of the substitute methods of teaching during worldwide lockdown. Hence it converts the mode towards e-learning and Tutors and students were virtually connected. COVID-19 pandemic forced educational institutions to move rapidly to online learning. However, COVID-19 is revitalizing the requirement to discover online teaching and learning opportunities Internet connections-learning tools were playing a vital role in this pandemic. Furthermore, it targeted to help teachers and educational institutions to facilitate student learning during closure. E-learning has delivered rapid growth and evidenced to be the best in all sectors, particularly in education throughout this pandemic.

STATEMENT OF THE PROBLEM:

The occurrence of COVID-19 pandemic has taken a significant impact on the global educational system; it has forced the closure of educational institutions, which has harmed the global student community. COVID-19's spreadable nature necessitated control and imposed isolation, which had a significant impact on personal interactions between teachers and students. Computer-based learning has emerged as the closest substitute for off-line teaching in the absence of traditional classroom teaching and one-to-one interaction. In light of this, the study aims to investigate students' perceptions and readiness for the online-learning system implemented during COVID-pandemic. During COVID-19, the study has been conducted to assess students' satisfaction with e-learning.

OBJECTIVES:

- To analyze the satisfaction of online mode of learning from students perception.
- To identify the problems faced by the students during online learning.

METHODOLOGY:

The Present study is carried out to know the students' perception towards e-learning during pandemic. The researcher aims to measure the students' satisfaction towards e-learning during COVID-19. Convenient sampling method has been applied to collect the data. The sample size of the study is 150 respondent. The data required for the study has been collected from the primary data source. The questionnaire is to be filled randomly by the college students. The following statistical tools have been used to analyze the primary data.

- ❖ Percentage Analysis
- ❖ Chi-square test.
- ❖ Anova
- ❖ Friedman's Rank test

REVIEW OF LITERATURE

Mohammad Arshad Khan (2021) has done the research on "Students' Perception towards E-Learning during COVID-19 in India ". The data has been collected from 250 respondents in delhi universities by random selection method. The study revealed that increasing prerequisite of e-learning and most of the students registered in virtual courses are satisfied with the mode of learning. He concluded that perceptions of students are affected by a host of elements.

Zayapragassarazan (2020) has studied " COVID-19 Strategies for Online Engagement of Remote Learners". The data has been collected from 150 students in puducherry. The study has concluded that online engagement strategies if applied for teaching, learning and assessment purposes helping learners to continuously encompass themselves in the learning process and will also nurture good study habits in them

Maria Jose sa (2020) studied the covid pandemic and its Opportunity to Substitute the Sustainable Progress of Teaching in Higher Education". The study is undertaken with primary data and was gathered from 345 respondents. The study insighted on the COVID-19 pandemic

predicted as an prospect to improve feasible development in higher education

Ahmed alsoufi(2020) has studied the impact of the COVID-19 pandemic on medical education. The purpose of the study is to deliver an outline of the condition experienced by medical students during the COVID-19 pandemic. A survey has been conducted with medical students from 13 medical schools in Libya. The study investigated demographic and socio-economic information, connected to medical online learning and electronic devices; medical education status during the COVID-19 pandemic; psychological well-being assessments; and e-learning knowledge, attitudes, and their practices.

SOURCE OF INTERNET USED FOR E-LEARNING

Students use various sources of internet for their learning like LAN, Mobile data, wifi and all the combinations. The paper tried to know which source is used most and least.

TABLE 1
SOURCE OF INTERNET USED BY THE RESPONDENTS

SOURCE OF INTERNET	FREQUENCY	PERCENTAGE
LAN	38	26.8
Mobile data pack	57	40.1
Wi-Fi	23	16.2
Combination of cellular data and Wi-Fi	24	16.9

Source of Data: Primary Data

The table 1 shows that 26.8 percent of respondents use LAN. 40.1 percent of the respondents use Mobile data pack, 16.2 percent of the respondents use Wi-Fi and 16.9 percent of the respondents use both cellular data and Wi-Fi. Hence the majority of the respondents use Mobile data pack as a source of internet with 40.1 percent.

PREFERRED DURATION FOR ONLINE CLASS(PER CLASS)-AGEWISE

The age group of the respondents and suitable duration for online class were calculated using the chi-square analysis by their selected option as 1 for 30 Minutes, 2 for 45 Minutes, 3 for 1 hour, 4 more than 1 hour.

