



## **A STUDY ON THE IMPACT OF COVID-19 ON THE ACADEMIC PERFORMANCE OF ARTS AND SCIENCE COLLEGE STUDENTS IN VIRUDHUNAGAR DISTRICT**

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### **ABSTRACT**

The COVID-19 outbreak affected the lives of almost all segments of society leading to serious implications including stress, frustration and depression. Due to the novel coronavirus, many colleges and universities suspended classroom teaching and switched to online mode of teaching worldwide. The present study was carried out to analyze the impact of COVID-19 on the academic performance of Arts and Science College Students in Virudhunagar District. A total of 1,231 respondents from different Arts and Science Colleges answered the online questionnaire. In this study, the potential consequences of COVID-19 pandemic on the students life is investigated. The study result showed that COVID-19 pandemic lockdown has affected the academic performance of most students.

**Keywords:** COVID-19, Online education, Mental health, Students, Coronavirus, COVID-19, Pandemic

### **INTRODUCTION**

The COVID-19 pandemic has adversely affected all levels of education system. Around the world, many universities and colleges either postponed or cancelled educational activities to avoid gatherings and thereby decrease the coronavirus transmission. With the result of this, classroom teaching is suspended and a switch to online teaching becomes effective. This online

teaching minimizes the contact between students themselves or between student and lecturers and provides opportunities of saving one's time and money. Online teaching made the communication between students and lecturers easier and convenient. Despite of the rising interest in online teaching, the satisfaction level of students remains the biggest indicator of

online learning experience. The satisfaction level of students can be associated with so many factors such as students-students interaction, students-teachers interaction, internet quality, course assessment quality, students' learning process and self-efficacy. COVID-19 affected the academic performance of students as this is the first attempt of students to experience online learning and thus, their satisfaction level from online learning is also found significant to be measured. This study examined the relationship between the academic performance of students and their satisfaction level with online teaching.

Though not many studies have been conducted exploring the impact of COVID-19 on the academic performance of college students and measuring their satisfaction level with online teaching during the COVID-19 pandemic lockdown period, the researcher made an effort to discover the most related studies concerning the current study. The COVID-19 outbreak affected the education field at all levels across the globe (Alanazi, *et al.*, 2020: Abuhassna, *et al.*, 2020: Baber, *et al.*, 2020: Durak, *et al.*, 2020: Novikov, 2020: Norah and shabir *et al.*, 2020 and Khan, *et al.*, 2021)

A study by Gonzalez, Rubia, *et al* (2020) identified the impact of COVID-19 on students' performance at the higher educational level. Their study found that COVID-19 left behind a positive impact on the students' performance and helped students to strengthen their learning strategies. Another study by Realyvasquez-Vargas *et al.* (2020) examined whether students' academic performance is affected by environmental factors during COVID-19. The

study revealed that environmental factors affect the academic performance of students during COVID-19 pandemic.

Loton *et al.* (2020) explored online learning during COVID-19 pandemic with students' performance and satisfaction. The results of the study showed that there is a significant impact on students' performance and their satisfaction level with online learning and teaching. Similarly, Elhadary *et al.* (2020) examined the impact of COVID-19 on the academic performance of science and social and science students in Turkey. The findings of the study showed that so many factors affected the students' academic performance during COVID-19 pandemic. The study also explored that both students and teachers are satisfied with the online teaching and learning application.

Almusharraf and Khahro (2020) conducted an investigation study on students' satisfaction level of online learning during COVID-19 outbreak. The findings of the study revealed that all students were highly satisfied with online learning application and tools. In contrast to the above studies which depicted a positive response and impact of COVID-19 on students' academic performance, two more studies revealed a negative impact of COVID-19 on students' online learning. Sharma *et al.* (2020) examined that the majority of students are dissatisfied with online learning tools and platforms. Also, the findings of the study conducted by Dinh and Nguyen (2020) revealed that online learning and teaching depicted a lower satisfaction level than the traditional face-to-face teaching and learning. Hence the present

study has been planned to analyze the impact of COVID-19 pandemic on the academic performance of Arts and Science College Students in Virudhunagar District and to study the satisfaction level of students with online teaching during the COVID-19 pandemic lockdown period.

