

**A DESCRIPTIVE STUDY ON ASSESSING THE HIGHER  
EDUCATION AND SCIENCE STUDENTS OF ONLINE CLASS  
DURING COVID-19 OUTBREAK IN PUDUCHERRY**

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**ABSTRACT**

**Introduction:** *The Corona pandemic has made a global impact in the past months and continues to hit most of the sectors, with education being one of them. Students across the globe are facing a complete isolation from their education institutions during the imposed lockdown amidst fears of pandemic. The situation has forced educational institution to shut down and the students to stay at home. As a result of COVID-19 lockdown the education system has moved to deliver online learning. Most institutions have come up with the idea of online class for students to start their respective academic year, instead of wasting time due to the delay in reopening of colleges. Online classes can present unique challenges, if not prepared, but if we develop skills for effective online learning then it can be an excellent alternative to a traditional classroom setting. Students and teachers need to know how to use technology in systems manner and make learning easy for learning.*

**Aim of the study:** *The aim of the study to assess the arts students experience about online class during COVID-19 outbreak in Puducherry.*

**Objectives:** *To assess the level of quality of online class during COVID-19 outbreak among arts students. To associate the level of quality of online class during COVID-19 outbreak among arts students with the selected demographic variables.*

**Research Methodology:** *The quantitative research approach with descriptive research design was used for the study. The settings of the study area were Acharya College of Arts and science College, Villinur at Puducherry. The data were collected from hundred arts students of both second and third year. In that samples fifty two from second year and fifty eight from third year students, and the convenient sampling technique were used to collect the data. The tool consists of three categories like student's satisfaction about online teaching, facilities & instructor performance.*

*Based on four point likert scale were used to scoring procedure method. Permission was obtained from the HOD from Department of Sociology & Social Work in Annamalai University. The structured questionnaire was given to the students to collect the data. Data analysis was done by using descriptive and inferential statistics with SPSS version 7.0.*

**Results:** *The results shows that half of them had fair experience of online class 50 (50%), 47 (47%) had good experience of online class and few students had excellent experience of online class during COVID-19 outbreak is 37 (37%). The quality of online class during COVID-19 outbreak mean 61.37 with standard deviation 15.64 and mean percentage was 2%. Students had traditional learning or online learning shown statistically significant association between the level of experience of online class during COVID-19 outbreak among nursing student's respondent  $p < 0.005$  level.*

**Conclusion:** *The study concluded that arts students had good experience and good quality of online class during COVID-19 outbreak.*

### **Introduction:**

The world is facing a health crisis as the Novel Corona virus (COVID-19) has spread globally and has adversely affected the economy, social life and education services all around the globe. As a result of the Covid-19 outbreak, higher education has moved to deliver online courses; the world has temporarily closed educational institutions to control the spread of the covid-19 pandemic, and has called for social distancing. It has made it mandatory to sit indoors and sitting idle indoors may lead to mental stress. Online learning can play an important role and is the best solution during this pandemic situation. Many of the colleges and universities are facing challenges providing quality education for their students during this prolonged period of lockdown. So, the students have expressed stress related to online learning and difficulties when completing the test and assignment.

### **Need for the Study:**

Online education is the present need of society to carry on learning for school and college students at the modern occasion of learning, and then it can be an excellent unconventional to an

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established classroom. The situation, all we students and teachers need to know is how to use expertise is an efficient method and makes knowledge easy for students and teaching easy for teachers. So the present study investigation shows that how the students can experience and evaluate the online learning class is crucial during Covid-19 outbreak is one of the challenges faced by students.

**Statement of the Problem:**

A descriptive study to assess the higher education students experience in online class during the COVID-19 outbreak in Puducherry.

**Major Objectives:**

- To assess the level of equality of online class during COVID-19 outbreak among Higher Education students.
- To associate the level of quality of online class during COVID-19 outbreak among Higher Education students with the selected demographic variables.

**Methodology:**

**Approach of the Study:**

“The quantitative approach” was used for this research.

**Design of Study:**

“A descriptive research design” was chosen for the study to find out the students experience about online class during covid-19 outbreak among Higher Education students.

**Variables in the study:**

Independent variable - online class

Dependent variable – Students experience on online class

**Geographical Location:**

The geographical area of the study was conducted at Achariya College of Higher Education and Science, “Villunur Puducherry”.

