Students Perception towards Online Classes during Covid-19

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Abstract

Online learning became popular during the pandemic period as it became necessary to transform the whole education system to online mode, which helps to reduce the spread of coronavirus and maintain social distancing. The purpose of the study is to analyzethe student's perception towards online classes during Covid-19 and to explore the difference in the students' viewpoint in terms of demographic variables like age, gender and qualification. The data were collected through questionnaire filled from 197 students of Delhi, NCR, UP and Haryana during July to October 2020 and analyzed using descriptive statistics, independent sample t-test and ANOVA. The study found that the boys prefer online classes over offline mode while the girls said that they can concentrate more during online classes. Students who were less than 15 years and above 20 years prefer online classes over offline mode while students who were in the age group of 15-20 enjoy learning during online classes. Students who were under graduate enjoy learning during online classes, however students who were graduates and post-graduatesprefer online classes over offline mode. The study concluded that online learning became popular during the pandemic period as it has become necessary to transform the whole education system in online mode. To convert the whole education system into the online system was not an easy task for

educational institutions, but the institutions and educators have made various strenuous efforts.

Keywords: COVID-19, E-learning, Online Classes, Online Education, Pandemic, Student'sPerception.

Introduction

Coronavirus, which came out at the end of December 2019 in the city of China, named Wuhan, spread speedily all over the world and quickly became a worldwide threat. As a result, the World Health Organization announced COVID-19 as a pandemic on March 11, 2020 *(Ceylan et al., 2021)*. This virus was new to the world, so the challenges caused by it were also new such as maintenance of social distancing, avoidance of close contact, *etc.,* which leads to nearly total closure of colleges, schools, universities, shops and malls. The situation of the pandemic has created massive disruption in the academic field as the struggle of rapid transformation into electronic learning has impacted teachers, students and colleges at all levels *(Ismaili, 2021)*. Due to this pandemic situation, young adults and college students faced various academic and non-academic-related fear, stress, anxiety and depression *(George and Thomas, 2020)*. All such factors gave birth to e-learningas the only alternative to the traditional classes *(Zia, 2020)*. E-learning means using the latest technology and network communication to fulfill the purpose of teaching and learning *(Kulal and Nayak, 2020)*. Online teaching environment refers to that environment, which is less restrictive in nature or easily accessed and understood to maximum possible extent by all people *(Singh and Jadhav, 2021)*. Concerning the decision of higher authorities and government, all the higher education institutions started to make efforts to use technology to support online learning, remote learning and distance education during the period of the COVID-19 pandemic *(Joshi et al., 2020)*. Online degrees are becoming increasingly desired options across the world, but still, some people believe that online learning is less attractive than face-to-face classroom education *(Bishop et al., 2018)*. In the 21st-century, the entire education system is changing from traditional face-to-face model to a technology-based independent mode in which the main focus is paid to develop the potentials and creativity of the learners in the best possible manner*(Bordoloi et al., 2021)*. In the education sector, online education is becoming fastest-growing segment *(Verma, 2020)*. Online learning became popular during the pandemic period as it became necessary to transform the whole education system in online mode, which helps to reduce the spread of coronavirus and maintain social distancing *(Gautamand Gautam, 2021)*.In online education, an e-guest, which means the participation of an external expert in the given area of the virtual classroom, provides an opportunity to include the external expertise and enhance learning *(Fulton, 2020)*.