TABLE 2

preferred duration for online class (per class)	AGE			TOTAL
	18-21 Years	22-25 Years	Above 25 Years	
30 Minutes	73	3	1	77
45 Minutes	20	11	1	32
1 Hour	23	0	2	25
More than 1 hour	6	1	1	8
Total	122	15	5	142

Source Of Data: Computed Data

The table 2 shows the association between the age and suitable duration for online class in a cross tab. The preferred duration for online class of the age groups are mentioned and analyzed in the table above. Hence the age group above 25 years prefers 30 minutes duration for online class uses is more compared to the other age groups.

PREFERRED DURATION FOR ONLINE CLASS(PER CLASS)-EDUCATION WISE

The Education of the respondents and preferred duration for online class were calculated by using cross tab i.e., chi-square test by their selected options

TABLE 3-PREFERRED DURATION FOR ONLINE CLASS(PER CLASS)-EDUCATION WISE

preferred duration for online class (per class)	EDUCATION				TOTAL
	DIPLOMA	UNDER GRADUATE	POST GRADUATE	OTHERS	

30 Minutes	11	62	4	0	77
45 Minutes	4	19	9	0	32
1 Hour	3	18	3	1	25
More than 1 hour	0	6	2	0	8
Total	18	105	18	1	142

Source Of Data: Computed Data

The table.3 shows the association between the Education and suitable duration for online class in a cross tab. The expected duration for online class of the education are mentioned and analyzed in the table above. Hence the undergraduate students prefers 30 minutes duration for online class uses is more (62) compared to the other age groups.

SUITABLE DURATION FOR ONLINE CLASS(PER CLASS)- LOCATION WISE

The Location of the respondents and suitable duration for online class were calculated by using cross tab i.e., chi-square test by their selected options.

The table.4 shows the association between the Location and suitable duration for online class in a cross tab. The expected duration for online class of the location are mentioned and analyzed in the table above. Hence the students located in rural area prefers 30 minutes duration for online class uses is more (79) compared to the other age groups.

**TABLE 4- SUITABLE DURATION FOR ONLINE CLASS(PER CLASS)-
LOCATION WISE**

Prefered duration for online class (per class)	LOCATION			TOTAL
	RURAL	URBAN	SEMI-URBAN	
30 Minutes	56	16	5	77
45 Minutes	10	12	10	32
1 Hour	10	4	11	25

	More than 1 hour	3	4	0	8
	Total	79	37	26	142

Source Of Data: Computed Data

TIME NEEDED AS BREAK BETWEEN TWO ONLINE CLASS

The age group of the respondents and time needed as a break between two online classes were calculated using the chi-square analysis by their selected option as 1 for 10 minutes, 2 for 15 minutes, 3 less than 1 minutes, 4 more than 15 minutes.

TABLE 5- TIME NEEDED AS BREAK

Time needed as a break between two online class	AGE			TOTAL
	18-21 years	22-25 years	Above 25 years	
10 Minutes	81	3	1	85
15 Minutes	22	7	1	30
Less than 10 minutes	8	4	2	14
More than 15 minutes	11	1	1	13
Total	122	15	5	142

Source Of Data: Computed Data

The table 5 shows the association between Age group of the respondents and the Time needed as a break between two online classes in a cross tab. The expected break duration between two online classes are mentioned and analyzed in the table above. Hence the age of 18-21 years students expects 10 minutes break between two online classes is more (122) compared to other age groups.

TIME NEEDED AS BREAK BETWEEN TWO ONLINE CLASS

The Education of the respondents and suitable duration for online class were calculated by using cross tab i.e., chi-square test by their selected options.

TABLE 6- TIME NEEDED AS BREAK

Time needed as a break between two online class	EDUCATION				TOTAL
	DIPLOMA	UNDER GRADUATE	POST GRADUATE	OTHERS	
10 Minutes	13	68	4	0	85
15 Minutes	2	23	5	0	30
Less than 10 minutes	2	5	6	1	14
More than 15 minutes	1	9	3	0	13
Total	18	105	18	1	142

Source Of Data: Computed Data

The table 6 shows the association between the education and Time needed as a break between two online classes in a cross tab. The expected break duration between two online classes are mentioned and analyzed in the table above.