**Sampling Size:**

The sample size for the present study was hundred samples. In those samples was selected from second year B. Sc Computer Science (fifty two) and third year B. com. (fifty eight) students.

**Population:**

The population for the present study was Higher Education students of second year and third year in Acharya College of Higher Education and science, “Villunur at Puducherry”.

### **Sampling techniques:**

“Convenient sampling technique” was used to select the sample for the research. During data collection hundred Higher Education students was selected.

### **Criteria for sample selection:**

#### **Inclusion criteria:**

- Students are all attended the online class compulsory.
- Students who are all willing to participate in this study.
- Students who can read and write Tamil and English.
- Students who are all present on the day of data collection.
- 2<sup>nd</sup> Year B.Sc in Computer Science and 3<sup>rd</sup> year B. Com e-learning students studying in “Acharya College for Higher Education and science”

#### **Exclusion criteria:**

- Not interested to participate in this study.
- Who are all not attend in the online class.
- Students who can read and write French only.
- Who are all absent on the day of data collection.

### **Tools used:**

#### **Part-A (Demographic characteristics)**

Demographic variables included age, gender, sex, education status, family income, parents occupation, religion, type of family, area of residence etc.,

#### **Part-B (Students experience about online learning during covid-19 outbreak)**

The study designed to cover the following categories:

1. Student’s fulfillment about online teaching.
2. Student’s fulfillment with facilities.
3. Student’s fulfillment with instructor performance in online teaching.

### **Scoring procedure:**

Student’s responses are mostly based on 4 point “Likert scale”. The scoring procedure

0-24 - Poor

25-55 - Fair

56-79 - Good

80-100 – Excellent

### Plan for data Analysis:

After the data collection, process data is summarized, organized, tabulated and analyzed. Data analysis was done by using “Descriptive and Inferential statistics with SPSS version 5.0”. The descriptive statistics are used to describe the demographic variables such as frequency and percentage. Mean, Standard Deviation used for assess the student experience on online class during Covid-19 outbreak. Inferential statistics such as the Chi -Square Test ‘P’ value and ‘T’ value were used to assess the student's experience.

### Data Analysis:

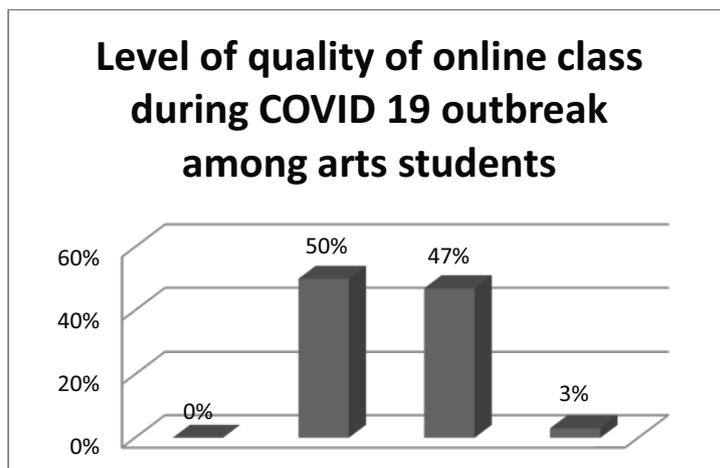
**Table1 Distribution of variables among Higher Education Students. (N=100)**

Sl. NO	VARIABLES	FREQUENCY (N)	%
1	<b>Age wise:</b>		
	17-18 years	5	5
	18-19 years	61	61
	19-21 years	34	34
	Above 22 years	0	0
2	<b>Gender</b>		
	Male	16	16
	Female	84	84
	Transgender	0	0
3	<b>Religion</b>		
	Hindu	90	90
	Muslim	4	4
	Christian	6	6
	Others	0	0
4	<b>Types of family</b>		
	Nuclear family	75	75
	Joint family	24	24
	Living alone	1	1
5	<b>Parent occupation</b>		
	Self employed	16	16

	Employed	25	25
	Daily wages	25	25
	Farmer	34	34
6	<b>Monthly income</b>		
	Rs.5000	26	26
	Rs.5000-10000	33	33
	Rs.10000-15000	26	26
	Above rs.15000	15	15
7	<b>Educational status</b>		
	B.Com 2 <sup>nd</sup> year	53	53
	B.Com 3 <sup>rd</sup> year	47	47
8	<b>Area of residence</b>		
	Urban	44	44
	Rural	56	56
9	<b>Which devices are using during your online class</b>		
	Android mobile	95	95
	Laptop	1	1
	Computer	4	4
	Others	0	0
10	<b>Are you interested to study traditional learning or online learning</b>		
	Traditional learning	81	81
	Online learning	19	19