Although the period of Covid-19 pandemic had a significant impact on the higher education system worldwide, so educational institutions were closed for an unprecedentedly long period. As a result, urgent preparation of the online learning materials, lack of experts for online teaching, *etc.*, affected the quality of online programs *(Ho et al., 2020)*.During the implementation of online learning, different kinds of tools have been created to support the education because traditionally, the lectureswere not supported through video conferencing *(Olsen et al., 2020)*. The transformation of the traditional education system to online teaching demands various curriculum considerations and other instructional approaches *(Othman, 2021)*. Now Indian society is becoming technology oriented, so the pressures have emerged within the education sector by the policymakers and stakeholders to embed e-technology into higher education courses *(Michael, 2012)*.In fact, after COVID-19, it will be realized that what initiatives related to online teaching were successful and what was not in the form of measurements of results *(Izumi et al., 2021)*. Various researches conducted on educators' responses regarding moving into fully online

teaching environments state that it offers opportunities and challenges both for instructors and the students *(Khlaif et al., 2018)*. Generally, instructors face steep learning curves with the advent of online education and accept that the online environment must be generated so that learning takes place for the students. Various studies presented thatit will become complicated for the faculties in future perioduntil teachers become proficient in teaching online *(Taylor, 2002)*. On the other side, as per the views of students, they have to face some kinds of difficulties like response time, lack of interaction with the instructor and absence of traditional classroom socialization. *(Adnan and Anwar, 2020)* but still they have the view that online learning is cheap, feasible and must be made a part of the study in India beyond the prevailing lockdown period. Engagement with the online learning platforms may prove an essential step to equalizing learning opportunities and preventing widening achievement gaps in the education sector *(Hicks et al., 2020)*.

Though online education is trendy in this era of the 21st century, but there are some drawbacks also. Online education facilitates easy access to education, anytime and anywhere, saves the time of traveling, saves money for educational institutions in the form of light, bus services, cultural activities, *etc*. On the other side, students do not feel comfortable in online education, they feel a lack of interface with educators and they do not pay full attention to the lectures, face various network issues, *etc*. In the present era of digitalization, employability is becoming a critical issue, as till now education world is working on the basics of traditional education system *(Bala and Singh, 2020)*. As higher educational institutions play important role to fulfill the supply of skilled human capital in the market, so by considering the importance of technology and issues of pandemic situation, institutions should plan good ideas for the growth of education sector *(Bala and Singh, 2020)*. The purpose of the study is to analyze the student's perception towards online classes during Covid-19 and to explore the difference in the students' viewpoint in terms of demographic variables like age, gender and qualification.

Review of Literature

Taylor (2002) described the pros and cons of online teaching. As online teaching is easy to access from anywhere, it is the main advantage of this education system, but on the other side, it has various drawbacks because a teacher cannot judge the actual learning status of the students in this system. *Michael (2012)* revealed that student prefer traditional teaching methods compared to online education because students feel that teachers are not professional and cannot provide proper education through online mode. So, for the successful implementation of online education, proper training should be provided to the teaching staff. *Dwivedi et al. (2019)* exhibitedthat students show interest in the classes if they feel that online content is related to their syllabus and essential from the exam's point of view; otherwise, they ignore the classes. *Kara et al. (2019)* stated that the challenges experienced by the students during online education depend upon various factors such as gender, age, skills and knowledge, as well as the context in which they study. *Khan & Khan (2019)* suggestedthat in order to improve online education, proper technological training should be provided to the students and teachers and there should be active individualized interaction between instructors and students. *Kilgour et al. (2019)* found that educators enjoy the facilities of online education like easy access and time saving, but they have to face some challenges also such as connectivity issues and lack of face-to-face communication. *Ahmed et al. (2020)* observed that various social media channels, especially Twitter and Facebook, are playing a significant role during COVID-19 by offering different kinds of online journal clubs, providing rapid dissemination of influential articlesand interactive education. *Ali (2020)* stated that the education system of the whole world is moving more towardse-learning. Student accessibility, staff readiness, motivation and confidence are playing an essential role in ICT integrated learning. *Amemado (2020)* stated that the online education system increased public safety and