TIME NEEDED AS BREAK BETWEEN TWO ONLINE CLASS –LOCATION WISE

The Location of the respondents and suitable duration for online class were calculated by using cross tab i.e., chi-square test by their selected options.

TABLE 7- TIME NEEDED AS BREAK BETWEEN TWO ONLINE CLASS

Time needed as a break between two online class	LOCATION			TOTAL
	RURAL	URBAN	SEMI-URBAN	
10 Minutes	56	15	14	85

15 Minutes	11	13	6	30
Less than 10 minutes	6	5	3	14
More than 15 minutes	6	4	3	13
Total	79	37	26	142

Source Of Data: Computed Data

The table 7 shows the association between the Location and Time needed as a break between two online classes in a cross tab. The expected break duration between two online classes are mentioned and analyzed in the table above. Hence the Rural area students expects 10 minutes break between two online classes is more compared to other area students.

SATISFACTION OF THE STUDENTS OF E-LEARNING DURING PANDEMIC PERIOD.

The table 8 shows that the mean values of the satisfaction of the students , with the scale of 5 to 1.

TABLE 8- SATISFACTION OF THE STUDENTS OF E-LEARNING

S.NO	SOURCES	N	MEAN	SD
1	Flexibility in time and space	142	2.16	0.97
2	Easiness and quick share of education material	142	2.01	0.92
3	Better collaboration and interaction among students	142	2.39	0.98
4	Accommodates diverse types of e-learning styles	142	2.19	0.96
5	Wide and diverse interactions	142	2.26	1.02
6	learning through online mode which offers flexibility at the time of convenient to the learner.	142	2.19	1.05

7	E-learning can allow people to study regardless of the places where they are located in the world.	142	2.26	1.00
8	Trust that usage of e-learning service simplifies the process.	142	2.11	1.02

Source- Primary data

The above table shows that the mean values of the satisfaction of the students , with the scale of 5 to 1. Among the variables highest mean value of 2.16 Time Flexibility and space Flexibility, followed by Easiness and quick share of education material (2.01), Better collaboration and interaction among students (2.39), accommodates diverse types of e-learning styles (2.19), Wide and diverse interactions (2.26) and learning over the online mode which provides flexibility of (2.19).

PROBLEMS FACED BY THE STUDENTS DURING E LEARNING

TABLE 9- PROBLEMS FACED BY THE STUDENTS

S.NO	FACTORS	MEAN RANK	RANK
1	Online security	3.05	3
2	Technical issues	3.09	2
3	Conducting assessments	2.74	5
4	Time management	3.13	1
5	Online exams	3.00	4

From the above table it is observed that the respondents have given the rank according to their problems faced by the students on e-learning during this pandemic and has given first rank to Time management, Second rank to Technical issues, Third rank to Online security, Fourth rank to Online exams, Fifth rank to Conducting assessments.

FINDINGS

The study on Students perception towards E-learning found that the respondents of age 18-21 years, both male and female, undergraduates, located in rural area prefer 30 minutes duration

for online class and prefer 10 minutes break between two online classes. The respondents of age 22-25 years, both male and female, undergraduates, located in urban area prefer 45 minutes duration for online class and prefer 15 minutes break between two online classes. The respondents of age 26-30 years, both male and female, undergraduates, located in semi-urban area prefer 1 hour duration for online class and prefer less than 15 minutes break between two online classes. The satisfaction of the students in E-learning during the pandemic are not significant for age, educational qualification, location and type of educational institution. The academic studying experience of the students during this period of COVID-19 are not significant for age, educational qualification, location and type of educational institution. The Friedman rank test reveals that Time management is ranked first, Technical issues is ranked second, Online security is ranked third according to the problems faced by the students.

CONCLUSION

The present study has analysed the students' perception towards e-learning during the COVID-19 pandemic. The result discloses that the preference of students as it is affordable them much freedom to link with their tutors, students and including study materials can be obtained at flexible time and space. The easiness in accessing study resources is identified to be one of the major causes for the students to choose e-learning mode. The study concluded that online technology enables easy access and positive attitude towards students community. It is found that based on usage, self-assessment, easiness in usage, and the behaviour of students transferred to prefer e-learning. Further, the study found that students gained similar experience as being taught and educated as like the physical classroom teaching and students have recognized online-learning as alike to face to face learning mode.

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