Perception of Students Studying in Colleges Towards Learning through Online in Pandemic Situation

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Abstract--- *In this pandemic situation, the purpose of this analysis is to determine students' perceptions of online learning. Because the educational platform has made a sudden shift away from traditional classroom learning methods, the study focuses on how students have perceived it as well as the risk associated with this transition.*

Keywords--- *Numerous Organisations, Online in Pandemic, Perception of Students.*

I. INTRODUCTION

The COVID-19 epidemic has had an impact on educational systems all across the world. Because of this, educational institutions have been forced to close, resulting in the exclusion of nearly 90 percent of the world's student population. The circumstance resulted in the forced absorption of learners into e-learning during this atypical phase of the Covid-19 pandemic, as the face-to-face learning approach was no longer appropriate during this period of Covid-19 Pandemic Lockdown. Our educational system has turned to e-learning in order to maintain continuity and to reframe and continue the teaching and learning activities in educational institutions, which is an incomplete or may not be an adequate solution to the crisis, but it is a rapid answer. The government and other communities throughout the world are adopting innovative tactics to keep the issue under control and to keep the virus from spreading much farther. As a result, individuals are being counselled to do nothing and their ability to relocate is being curtailed. Because social separation is the only option to prevent the transmission of this virus, lockdowns were facilitated around the country, and individuals were advised to stay at their places of residence. A virus known as "coronavirus" causes Coronavirus disease (COVID-19), which is a newly discovered transmissible disease that is caused by a virus known as "coronavirus." The lockdown caused by COVID 19 has had the greatest impact on students' life, since they were no longer able to connect with their professors on a one-on-one basis as they had been previously. This movement in the educational system from traditional classroom-based learning to computer-based learning may be one of the most significant educational experiments to have taken place in recent history. In light of the outbreak of the COVID 19 pandemic in India, it is critical to understand the growth of this method of teaching and learning. It is also critical to understand whether it is convenient for students and whether it assists them in achieving the goals they set for them while in college and during their education. Because of this, the purpose of the current study was to gain a better understanding of the student's viewpoint, attitudes, and willingness to participate in online programmes offered at the university level. Following the instructions of the Honorable Prime Minister of

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India Shri Narendra Modi Ji, the shutdown of numerous organisations has had a significant impact on the life of every citizen in the country. Because each individual is being negatively impacted, the life of a student is no less negatively impacted than the lives of any other individuals. They are have a tough time coping with these conditions. The traditional teaching and learning techniques used by the Indian educational system, which involves one-on-one interaction between students and teachers, were continued. The lockout occurred as a result of COVID 19 having a negative impact on the lives of kids, who are no longer able to participate in their typical classroom learning activities, which include fun learning through interaction and activities. During this stage, it becomes increasingly difficult to maintain a continuous and unaffected education in the face of this terrible pandemic. Consequently, a system that can act as a unifying factor between students and teachers becomes necessary to facilitate communication. Learning is a continuous process, and as a result of the 21-day lockdown, the government and private institutions transitioned from classroom teaching to e-learning in order to keep the learning process moving forward without a snooze button. Many public and private organisations have made the transition from traditional classroom instruction to digital instruction. As a result, they have begun teaching their students in the most effective manner possible through online classes in order to ensure that the global COVID-19 pandemic does not interfere with the students' education. Students have been unable to attend classes because the campuses have been closed, but lecturers have been hard at work preparing valuable study materials for their students to ensure that the teaching-learning process is not disrupted. Teachers are working extremely hard to achieve the best possible results for their students and are available to them at all hours of the day in order to reduce the difficulty and disruption being experienced by students all over the world as a result of the pandemic.

II. LITERATURE REVIEW

Liguori & Winkler, 2020 Studies on resistance to change will be of little assistance to any academic institution anywhere in the nation. They will be assessed on their ability to adjust to shifts in such a short period of time as well as their ability to maintain the quality of the work. The legal standing of school units is at danger, and it is being scrutinised by the authorities. Their ability to adapt is demonstrated by how effectively they handle themselves and how well they maintain their educational quality in the midst of a crisis. The only plausible option was to move away from face-to-face lectures and towards an online learning environment. To be sure, academic institutions could not change the entirety of their college courses into an online resource in a matter of weeks or months. The three most difficult difficulties for online teaching are the following: distance dominating, scalability, and the form of individualised tutoring and knowledge improvement. Institutions that come up with innovative ideas will only be able to assist us deal with this crisis.

