# HIGHER EDUCATION REMOTE ASSESSMENT AFTER COVID-19 PANDEMIC IN INDIA

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## *ABSTRACT*

*Due to the massive spread of the Covid-19 virus, colleges have been forced to use online learning. The majority of these educational establishments, on the other hand, were ill-prepared to offer every course online. Universities face a number of important issues, including inadequate technology, a lack of appropriate online tools, and a lack of experience with remote learning among teachers and students. A new problem arose in addition to everything else that was going on: which methods would be used to investigate the situation? After the pandemic, this study set out to find out what kinds of common evaluation methods were used, how students felt about the quality of the evaluation, and the benefits and drawbacks of using different evaluation methods. We also looked into whether interactions between students and faculty members affected students' perceptions of the quality of reopened colleges and universities' tests. In order to answer four survey-style research questions, the researchers used a three-part instrument to collect both qualitative and quantitative data. There were a total of nine questions on the test. The study had 150 participants all together. It is safe to assert that the vast majority of students are pleased with the manner in which they are graded because assignments are the method of evaluation that is utilized the most frequently. When students speak with teachers, they express satisfaction with the overall quality of the assessment procedures. This exemplifies the significance of feedback and formative evaluation in remote evaluation. Online test takers also expressed satisfaction with the evaluation's overall quality. It was planned to carry out additional research.*


***Keywords**: Remote assessment, Measurement and evaluation, Distance education, Online test, E-assessment.*


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## I. Introduction

The risks we face will increase as more people and places around the world become connected. Due to the failure of national borders to contain the COVID-19 outbreak, it has been challenging. In some way, everyone has been impacted, regardless of gender, education level, income, or location. On the other hand, society's most helpless and vulnerable members have suffered the most. Education-related expenses are subject to taxation. Students from wealthy families who are capable of learning, who want to learn, and whose parents want them to learn may be able to find other ways to learn and circumvent closed college doors. When colleges close, children from low-income families frequently miss out. As a result of the crisis, numerous difficulties and disparities in our educational systems have emerged. These issues include a mismatch between resources and requirements and a lack of access to the bandwidth and equipment needed for online education. They also include a lack of learning environments that are encouraging. It is important to take into account the growing popularity of online education.

Higher education institutions suffered significant damage as a result of the lockdown strategies implemented in response to the COVID-19 pandemic. Universities have been forced to close, and border security has been increased by governments. These closures had an effect on students' ability to learn and perform well on tests, as well as their safety and legal standing in the nation where they were studying abroad, despite the fact that colleges and universities rushed to replace traditional classroom instruction with online learning. In light of the current economic downturn, people have been discussing the value of a university degree, which enables you to not only learn new things but also meet new people and establish professional connections. Digitalization can be used to broaden and strengthen relationships between students, teachers, and other people if universities are to fulfill their original function in the near future. Renovations to colleges and other institutions will undoubtedly benefit students and the economy as a whole. The renewed introduction of examples won't just help families monetarily, yet will likewise permit a few guardians to get back to work. Families will be able to earn more money as a result. However, these benefits must be carefully balanced against the health risks they pose and the urgent need to lessen the epidemic's impact. As a result, all government officials in charge of education and public health must work together consistently and successfully. More local involvement and autonomy should be given to this coordination, and solutions should be tailored to each region's requirements. Changing personnel and attendance policies, implementing physical separation measures, establishing cleanliness regulations, investing in staff training on the best ways to combat the infection, and so on are all ways to address