**RESEARCH METHODOLOGY**

The present study used quantitative research design which adopted a survey questionnaire to explore the impacts of COVID-19 on the academic performance of Arts and Science students and their satisfaction level with online learning. The data was collected from 1231 students, including 867 males and 364 female students from Arts and Science College in Virudhunagar District through Google forms. The link of the questionnaire was also shared through different social media platforms like Whatsapp, Facebook and Twitter. For the present study, Simple random sampling technique was employed to ensure that each and every sample has an equal chance of being selected.

The data obtained were analyzed using descriptive and inferential statistical analysis. Descriptive statistics was employed to identify the frequency, percentage, mean and standard deviation of the respondents’ demographic profile and also to measure their satisfaction level with online learning. While the inferential statistics was employed to explore the differences in students’ academic performance and their satisfaction level with online learning across gender as well as to examine the

relationship between students’ performance and satisfaction level.

**ANALYSIS AND INTERPRETATION**

**TABLE1: RESPONDENTS GENDER AND AGE**

Gender	Age	No. of Respondents
Male	18 – 21 years	580
	22 – 25 years	199
	Above 25 years	88
<b>Total</b>		<b>867</b>
Female	18 – 21 years	221
	22 – 25 years	91
	Above 25 years	52
<b>Total</b>		<b>364</b>

Source: Primary data, 2021

It is inferred from Table 1 that in terms of age, among 867 male students, a majority of the students fall in the age category of 18 – 21 years. Among 364 female students, a majority of 221 students fall in the age category of 18 – 21 years.

**TABLE 2: PREFERENCE OF TEACHING MODE BY GENDER AND AGE**

Age			Gender		Total
			Male	Female	
18 – 21 yrs	Preference	Face-to-Face teaching	423	184	194
		Online teaching	157	37	607
	<b>Total</b>		<b>580</b>	<b>221</b>	<b>801</b>
22 – 25 yrs	Preference	Face-to-Face teaching	146	66	78
		Online teaching	53	25	212
	<b>Total</b>		<b>199</b>	<b>91</b>	<b>290</b>
Above 25 yrs	Preference	Face-to-Face teaching	54	42	44
		Online teaching	34	10	96
	<b>Total</b>		<b>88</b>	<b>52</b>	<b>140</b>
Total	Preference	Face-to-Face teaching	623	292	915
		Online teaching	244	72	316
	<b>Total</b>		<b>867</b>	<b>364</b>	<b>1231</b>

Source: Primary data, 2021

It is evident from the above table that 157 male respondents and 37 female respondents in the age group of 18 – 21 years preferred to have online teaching session, while 423 male respondents and 184 female respondents in the same age group preferred to have face-to-face teaching session. 53 male respondents and 25 female respondents who fall under the age category of 22 – 25 years preferred to have online teaching, while 146 male respondents and 66 female respondents in

the same age group preferred to have face-to-face teaching. 34 male respondents and 10 female respondents who are above 25 years of age preferred to experience online teaching. The respondent 54 male and 42 female agreed that they prefer face-to-face teaching. In considering the overall preferences by gender, it is observed that the majority of the respondents (915) are happy with the traditional face-to-face teaching, while 316 respondents only preferred to have online teaching session.