Carey, 2020 concentrated on online learning in order to emerge victorious in this pandemonium. As a result, improving the overall quality of online teaching and learning is critical at this point in time. Following the Covid-19 outbreak, online instruction at Chinese institutions has risen at an exponential rate. As a result, there has been an abrupt movement from traditional classrooms to virtual classrooms, meaning that educators have transformed their whole teaching strategy in order to deal with new market conditions and adapt to shifting circumstances. During this difficult moment, the greatest concern is not whether online teaching–learning techniques would deliver and prevail

in higher-quality education, but rather how academic institutions will be able to implement online learning in such a large-scale manner during this period of uncertainty.

Basilaia et al., 2020 determined that a rapid transition to online learning is required; as a result, Google's products, which include applications such as Gmail, Google Forms, Google Calendars, G-Drive, Google Hangouts, Google Jam board and Drawings, Google Classroom, and Open Board Software, can be extremely useful in such difficult situations (not a Google creation paves the path for recording the meetings in the forms of files). These technologies might be used to efficiently replace face-to-face classes in some situations.

Singh & Thurman, 2019 analysed that online learning can be considered a tactic that can make the teaching–learning process more student-centered, more unique, and even more versatile. Online learning is described as "learning experiences that take place in synchronous or asynchronous scenarios utilising a variety of devices (e.g., mobile phones, computers, etc.) that are connected to the internet." Students can be anywhere (independent) and yet learn and engage with teachers and other students in such scenarios".

Dashti and Aldashti 2015 The College of Basic Education in Kuwait performed a research on "students' conceptions toward using mobile learning at the College of Basic Education in Kuwait," in which they distributed 300 questionnaires to female students and discovered that 80 percent were comfortable with using mobile devices as a study aid, and that mobile learning improved their knowledge of English language proficiency.

Miller 2014 In 1922, researchers attempted to determine if the University of Chicago was the first academic institution of higher learning to broadcast classes over the radio. The first aired college lessons were introduced in 1953, three decades after the University of Houston suggested them in the same year. Approximately four decades passed between the "old" form of academic environment and the current version of online learning, which was fueled by the Department of Defense's Arpanet in the United States in 1969 and subsequently on the Internet. According to the published sources, the University of Phoenix was founded in 1989 with the goal of being the first privately owned academic institution to provide degree programmes using a synchronized online method of delivery in the United States.

Pappas 2013 This brochure from the University of Wisconsin-Madison was the first time the word "distance education" appeared in the United States, and it was published in 1892. The beginnings of the contemporary Internet-based e-learning in the United States may be traced back to the paper-based correspondence study in Boston in 1728, when Caleb Phillips promoted an university course in the Boston Gazette newspaper, which was the first newspaper in the United States to do so (Ferryman, 2013). In the 1800s, access to higher education was severely restricted due to the geographic distance between prospective students and educational institutions. This situation changed in 1892 when Pennsylvania State University introduced a new opportunity in the form of a correspondence study programme, which has since become widely used (Banas and Emory, 1998).

III. OBJECTIVES OF THE STUDY

Primary Objective

To determine how students felt about e-learning during the Covid-19 lockdown period.

Secondary Objectives

To identify the impact of e-learning/online sessions during the Covid-19 lockdown period.

To examine whether students' perceptions differed depending on their characteristics.

To assess the acceptance of e-learning as an alternative to face-to-face learning.

IV. RESEARCH METHODOLOGY AND RESEARCH DESIGN

Data collection appears to be the most crucial and indispensable facet of any research project because the entire outcome of the study is dependent on the data and information collected; therefore, the methods used by me to collect the data was an online questionnaire in Google forms. The final explanation was derived from the research that were mentioned regarding the perspective and attitude of students toward e-learning.

Student perception is fundamentally a way of looking at things from multiple perspectives, and the primary goal of this study is to discover the students' perceptions, as well as to examine the level of acceptability of e-learning as an alternative to face-to-face learning sessions. It was entirely dependent on the primary and secondary data for this investigation. The information for this study was gathered by the distribution of a questionnaire among students at various universities around the country via the internet. Techniques for doing research include developing research hypotheses, developing research designs, developing tools, developing instruments, developing data specifications, developing sampling frames, and developing data analysis methods.

The descriptive research approach that was used in this study is very appropriate for the subject matter. Studies that are descriptive in nature are those that are concerned with characterizing the features of a person or a group of individuals. The major descriptive research is utilised for a variety of various types of fact finding. A survey is carried out with a strong emphasis on reasoning in order to determine the views and attitudes of the pupils. An anonymous self-administered questionnaire was circulated with several occupants in order to collect data, and 112 replies were collected. Descriptive statistics, the chi square test, and the Wilcoxon rank sum tests were all employed in the analysis of the information. It was decided to analyse the replies from the students utilising some of the most trustworthy statistical measuring tools available, such as the Statistical Package for Social Sciences (SPSS) version 16 software.