risks and trade-offs. These are only a few examples of actions that could be taken. Nevertheless, the issues will not be resolved after the current crisis has passed. In the upcoming years, there is a possibility that educational programs, in particular, will receive less funding. Even though some nations have implemented short-term stimulus packages, diverting public funds to social welfare and health care programs jeopardizes long-term investments in education. Private funding will become increasingly difficult to obtain if the economy continues to struggle and the unemployment rate rises. In nations where international students pay higher tuition, there is less money available because travel restrictions make it harder for them to move around. This is taking place in higher education institutions. This happens in countries where educational cost for nearby understudies is essentially lower than educational cost for global understudies. For a bigger scope, the lockout was one of the variables that added to the labor force turning out to be more lopsided. Despite the fact that many of them have been on the front lines of the fight against the disease and have made contributions to society, people with less education are less likely to be able to work from home. On the other hand, most people who have the most education are able to work from home. The purpose of this study was to find out how students in India felt about their college education following the COVID-19 outbreak because it had such a significant impact on their brains. This was done to answer the question, "Has the epidemic changed the way students perceive things after COVID?" This study aims to find out if students' prior educational experiences and backgrounds have a significant impact on their perceptions of the educational environment in higher education institutions.

**Literature Review**

The impact of COVID on the educational system Since the post-COVID-19 phase will soon transition into a new normal, it is essential for curriculum studies to make changes to the educational environment (Khan et al.). 2021). Online grading of student work and traditional classroom grading share many similarities. The online educational evaluation is available in both asynchronous and synchronous formats in the system (Tinsley 2020). Both synchronous and asynchronous communication protocols are required for online educational environments to function properly. During synchronous online collaboration, the tutor and student collaborate online at a predetermined time using programs like Zoom. Online and in real time, this kind of instruction is available (Chaves et al.). 2021). Additionally, mobile devices like smartphones can be used for learning and the teacher can simultaneously provide students with feedback (BUDI and Anshori, 2020). In asynchronous online training, neither the instructor nor the student communicate with one another at any point during the learning process. In order to investigate the many facets of the issue under investigation,

they are relocated to various locations and times. Moodle is the stage utilized for this sort of assessment, and inside it, the guide will give educational data to the mentees as postings (Joshi et al. 2020). Educating and coaching require a great many capacities and outlooks, which are communicated through the teacher's disposition in the homeroom. The students' behavior in the classroom is significantly influenced by the instructor's demeanor. A significant amount of knowledge must be imparted, some of which is required and others merely elective, in order for educators to fulfill their societal responsibility (Fatimah et al.). 2021). Because of this, a student's self-esteem and self-image improve as a direct result of the overall synergy, communication, and cooperation in the classroom. This is due to the fact that physical learning halls and labs provide teachers and students with an environment that encourages in-depth instruction (Mok et al.). 2021). By first analyzing, then reiterating, and finally evaluating their ideas, the instructor can re-establish students' prior knowledge of a subject. According to Jebaseelan (2016), this enables the teacher to achieve the desired result.

**Educational environment in India**

Which colleges are affected by COVID? Curriculum studies must make changes to the educational environment because the post-COVID-19 era will soon settle into a new normal (Khan et al.). 2021). In both the classroom and online, students' work is evaluated in many of the same ways. There is a real-time and a non-real-time version of the online teacher assessment (Tinsley 2020). Both real-time and non-real-time communication strategies underpin online education. The tutor and student collaborate online using tools like Zoom at a predetermined time during the synchronous type. In real time, this kind of online instruction takes place (Chaves et al. 2021). Mobile devices like smartphones can also be used for learning, and teachers can simultaneously give students feedback on them (BUDI and Anshori 2020). When a student learns online in an asynchronous setting, there is no communication between the teacher and the student. In order to investigate various aspects of the subject, they are relocated to various locations at various times. This kind of evaluation is done on Moodle, and postings are how the mentor gives the mentees information to help them learn (Joshi et al.). 2020). A teacher's behavior demonstrates the variety of skills and attitudes required for teaching and tutoring. The students' behavior is significantly influenced by the teacher's actions. Teachers must impart a lot of information in order to accomplish their tasks, some of which is valuable and others that is not (Fatimah et al. 2021). Consequently, a student's self-esteem and self-image are affected by their classroom collaboration, communication, and cooperation. This is because physical classrooms

and labs encourage professors and students alike to engage in deep learning (Mok et al.). 2021). Consequently, by analyzing, enforcing, and ultimately determining what the students believe, the instructor can remind students of what they already know about a subject (Jebaseelan, 2016).