helped in maintaining social distance during the pandemic period. *Demuyakor (2020)* highlighted that all the students have adequate knowledge regarding the COVID-19 pandemicand they accept that the implementation of online learning was an excellent idea by the government. *George & Thomas (2020)* presented the issues faced by the students due to online educationsuch as depression, ambiguity, infection, fear, *etc.* *Hashlamoun & Daouk (2020)* indicated that in online education, students have to face various barriers and to understand the English is one of the primary reasons among all the challenges faced by the students. *Hicks et al. (2020)* indicated that promoting equitable access to online learning can improve education policy responses to the pandemic.*Khalili (2020)* stated that aged teachers try to teach the students online, but due to the lack of technological knowledge, they suffer from various barriers like lack of knowledge to facilitate a supportive, engaged, and positive online environment. *Olsen et al., (2020)* found that there are individual differences in students' behaviors between cohorts, but no differences exist between the learning environment. *Rapanta et al. (2020)* described the changes in teaching methods before and after the COVID–19 situation. The study revealed that to make the education system better in pandemic period there is a need to make cognitive, facilitatory and social changes. *Reimers (2020)* suggested some principles for the successful implementation of online education, such as designing the course curriculum as suitable to online classes, low price of network plans, easy access of networks, *etc.* *Izumi et al. (2021)* highlighted the problems during pandemic period like lack of adequate preparedness, change in the teaching mode to online lectures and work from home. *Khlaif et al. (2021)* highlighted the views of students regarding online studios. Students think that the main benefits of online studios are using the digital tools, chances to realize themselves and work efficiently in the distance education process. *Othman (2021)* stated that the transition of the education system to online education requires various considerations of the course curriculum as well as teachers should try to understand the problems of students which they face due to the new educational environment. *Sharma (2021)* revealed that online classes are convenient but the students are not satisfied with the online classes.

Research Objectives
1. To analyse the student's perception towards online classes during Covid-19.
2. To explore the difference in the students' viewpoint in terms of demographic variables like age, gender and qualification.

Hypothesis
H_{01}: There is no difference in the gender-wise viewpoint towards online classes.
H_{02}: There is no difference in the age-wise viewpoint towards online classes.
H_{03}: There is no difference in the qualification-wise viewpoint towardsonline classes.

Methodology
The research design is exploratory-cum-descriptive in nature. The population for the existing study is all the students attending online classes in India, but for the current study, Delhi, NCR, UP and Haryana were selected. The data were gathered through primary sources. For this purpose, a questionnaire was prepared using five-point Likert scale. The study was conducted during July to October 2020. Google forms were sent to 386 students, but only 197 filled it. The response rate was 51 percent. Random sampling technique was used to select the respondents. The data were analysed using independent sample t-test and ANOVA.The reliability was checked by Cronbach's Alpha Coefficient and the value is 0.779. Value of 0.70 and above is considered good*(Nunally, 1978)*.

Results and Discussions
Table-1 shows the demographic profile of the respondents. Out of 197 respondents, majority of them were girls(52.8 percent), in the age group of 15 to 20 years and were graduates(50.3 percent).

Table-1: DemographicProfile of Respondents

Demographic	Characteristics	Frequency	Percentage
Gender	Boys	93	47.2
	Girls	104	52.8
Age (in Years)	Less than 15	47	23.9
	15-20	81	41.1
	More than 20	69	35.0
	Under Graduate	48	24.4
	Graduate	99	50.3
	Post Graduate	50	25.4

Source: Primary Data

Table-2 represents the gender-wise analysis of the students. It shows that the boys prefer online classes over offline mode ($\bar{x}$=3.91, σ=1.29), enjoy learning during online classes ($\bar{x}$=3.77, σ=1.16) and concentrate more during online classes ($\bar{x}$=3.62, σ=1.22) while the girls canconcentrate more during online classes ($\bar{x}$=3.82, σ=1.04), prefer online classes over offline mode ($\bar{x}$=3.81, σ=1.26) and think that online classes are more interactive($\bar{x}$=3.75, σ=1.12). Statistically, t-test results show that there is a significant difference in the students' viewpoint towards 'I feel supported by my institute during online classes' (p=0.048) and 'more learning material is provided during online classes' (p=0.019) at 5 percent level of significance, therefore the null hypothesis (H_{01}) is rejected.