The questionnaire was divided into four sections. In the first section of the survey study, students were asked to provide their personal information, which included their age, gender, and year of study, as well as a description of their IT abilities and a statement about whether or not they had previously participated in any of the online courses. In the second round, the respondents were presented with six sets of alternatives depicting the advantages and downsides of e-learning, from which they were free to select as many as they believed to be true for themselves. In the final section, respondents were asked to compare face-to-face learning with online learning, using a Likert scale (1 being clearly ineffective, 5 being certainly effective), in terms of capacity to grasp learning goals (knowledge, personal traits and social competences). Students were also asked to assess their level of activity throughout class using a 5-point scale (1 being highly sedentary and 5 being extremely active).

When it comes to complete the last section, students were required to score their degree of acceptance of online learning using a Likert scale and five alternatives ranging from 1 to 5 (1 = extremely unpleasant, 5 = really nice).

V. DATA ANALYSIS AND INTERPRETATION

1. Demographic Analysis

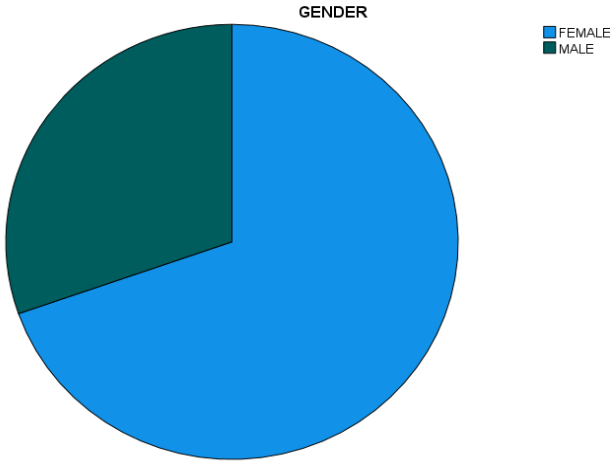

Fig. 1: Gender

The gender of the responders is depicted in the illustration above. It is found that 69.6 percent of the respondents are female, while 30.4 percent of the respondents are male in this study. As a result, females make up the vast majority of those who participate in the study.

According to the findings of this paper's age analysis, 39.3 percent of the respondents are between the ages of 22 and 29, which is the majority age group among the respondents. The age group of 26 is represented by 0.9 percent of those who answered the survey's questions, which is a minority among those who answered the survey's questions.

In this study, roughly 61.6 percent of respondents are enrolled in post-graduate programmes, while 38.4 percent of respondents are enrolled in programmes leading to undergraduate degrees. As a result, the vast majority of responders are currently enrolled in post-graduate studies.

2. Descriptive Statistics

Descriptive statistics are used to characterise the fundamental characteristics of the data utilised in the investigation. They provide concise descriptions of the sample and the measurements that were employed. Together with the straightforward graphic examination, they serve as the foundation for practically any measurable data analysis.

For the purpose of analysing the advantages of e-learning, descriptive analysis is carried out. A standard deviation of 0.499 is obtained for the ability to record the meeting, with a mean value of 1.553. For courses with high interaction, a standard deviation of 0.243 is obtained for a mean value of 1.937. As a result, the majority of respondents view the capacity to record meetings to be a benefit of e-learning, with the least amount of consideration given to the interaction of classes.

For the purpose of analysing the disadvantages of e-learning, descriptive analysis is carried out. For lack of discipline, a standard deviation of 2.18034 is obtained, whereas the mean value is 1.8036. The standard deviation is 0.45793 when the learning circumstances are inadequate for the mean value of 1.7054 at home. As a result, the majority of respondents consider a lack of discipline to be a disadvantage of e-learning, whereas bad learning conditions at home have little impact on the majority of respondents.

3. Wilcoxon Signed Ranks Test

When comparing two related samples or matched samples, or when analysing the frequent dimensions on a single sample, the Wilcoxon signed-rank test is used to determine whether or not there are changes in the populations mean rank, the Wilcoxon signed-rank test is shown.

In order to compare e-learning with face-to-face learning in terms of different features, hypotheses must be established. In order to perform the analysis and infer the findings, two hypotheses must be established, which are referred to as the Null Hypothesis (H0) and the Alternate Hypothesis (H1). If the findings are statistically significant, the Null Hypothesis (H0) is rejected and the Alternate Hypothesis (H1) is accepted; if the results are not statistically significant, the Null Hypothesis (H0) is rejected and the Alternate Hypothesis (H1) is accepted.