**Teaching and learning**

Change is part of learning, like when you learn a new skill, understand a logical law, or change how you think. Teaching is a set of events that happen outside of the classroom to help students learn inside. According to Sawarkar and Sawarkar 2020, learning is all about change. A person's thoughts, actions, and behaviors are often changed intentionally during the process of learning, which is a process that lasts a lifetime. Instruction's goal is to assist individuals with working on their psyches. (Falcone 2020) This can happen through formal or informal education. Teaching takes place outside, while learning takes place within. This suggests that teaching must come from outside the learner while learning must come from within the learner. In an educational setting, there are many different aspects to the teaching process. It affects homeroom exercises due to how different parts of instruction, like understudies, instructors, neighborhood conditions, and the educational plan, connect with each other (Hair 2020).

Evaluation or assessment is the only quantitative method that should be used to determine a student's performance (Dochy et al.). 2005; 2006 (Skarphedinsson) There are two approaches to evaluation: the old method and the new strategy. Essays and multiple-choice tests, according to Sawarkar & Sawarkar (2020), are the most common evaluation methods. Modern evaluation techniques include portfolios, simulations, self- and peer-evaluations, and other novel approaches. It's possible that a student's motivation to learn changes when their work is graded by a teacher. Evaluation is one of the most important methods for determining how students perceive their learning from a logical and factual perspective (Cano et al.). 2020; Coubergs and co 2017; 2019) Han and Ellis

**College and administration**

The policies of administrative departments and management have a significant impact on students' motivation to learn (Mok et al.). 2021). Additionally, it stated that the college administration's actions will have an indirect impact on the educational setting. The educational

environment as a whole will benefit if management makes sound decisions. Therefore, it is essential to know how students perceive the college and its administration.

**Teacher**

A teacher is someone whose primary occupation is teaching in formal educational settings like colleges and universities, according to the Cambridge English Dictionary. According to the findings of numerous studies looking into how students perceive their teachers, teachers can inspire or motivate their students to perform better in class (Joshi et al. 2020; Vega-Hernández and others 2020), and that their actions in the classroom help students learn (Muthuprasad et al., 2000). 2021; Schwab and co. 2018; Stormon and co 2019). Since teachers play a bigger role in their students' growth, it's important to know how students feel about their professors.

**Online class**

According to Bao 2020, an online class is one in which students take lessons or learn online rather than in person. Online education is now required by all colleges and other institutions as a result of the COVID-19 virus. As of right now, it is an essential part of the educational setting (Ali 2020; Bestiantono and others 2020). It is essential to determine whether "its online class is a benefit or a detriment?" because some students found it difficult because it was the only way to hold classes during the pandemic (Kulal and Nayak, 2020). While thinking about the instructive climate, think about how students deciphered web-based classes.

**Demographical and educational details of the students**

**Table 1: Demographical and educational details of the students**

| Demographic and educational variables | No of respondents | Percentage |
|---|---|---|
| **Gender** | | |
| Male | 90 | 60 |
| Female | 60 | 40 |
| **Living Location** | | |
| Urban | 75 | 50 |
| Semi Urban | 45 | 30 |
| Rural | 30 | 20 |
| Stream of the study | | |

| | | |
|---|---|---|
| Commerce/Management | 90 | 60 |
| Humanity | 45 | 30 |
| Science | 15 | 10 |
| Types of college | | |
| Government college | 30 | 20 |
| Private college | 60 | 40 |
| Aided college | 15 | 10 |
| Autonomous college | 45 | 30 |
| Grade point average | | |
| 0-4 | 15 | 10 |
| 4-6 | 30 | 20 |
| 6-8 | 60 | 40 |
| 8-10 | 45 | 30 |

Source: Primary data

Demographic and educational data, such as the gender, place of residence, field of study, type of college, and grade point average, were gathered to gain a deeper comprehension of the students' backgrounds. This will assist us in comprehending the diversity of research field students. The particulars are provided below. Table 1's demographic and educational data show that only 40% of students are female, while 60% of students are male. It demonstrates that the majority of respondents reside in semi-urban areas, 20 percent in rural areas, and 50 percent in metropolitan areas. The remaining students are from the humanities and sciences, with the department of commerce and management accounting for the majority (60 percent). As indicated by the information, 60% of understudies seek after advanced education at private establishments, while simply 20% go to government universities. Additionally, it revealed that 30% of college teachers had a grade point average of 10-8, while 40% of college students had an average of 6-8. The findings indicate that the number of students meets all demographic and educational criteria fairly.