**TABLE 3: IMPACT OF COVID-19 ON THE ACADEMIC PERFORMANCE OF ARTS AND SCIENCE COLLEGE STUDENTS**

S.No.	Academic Performance	Frequency and Percentage (%)						
	Variables	SDA	DA	N	A	SA	Mean	S.D
1.	I enjoyed online learning	401 (32.6)	175 (14.2)	208 (16.9)	220 (17.9)	227 (18.4)	2.75	1.51
2.	Online learning made me feel good about myself	408 (33.1)	180 (14.6)	185 (15.0)	209 (17.0)	249 (20.2)	2.77	1.54
3.	During COVID-19 outbreak, Online learning created dramatic changes in my academic performance	394 (32.0)	181 (14.7)	210 (17.1)	216 (17.5)	230 (18.7)	2.76	1.51
4.	During COVID-19 outbreak, I am able to perform well than before	372 (30.2)	183 (14.9)	244 (19.8)	201 (16.3)	231 (18.8)	2.79	1.49
5.	During COVID-19 outbreak, I organized my time well and did all my activities online successfully	365 (29.7)	176 (14.3)	218 (17.7)	228 (18.5)	244 (19.8)	2.85	1.51
6.	During COVID-19 outbreak, I have acquired more knowledge through online learning	384 (31.2)	164 (13.3)	185 (15.0)	262 (21.3)	236 (19.2)	2.84	1.52
7.	During COVID-19 outbreak, I have improved my communication and creativity skills through online learning	352 (28.6)	165 (13.4)	184 (14.9)	305 (24.8)	225 (18.3)	2.91	1.50
8.	During COVID-19 outbreak, I actively participated in online classes and answered teacher's questions	397 (32.3)	178 (14.5)	192 (15.6)	247 (20.1)	217 (17.6)	2.76	1.51
9.	During COVID-19 outbreak, I completed the study assignments on time	391 (31.8)	193 (15.7)	191 (15.5)	228 (18.5)	228 (18.5)	2.76	1.51
10.	I have experienced much difficulty in communicating with my teachers during COVID-19 outbreak	427 (34.7)	175 (14.2)	185 (15.0)	219 (17.8)	225 (18.3)	2.71	1.53
11.	Fear and anxiety affected my study plan during COVID-19 outbreak	405 (32.9)	177 (14.4)	190 (15.4)	214 (17.4)	245 (19.9)	2.77	1.54
12.	I faced some technical troubles in online learning during COVID-19 outbreak	429 (34.8)	184 (14.9)	185 (15.0)	204 (16.6)	229 (18.6)	2.69	1.53
13.	I am dissatisfied with the online learning session and online platforms	410 (33.3)	195 (15.8)	196 (15.9)	234 (19.0)	196 (15.9)	2.68	1.49

Source: Primary data, 2021

From table 3, we notify the impact of COVID-19 on the academic performance of Arts and Science College students. It is clear from the above table that the mean score of each variable ranged between 2.68 and 2.91. This depicts that

majority of the respondents have either strongly disagreed or simply disagreed on each variable about the academic performance of students. Likewise, the highest and lowest mean of variables related to the academic performance of

Arts and Science College students are 2.91 (indicating the communication and creativity skills of students) and 2.68 (representing the

respondents’ attitude towards online learning and using online platforms) respectively.

**TABLE 4: SATISFACTION LEVEL OF STUDENTS WITH ONLINE TEACHING DURING COVID-19 PANDEMIC LOCKDOWN**

S.No.	Satisfaction level	Frequency and Percentage (%)						
	Variables	SDA	DA	N	A	SA	Mean	S.D
1.	I am satisfied with the online webinars and courses	412 (33.5)	183 (14.9)	183 (14.9)	209 (17.0)	244 (19.8)	2.75	1.54
2.	I am satisfied with the instructors’ follow up, motivation and various online teaching approaches	427 (34.7)	207 (16.8)	185 (15.0)	220 (17.9)	192 (15.6)	2.63	1.49
3.	I feel more comfortable and convenient with online learning environment	392 (31.8)	200 (16.2)	183 (14.9)	210 (17.1)	246 (20.0)	2.78	1.53
4.	Online learning allows students to have access to a wide range of resources and study materials	395 (32.1)	212 (17.2)	185 (15.0)	189 (15.4)	250 (20.3)	2.75	1.53
5.	I work well together with our students and teachers in online learning	397 (32.3)	194 (15.8)	209 (17.0)	198 (16.1)	233 (18.9)	2.74	1.51
6.	I am satisfied with the online teaching policies and have adequate technical support from my college.	386 (31.4)	193 (15.7)	184 (14.9)	255 (20.7)	213 (17.3)	2.77	1.50
7.	I am satisfied with my teacher’s assessment in online teaching	391 (31.8)	193 (15.7)	184 (14.9)	239 (19.4)	224 (18.2)	2.76	1.51
8.	I am satisfied with the content quality of online courses	398 (32.3)	192 (15.6)	185 (15.0)	245 (19.9)	211 (17.1)	2.74	1.50

Source: Primary data, 2021

Table 4 elicits the satisfaction level of Arts and Science College students with online teaching during the COVID-19 pandemic lockdown period. As shown in the above table, variable 3 representing the students’ comfortability and convenience with online learning environment has the highest mean score of M = 2.78 and variable 5 (representing the students’ ability to work well together with other students and teachers in online learning) and variable 8 (representing the students’ satisfaction level with content quality of online courses) holds the same mean score of M = 2.74 each.