Comparison of e-learning and Face to Face Learning in Terms of Knowledge

H0: There is no significant difference between e-learning and face to face learning in terms of increasing knowledge.

		N	*Mean Rank*	*Sum of Ranks*
face to face learning e-learning	Negative Ranks	20	33.10	662.00
	Positive Ranks	62	44.21	2741.0
	Ties	30		
	Total	112		

Test statistics	
	Face to face learning - e-learning
Z	-4.939
Asymp. Sig. (2-tailed)	.000

Wilcoxon rank test carried for comparing e-learning and face to face learning in terms of increasing knowledge. When the Z value is nearly equal to the significant value zero, the null hypothesis may be regarded as a possibility. Because the z value is -4.930, it is less than the statistically significant value, and so the null hypothesis is rejected and the alternative hypothesis is accepted. In terms of developing knowledge, the mean rank for e-learning is greater (M=44.21) than the mean rank for face-to-face learning (M=33.10).

Comparison of e-learning and Face to Face Learning in Terms of Personal Traits

H0: E-learning has no relation towards face to face learning in terms of increasing personal traits.

Ranks

	N	*Mean Rank*	*Sum of Ranks*	
Face to face learning - e-learning	Negative Ranks	11	31.8	343.0
	Positive Ranks	70	42.58	2978.0
	Ties	31		
	Total	112		

Test statistics	
	Face to Face Learning - E-Learning
Z	-6.3295
Asymp. Sig. (2-tailed)	.000

Wilcoxon rank test used to compare e-learning versus face-to face learning in terms of personal attributes being improved. In this case, the null hypothesis may be accepted if the Z value is close to zero. Because the z value is -6.325, alternative hypothesis h1 is accepted. There is a statistically significant difference between e-learning and face-to-face learning when it comes to growing one's personal attributes.

Comparison of e-learning and Face to Face Learning in Terms of Social Competence

H0: There is no significant difference between e-learning and face to face learning in terms of increasing social competence.

Ranks

		N	*Mean Rank*	*Sum of Ranks*
Face to face learning - e-learning	Negative Ranks	10	19.80	198.0
	Positive Ranks	60	41.87	2805.0
	Ties	35		
	Total	112		

E-learning and face-to-face learning were compared using the Wilcoxon rank test with the purpose of enhancing social competence. In this case, the null hypothesis may be accepted if the Z value is close to zero. We can rule out the null hypothesis and accept the alternative hypothesis since z = -6.710, which is below the significant value. When it comes to improving social skills, e-learning ranks better than face-to-face education, which ranks lower (M=19.80).

Comparison of e-learning and Face to Face Learning in Terms of Class Participation

H0: There is no significant difference between e-learning and face to face learning in terms of class participation.

Ranks

		N	*Mean Rank*	*Sum of Ranks*
Face to face learning - e-learning	Negative Ranks	10	45.8	458.0
	Positive Ranks	71	40.32	2863.0
	Ties	31		
	Total	112		

Test statistics	
	Face to face learning - e-learning
Z	-5.803
Asymp. Sig. (2-tailed)	.000

In order to compare the effectiveness of e-learning versus face-to-face learning in terms of class participation, the Wilcoxon rank test was used. This hypothesis might be adopted when the Z value is almost equal to zero, which corresponds to a significant value of zero. Because the z value is -5.803, it is less than the statistically significant value, and so the null hypothesis is rejected and the alternative hypothesis is accepted. Face-to-face learning has a higher mean rank (M=45.80) than e-learning, which has a lower mean rank (M=40.32) in terms of participation in class sessions.

4. Chi Square Test

It is possible to use another measuring programme, the chi-squared test, often known as the T test, to determine if a given test statistic is chi-squared distributed when testing the null hypothesis. When the test statistic is chi-squared distributed, it is especially Karl Pearson's chi-squared test and variations thereof that are legitimate to employ.

To Find the Relationship between Gender and e-learning Acceptance

H0: There is no significant relationship between gender and e-learning acceptance.

	Value	*df*	*Asym sig (2-sided)*
Pearson Chi-Square	14.171	4	.007
Likelihood Ratio	13.728	4	.008
Linear-by-Linear Association	8.370	1	.004
N of Valid Cases	112		

In light of the fact that the chi-square value is 0.007, which is less than 0.05 at the 95 percent confidence level, the null hypothesis is rejected, and the alternative hypothesis is accepted, namely that there is a statistically significant difference between gender and adoption of e-learning.