Table-: 2Gender-wise Analysis

Statements	$\bar{x}$		σ		t-test	
	Boys	Girls	Boys	Girls	t-values	Sig
More attention is given to students during online classes	3.31	3.41	1.302	1.204	0.569	0.570
Online classes are more interactive	3.58	3.75	1.271	1.121	0.429	0.668
I face problem in understanding the concepts in online classes	2.09	2.06	1.148	1.050	0.181	0.857
I feel supported by my institute during online classes	2.91	2.57	1.282	1.164	1.989	0.048*
I am more focused on the subjects due to online classes	3.55	3.42	1.238	1.172	0.730	0.467
My academic performance is enhanced due to online classes	2.88	3.14	1.187	1.161	1.567	0.119
I can concentrate more during online classes	3.62	3.82	1.224	1.104	1.168	0.244
I prefer online classes over offline mode	3.91	3.81	1.299	1.260	0.530	0.597
I am more comfortable in online classes	3.44	3.45	1.118	1.114	0.069	0.945
More learning material is provided during online classes	3.04	2.68	1.179	0.958	2.364	0.019*
I enjoy learning during online classes	3.77	3.69	1.162	1.247	0.475	0.635

*=Significant at 5 percent level
Source: Primary Survey

Table-3shows age-wise analysis of the students. Students who were less than 15 years preferonline classes over offline mode ($\bar{x}$=3.94, σ=1.34), think that online classes are more interactive($\bar{x}$=3.91, σ=1.03)and concentrate more during online classes ($\bar{x}$=3.85, σ=1.08). Students who were in the age group of 15-20 enjoy learning during online classes ($\bar{x}$=3.74, σ=1.18), prefer online classes over offline

mode ($\bar{x}$=3.70, σ=1.24) and concentrate more during online classes ($\bar{x}$=3.64, σ=1.20) while the students who were above 20 years prefer online classes over offline mode ($\bar{x}$=4.00, σ=1.26), think that online classes are more interactive($\bar{x}$=3.74, σ=1.19)and enjoy learning during online classes ($\bar{x}$=3.73, σ=1.23).

Statistically, ANOVA results show that there is a significant difference in the students' viewpoint towards 'online classes are more interactive'(p=0.019) at 5 percent level of significance, therefore the null hypothesis (H_{02}) is rejected.

Table-3: Age-wise Analysis

Statements	$\bar{x}$			σ			ANOVA	
	<15 years	15-20 years	>20 years	<15 years	15-20 years	>20 years	F	Sig.
More attention is given to students during online classes	3.57	3.36	3.23	1.137	1.288	1.274	1.055	0.350
Online classes are more interactive	3.91	3.35	3.74	1.039	1.226	1.196	4.051	0.019*
I face problem in understanding the concepts in online classes	2.17	2.02	2.06	1.185	1.037	1.110	0.268	0.765
I feel supported by my institute during online classes	3.00	2.67	2.62	1.285	1.151	1.273	1.507	0.224
I am more focused on the subjects due to online classes	3.57	3.44	3.46	1.211	1.235	1.170	0.185	0.831
My academic performance is enhanced due to online classes	3.09	2.93	3.09	1.060	1.191	1.245	0.439	0.645
I can concentrate more during online classes	3.85	3.64	3.74	1.083	1.207	1.171	0.485	0.617
I prefer online classes over offline mode	3.94	3.70	4.00	1.342	1.249	1.260	1.107	0.333
I am more comfortable in online classes	3.53	3.35	3.51	1.231	1.014	1.146	0.571	0.566
More learning material is provided during online classes	2.91	2.90	2.75	1.120	1.125	1.006	0.447	0.640
I enjoy learning during online classes	3.70	3.74	3.73	1.232	1.181	1.233	0.018	0.983