In this table No.1, 100 Higher Education student structures, one was administered. The majority of the Higher Education students, 61 (61%) of the study population, were in the age group 18-19 years. The majority of the Higher Education students come female (84%) in gender. Most of the Higher Education students, 90 (90%) belong to the Hindu religion. Most of the Higher Education student's family structure shows that one third (75%) of the respondents belong to a nuclear family. Out of the total samples, 34 (34%) parents' occupation is farmer. Most of the Higher Education students' parents' monthly income shows 33 (33%) Rs. 5000-10,000. Half of the Higher Education students studied in B.Com Higher Education and 2nd year 53 (53%). Half of the responses lived in rural areas (56%). Higher Education students were using Android Phone during their online class 95

(95%). A greater proportion, 81 (81%) of the Higher Education students were interested in studying traditional learning.



**Figure 1** Frequency and percentage wise distribution of level of quality of online class during COVID 19 outbreak among Higher Education students

**Table 2** Mean and standard deviation of level of quality of online class during COVID 19 outbreak among Higher Education students. (N = 100)

	Max score	Range	Score		
			Mean	Standard deviation	Mean %
Overall	120	31-120	61.37	15.64	2%

In this table says that level of quality of online class during COVID-19 outbreak among Higher Education students (61.37±15.64) and mean percentage was 2%.

**Table 3** Association between the level of quality of online class during COVID 19 outbreak among Higher Education students with their selected demographic variables (N=100)

Sl.no	Variables	Level of Quality of Online Class						X2	df	p-value
		Fair		Good		Excellent				
		N	%	N	%	N	%			
1	<b>Age (in years)</b>									
	17-18 years	3	60	2	40	0	0	0.980	4	0.913
	18-19 years	32	52.5	27	44.3	2	3.3			
	19-21 years	15	44.1	18	52.9	1	2.9			
	Above 22 years	0	0	0	0	0	0			
2	<b>Gender</b>							7.416	2	0.025*S
	Male	4	31.3	9	56.3	2	12.5			

	Female	45	53.6	38	45.2	1	1.2			
	Transgender	0	0	0	0	0	0			
3	<b>Religion</b>									
	Hindu	48	53.3	39	43.3	3	3.3	6.009	4	0.199
	Muslim	0	0	4	100	0	0			
	Christian	2	33.3	4	66.7	0	0			
	Others	0	0	0	0	0	0			
4	<b>Types of family</b>									
	Nuclear family	37	49.3	36	48	2	2.7	1.516	4	0.824
	Joint family	13	54.2	10	41.7	1	4.2			
	Living alone	0	0	1	100	0	0			
5	<b>Parent Occupation</b>									
	Self employed	6	38.5	10	62.5	0	0	2.473	6	0.871
	Employed	14	56	10	40	1	4			
	Daily wages	13	52	11	44	1	4			
	Farmer	17	50	16	47.1	1	2.9			
6	<b>Monthly Income</b>									
	Rs.5000	14	53.8	12	46.2	0	0	4.024	6	0.673
	Rs.5000-10000	13	39.4	19	57.6	1	3			
	Rs.10000-15000	15	57.7	10	38.5	1	3.8			
	Above rs.15000	8	53.3	6	40	1	6.7			
7	<b>Educational Status:</b>									
	B.Com 2nd year	27	50.9	24	45.3	2	3.8	0.316	2	0.854
	B.Com 3rd year	23	48.9	23	48.9	1	2.1			
8	<b>Area of Residence</b>									
	Urban	23	52.3	20	45.5	1	2.3	0.260	2	0.878
	Rural	27	48.2	27	48.2	2	3.6			
9	<b>Which devices are using during your online class</b>									
	Android mobile	47	49.5	45	47.4	3	3.2	2.175	4	0.704
	Laptop	0	0	1	100	0	0			
	Computer	3	75	1	25	0	0			
	Others	0	0	0	0	0	0			
10	<b>Are you interested to study traditional learning or online learning</b>									
	Traditional learning	36	44.4	43	53.1	2	2.5	6.392	2	0.041*S
	Online learning	14	73.7	4	21.1	1	5.3			

The table No.3 says that depicts that the variables gender and are you interested to study traditional learning or online learning had shown statistically significant association between level of quality of online class during COVID 19 outbreak among Higher Education students with chi-square value of ( $\chi^2=7.416$ , d.f=2) and ( $\chi^2=6.392$ , d.f=2) at  $p<0.005$  level. The other demographic variables

had not shown statistically significant association with level of quality of online class during COVID 19 outbreak among Higher Education students respectively.