**Table 2: Descriptive analysis of students perception on online class**

| Statement on online class | Mean | SD | t value | P value |
|---|---|---|---|---|
| The lessons are frequently stimulating. | 3.30 | 1.19 | 33.92 | <0.05 |
| I easily participate in the lesson. | 3.48 | 1.33 | 32.85 | <0.05 |
| I feel as though I can ask any questions I want. | 2.90 | 1.22 | 29.00 | <0.05 |
| I enjoy teaching online. | 3.40 | 1.40 | 33.13 | <0.05 |
| I prefer online instruction because it is more connected and interactive. | 2.32 | 1.41 | 20.13 | <0.05 |
| I think it's just as effective to teach online as in person. | 2.50 | 1.20 | 25.34 | <0.05 |

| | | | | |
|---|---|---|---|---|
| I would rather teach online than face-to-face. | 2.51 | 1.21 | 25.24 | <0.05 |
| It could be a problem with my Internet connection. | 3.49 | 1.22 | 34.86 | <0.05 |

Source: Primary data

After COVID, online classes have become more important and an essential part of the educational environment. A descriptive analysis was carried out in order to ascertain the students' perceptions of online classes, whether positively or negatively. Good perception is defined as a mean value greater than three if the differences are statistically significant, while negative perception is defined as a mean value less than three. Table 2 displays a sample t-test result and a descriptive study on student perceptions of online classrooms. Students agree, as shown in the table above, that online instruction is just as effective as face-to-face instruction and that I prefer it to be more connected and participative (M=2.32). Additionally, it discovered that "Internet connection may be difficult" had the highest mean value of 3.48 and the lowest mean value of 2.32, both with a standard deviation of 1.411. On the other hand, "online instruction is equally effective as in-person instruction" had the lowest mean value of 2.32 and a standard deviation of 1.191. We could draw the conclusion that, with the exception of "I prefer online teaching to be more involved and linked" and "Internet connection may be challenging," student perceptions of online classrooms and online classes differ significantly

**Students' perception towards teaching and learning**

**Table 3:Descriptive analysis on students' perception towards teaching and learning**

| Statement on teaching and learning | Mean | SD | t value | P value |
|---|---|---|---|---|
| Post Coronavirus instructor will accept job of mendor | 2.30 | 1.27 | 22.12 | <0.05 |
| After the pandemic, students will not be required to attend College. | 2.90 | 1.04 | 33.90 | <0.05 |
| Following the pandemic, self-motivated learning is required. | 2.40 | 1.20 | 24.41 | <0.05 |
| The book will be replaced by videos and e-books. | 3.20 | 1.08 | 36.26 | <0.05 |
| Following the college's reopening, online classes continue. | 2.30 | 1.34 | 20.86 | <0.05 |
| The self-learning module offers more adaptability. | 2.50 | 1.20 | 25.34 | <0.05 |
| Online instruction is not as effective as classroom instruction. | 1.80 | 0.98 | 22.43 | <0.05 |
| Classroom instruction allows for improved discussion. | 1.70 | 0.78 | 26.56 | <0.05 |

Source: Primary data

Students were dissatisfied as a result of their fear of lockdown and COVID-19, and this had a negative impact not only on the teaching and learning practices of the students but also of the teachers (Ramesh, 2020). It has the potential to alter students' perspectives on education. Table 3 shows the graphic examination and t-test for understudy perspectives on educating and learning. According to Table 3, college students strongly believe that classroom instruction is more effective than online instruction (M=1.80) and provides more debate opportunities. We can draw the conclusion that students' perceptions of classroom instruction and learning differ significantly from those of online programs