VI. FINDINGS

According to the respondents, the majority of them are between the ages of 22 and 24. Female respondents (69.6 percent) outnumber male respondents (69.4 percent) (30.4). 61.6 percent of those who answered the survey are pursuing post-graduate studies, while 38.4 percent are pursuing undergraduate studies. The majority of respondents with modest IT abilities had also never participated in e-learning before the Corona phase. The COVID-19 phase forced the majority of respondents to get more used to e-learning. The capacity to record meetings, as well as access to online resources, were judged to be the most helpful aspects of e-learning, according to the respondents. Learning in one's own environment was also found to be advantageous. Lack of discipline appears to be one of the most significant disadvantages, with respondents reporting negative impacts from social isolation as well as technological difficulties encountered while e-learning. In terms of expanding knowledge, e-learning is chosen by the majority of

respondents when comparing face-to-face learning with beneficiaries for the purpose of enhancing their personal attributes, according to the results of the survey. According to the answer, e-learning might also help them improve their social skills as well. Gender appears to be a role in determining whether or not students accept e-learning; female students appear to be the most accepting of e-learning. The acceptability of e-learning is not influenced by one's educational background.

VII. SUGGESTIONS

It is always possible for people to be resistant to change, which is why the kids found this abrupt changeover to be a little unsettling. Transitioning to online education can be a tough process, therefore be more involved and participatory in order to become familiar with this new shift. One of the most significant risks while making the move to online study is the increasing degree of diversion, and our houses are notoriously loaded with distraction to an even higher extent. A few examples are social media, television, the internet, video-on-demand (VOD), video games, YouTube, family, and literature, among other things. This means that an appropriate environment free of distractions must be selected and the area designated as a study centre must be maintained. Keeping distractions at bay is much easier said than done, but there are several strategies and programmes that may assist you. For example, leaving your phone on the other side of the room or in another room can be beneficial. The most important thing is to keep it out of reach of our hands and make it more difficult for you to delay with it. Another efficiency-enhancing tool for online learning is the use of website filters, many of which include extra productivity features that may be used across different platforms and devices, such as smartphones and tablets. Making the abrupt transition from a busy classroom setting to the seclusion of home study may be quite intimidating, and it appears to be a tough transition to make. Just because you are self-isolating does not imply that you are alone; in fact, many of your classmates are experiencing the same difficulties as you. Prevent unfavorable emotions like these and place a high value on the desire to learn at the top of your priority list. If you are the sort of person who gets inspired and driven by conversing with your classmates and friends, it may be time to reach out and form a virtual study group for yourself. You can learn about a social media group and set up a time for your virtual study group to meet online.

VIII. CONCLUSION

According to the findings of this study, e-learning is a beneficial means of instructing college students. E-learning, according to the responses to our study, is successful in boosting knowledge and is widely accepted by the general public. However, it is critical to not just concentrate on expanding information, but also on strengthening social contacts. Student readiness to engage with the materials and get feedback is essential for successful e-learning. Not only should the distribution of information be supported, but students should also be prepared to work with the materials and receive feedback. A well-thought-out plan, as well as a more proactive attitude, are required for the successful integration of online learning into academics; this is not an easy feat. When it comes to e-learning, it involves more than just a shift in technology. In this way, we may redefine how we pass on information, skills, and values to our younger generations of employees and students, as well as to future generations of workers. Following are some predictions on how eLearning and the purposes it serves will continue to evolve in the next years, as well as about its significance and prominence. Millions or billions of knowledge and

data modules will be made available to learners. Along with the use of web pages with simple text and pictures, there is also the use of video. Others may be comprised of multimedia simulations or other forms of interaction. E-learning has become the standard method of conducting training or providing education and counselling to employees in a wide range of sectors other than the educational sector. There are four critical characteristics of e-learning that must be considered. The first part is concerned with teaching what learners need to know in the manner in which they most naturally acquire it, without making any modifications. The second part focuses on defining specific learning objectives that are easy to understand. The third aspect specifies how the first two components are to be assembled. It is necessary to maintain attention on the appropriate goals. The last components are dependent on the effectiveness of testing. After doing this research, it has been determined that there is a link between emotional intelligence and academic success. Self-motivation is the most accurate predictor that may be utilised to improve academic performance. The university can devote more resources to the many psychologically linked seminars and activities that can assist students in improving their self-motivation while also encouraging and motivating them to do better in their tests, among other things.

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