*=Significant at 5 percent level
Source: Primary Survey

Table-4 represents thequalification-wise analysis of the respondents. The students who are under graduatesenjoy learning during online classes ($\bar{x}$=3.79, σ=1.21), prefer online classes over offline mode ($\bar{x}$=3.78, σ=1.24) and can concentrate more during online classes

($\bar{x}$=3.77, σ=1.15).Students who aregraduates prefer online classes over offline mode ($\bar{x}$=3.77, σ=1.34), enjoy learning during online classes ($\bar{x}$=3.69, σ=1.29) and concentrate more during online classes ($\bar{x}$=3.68, σ=1.22). Students who are post-graduatesprefer online classes over offline mode ($\bar{x}$=4.12, σ=1.27), think that online classes are more interactive($\bar{x}$=3.72, σ=1.41) and enjoy learning during online classes ($\bar{x}$=3.68, σ=1.11). Statistically, ANOVA results show that there is a significant difference in the students' viewpoint towards 'I feel supported by my institute during online classes' (p=0.046) at 5 percent level of significance, therefore the null hypothesis (H_{03}) is rejected.

Table-4: Qualification-wise Analysis

Statements	$\bar{x}$			σ			ANOVA	
	UG	Grad	PG	UG	Grad	PG	F	Sig.
More attention is given to students during online classes	3.48	3.08	3.40	1.248	1.302	1.178	1.709	0.184
Online classes are more interactive	3.63	3.50	3.72	1.036	1.255	1.415	0.418	0.659
I face problem in understanding the concepts in online classes	2.03	2.06	2.16	1.083	1.060	1.167	0.233	0.792
I feel supported by my institute during online classes	2.59	2.65	3.10	1.187	1.263	1.233	3.118	0.046*
I am more focused on the subjects due to online classes	3.54	3.31	3.54	1.240	1.188	1.147	0.631	0.533
My academic performance is enhanced due to online classes	3.04	3.02	2.98	1.169	1.229	1.169	0.043	0.958
I can concentrate more during online classes	3.77	3.68	3.67	1.159	1.223	1.133	0.128	0.880
I prefer online classes over offline mode	3.78	3.77	4.12	1.242	1.341	1.272	1.364	0.258
I am more comfortable in online classes	3.45	3.33	3.54	1.043	1.117	1.249	0.425	0.654
More learning material is provided during online classes	2.75	2.92	3.00	0.951	1.235	1.161	1.019	0.363
I enjoy learning during online classes	3.79	3.69	3.68	1.217	1.291	1.115	0.149	0.861

*=Significant at 5 percent level
Source: Primary Survey

Conclusion

The present study revealed the student's perception towards online classes during

Covid-19 and explored the difference in the students' viewpoint in terms of demographic variables like age, gender and qualification. The study concluded that the boys prefer online classes over offline mode while the girls said that they can concentrate more during online classes. Students who were less than 15 years and above 20 years prefer online classes over offline mode while students who were in the age group of 15-20 enjoy learning during online classes. Students who were under graduate enjoy learning during online classes, however students who were graduates and post-graduatesprefer online classes over offline mode. Online learning became popular during the pandemic period as it has become necessary to transform the whole education system in online mode. To convert the whole education system into the online system was not an easy task for educational institutions, but the institutions and educators have made various strenuous efforts.

Implications of Study

The paper adds value to the previous literature on online classes. This study will be useful to the students, faculties and educational institutes as they will be able to know the perception of students towards online classes. The study will provide reference to the researchers to conduct the study in same stream.

Limitations and Further Scope of Research

The study was limited to Delhi, NCR, UP and Haryana, so the results may not be applicable to the whole nation. The sample size was small, so the results may not be generalized. The present study only focused on student's perception towards online classes so further studies may include the viewpoint of teachers.The present study was limited to descriptive statistics, t-test and ANOVA, therefore upcoming studies may be done using various other statistical tests. In the current study, the data were gathered through questionnaire only, so other methods like interviews and observations can be used for future research.

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