**Students' perception towards evaluation**

**Table 4:Descriptive analysis of students' perception on evaluation**

| Statement on perception towards evaluation | Mean | SD | t value | P value |
|---|---|---|---|---|
| Exams conducted online rather than offline are more convenient. | 2.10 | 1.37 | 18.64 | <0.05 |
| Open exams are a good way to evaluate students. | 2.60 | 1.28 | 24.78 | <0.05 |
| An online assignment with a lot of deadlines will be preferred. | 2.20 | 1.40 | 19.18 | <0.05 |

Source: Primary data

Assessment and evaluation were also done online during the outbreak, but the accuracy of online evaluations is always in question. While some students may find the online exam process difficult, others may find it simple (Ramesh, 2020). Consequently, it is essential to investigate how students perceive the evaluation procedure. The descriptive analysis and t-test results for students' evaluative perceptions are presented in Table 4. College students prefer online assignments because they encourage students to submit their work on time (M=2.20), and online assessments will eventually replace offline exams because they are easier to take (M=2.10). It was also found that college students think open-book exams are a good way to grade students because there is no cheating (M=2.60). Because P< 0.05, we can conclude that the average student evaluation perceptions and the mean student assessment perceptions differ significantly.

**Students' perception towards teachers**

Students look up to teachers as role models, and teachers influence how students behave. The demonstrations and disposition of an educator in the homeroom straightforwardly affect the learning

inspiration of understudies (van Wyk 2020). The descriptive analysis and t-test results for students' perceptions of professors are presented in Table 5. According to Table 8, college students have a strong belief that their teachers teach them to apply previously learned concepts in order to learn new things (M = 1.90) and that their teachers use a variety of resources in their classroom activities (M = 2.10). M=2.20, students agreed, and M=2.30, students agreed, that our instructors encourage us to approach a problem from multiple perspectives and that we receive assignments related to the subject we are currently studying. Because P <0.05, we are able to draw the conclusion that students' average perceptions of extracurricular activities differ significantly from their mean opinions.

**Table 5: Descriptive analysis of students' perception on teachers**

| Statement regarding teachers' perceptions | Mean | SD | t value | P value |
|---|---|---|---|---|
| We receive assignments for the subject we are studying at the moment. | 2.20 | 1.40 | 19.18 | <0.05 |
| Our teacher teaches us to use concepts we already know to learn new things. | 1.90 | 1.04 | 22.21 | <0.05 |
| In order to carry out a class activity, our teachers make use of a variety of | 2.10 | 1.04 | 24.55 | <0.05 |
| Our teachers encourage us to take a fresh look at the issue. | 2.30 | 0.90 | 31.19 | <0.05 |

Source: Primary data

## Conclusion

The study's conclusion is that students, despite their varied educational backgrounds, perceive the college learning environment positively. During a pandemic, online education and testing are the best options. At post-COVID universities, academics and extracurricular activities are given the same importance as in-person and online classes. We are able to draw the conclusion that the COVID-19 pandemic has altered students' perceptions of their colleges and prompted them to reevaluate their education based on our study's findings and literature analysis. We might suggest to college administrators that at least one subject be taught online because students are used to it and it helps them prepare for future pandemics, based on what we've talked about so far. We believe that even after the lockdown is lifted, universities and the government should not stop offering online classes. We also want the government to provide colleges with computers and Internet access so that students can arrive on time for class. We believe that colleges should continue to offer online classes for the next three months, with more flexible attendance and grade policies, based on responses to

the survey's open-ended questions. The last and most important thing is that the government needs to do everything it can to help students who graduated during the pandemic find jobs. Consequently, the government must intervene to safeguard the interests of students. Because of this, they are able to guarantee that the educational setting meets the requirements of the students. In light of this pandemic, the government and educational establishments must also put in a lot of effort to change students' perceptions of how they are taught and learned and offer a new hope for evaluation and assessment.

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