### **Major Findings:**

Out of the 100 Higher Education and Science students who were interviewed. Majority of the students 61 (61%) of study population were in the age group 18-19 years, Majority of the students comes under female 84 (84%) in gender. Most of the Higher Education students 90 (90%) were belongs to Hindu religion. Most of them come under nuclear family 75 (75%). Majority of the Higher Education student's parent occupation is farmer 34 (34%) were monthly income Rs. 5000-10,000. Half of the Higher Education students had studying B. Com II<sup>nd</sup> year 53 (53%). Most of them were lived in rural area 56 (56%). Majority of the students android mobile are using during their online class 95 (95%). Majority of the Higher Education students had interested to study traditional learning 81 (81%). Finding outbreak of COVID 19 results shows that level of quality of experience of online class during Covid19 outbreak among Higher Education students. Half of them had fair level of quality of online class 50 (50%), 47 (47%) had good level of quality of online class and few students had excelled level of quality of online class during covid19 outbreak is 37 (37%). The mean and standard deviation was (61.37+or -15.64) and means percentage was 2%.

### **Major Recommendations:**

- The analysis showed that 68% of the faculty members had undergone training, while 32% did not have. Exercise is part of development programs provided by universities to equip their staff with the necessary skills. This criterion highlights Faculty Academic Development Centers' role to have plans to deal with all abrupt crises such as COVID-19. Training programs should not be limited to faculty; they should also involve students. The study found that Zoom and Microsoft Teams were used by the surveyed faculty more than others in conducting virtual classes. Moreover, Whats App is the most popular platform for communication between faculty and their students outside classrooms.
  
- The majority of respondents revealed that they had computer competency before the emergence of COVID-19. This competency helped the faculty to do online classes since IT skills are mandatory for the technology learning environment. However, the study showed that faculty preferred traditional teaching, face to face, more than online. Face-to-face instruction allows the ability to discuss and have lively guidance for your students. It

encourages students' engagement and reflects positively on the level of students. Therefore, most of the faculty members indicated that online classes' preparation entails more effort to ensure having interactive online courses.

- The students faced difficulties when attending online classes. Based on the findings, these challenges lie in students' struggle to adapt to online courses, lack of direct contact with the faculty, lack of motivation to attend classes, and time management. This list of challenges should be considered by course coordinators and program chairs by offering solutions to these challenges. Students viewed the issue of adapting to the transference from face to face to online instructions as a challenge. This is a great challenge since most countries were not prepared enough to cope with abrupt crises that we did not have before. Students also highlighted that online platforms are not easily adjustable to deaf, hard of hearing, or special needs students. The government should help such students by offering courses provided by specialists of students with special needs. Students also complained about the lack of interaction, reflecting on students' achievements and their personalities. Technical Internet connectivity issues also affect learning via learning modalities. This challenge can be overcome by improving the speed of the Internet packages provided to students. In this context, governments should offer Internet packages to students at low cost, and the telecommunication companies should help students. Similarly, students were concerned about their data privacy since their information was exposed to breach by external parties; they use their laptops and PCs available at their homes. This requires that universities should educate students about data privacy. They also have to provide students with free firewall programs to protect their data.

### **Conclusion:**

The present scenario is a big challenge for both the teachers and students, but the human tendency to continuously learn and evolve through challenges has proven to be born into the human race. The current situation will definitely give way to a boom in the educational system, which will transform a digital era from being a more physical classroom presence. Students as well as teachers need to change with the current needs of the time. Social distancing and online learning are a means of hope for a better future. We strive to achieve a new way of life. The teacher should understand the needs of students. Moreover, students should also understand the effort of teachers to make them

learn and grow so as to make online learning more interesting and meaningful. The present study concluded that Higher Education students had good experience and good quality of virtual class teaching during COVID-19.

## References

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