**TABLE 5: DESCRIPTIVE STATISTICS OF THE AVERAGE MEAN SCORE OF VARIABLES**

	N	Mean	Std. Deviation
Academic Performance of Students	1231	2.7226	1.45069
Satisfaction Level of Students	1231	2.7648	1.45841
Valid N (listwise)	1231		

Source: Primary data, 2021

According to table 5, the overall mean score of the academic performance of the students is 2.7226 with a standard deviation of 1.45069. The overall mean score of the satisfaction level of the students is higher than the academic performance i.e., 2.7648 with a standard deviation of 1.45841.

**TABLE 6: CORRELATION BETWEEN ACADEMIC PERFORMANCE AND SATISFACTION LEVEL OF STUDENTS**

Particulars		Academic Performance	Students Satisfaction
Academic Performance	Pearson Correlation	1	.902**
	Sig. (2-tailed)		.000
	N	1231	1231
Students Satisfaction	Pearson Correlation	.902**	1
	Sig. (2-tailed)	.000	
	N	1231	1231

\*\* , Correlation is significant at the 0.01 level (2-tailed)

Source: Primary data, 2021

Pearson Correlation analysis was carried out to find out the relationship between the academic performance of students and their satisfaction level with online teaching. From Table 6, it is inferred that the P-value is less than the alpha value ( $P = 0.000 < 0.05$ ). Therefore, it is considered to be significant and so there is a strong positive correlation between the academic performance of students and their satisfaction level with online teaching during the COVID-19 pandemic lockdown period.

## **FINDINGS**

The present study mainly intended to investigate the impact of COVID-19 pandemic on the academic performance of Arts and Science College students and their satisfaction level with online teaching. Besides, it also aimed to explore the relationship between academic performance of students with their satisfaction level during the COVID-19 pandemic lockdown period. The findings of the study revealed that almost all the respondents preferred to have the traditional face-to-face teaching method, while fewer respondents preferred to have online teaching method. The findings of the study also showed that COVID-19 has a negative impact on the performance of students in many aspects such as their ability to perform well in each course and assignments. Hence, the overall findings related to the impact of COVID-19 on the academic performance of students is that COVID-19 has negatively affected the academic performance of Arts and Science College students in Virudhunagar District.

The findings on the satisfaction level of students revealed that all respondents were highly dissatisfied with the online teaching method during the COVID-19 pandemic lockdown period. Majority of respondents showed dissatisfaction with the webinars and online courses along with instructor's approaches and follow-up sessions during the pandemic. Moreover, it was also identified that the respondents' satisfaction level is low in other aspects such as teachers' motivation in online classes, teacher vs students' interaction, lack of proper assessment, lack of technical support during the COVID-19 outbreak. Finally, the findings also revealed that there was a strong positive correlation between the academic performance and satisfaction level of Arts and Science college students with online teaching during the COVID-19 outbreak.

## **CONCLUSION**

Although online learning provides an opportunity for self-study, the main challenge that online education faces is how to give practical lessons. The adoption of online learning during the COVID-19 crisis is viewed to be an abrupt response to the crisis which was not well planned in advance. In addition, the sudden shift from traditional teaching to online teaching is conceived as a crisis management rather than as a teaching model which they deliberately want to stick to in the future. The findings of the study present several suggestions and implications to the educational institutions and other concerned parties to enhance both the quality and capacity of online teaching during



emergencies and from another side, to stimulate the academic performance of students and to improve their satisfaction level with online teaching. Though the COVID-19 outbreak has a negative impact on the academic performance of Arts and Science College students in Virudhunagar District, proper training for online teaching applications, tools and devices, free Wi-Fi facility and virtual resources, interactive and comprehensive online teaching environment along with constructive guidance and feedback would enhance the students' performance and satisfaction level with online teaching.

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