



ORIGINAL RESEARCH PAPER

Management

STUDENTS' PERCEPTION AND SATISFACTION TOWARDS ONLINE EDUCATION DURING THE COVID-19 PANDEMIC: AN EMPIRICAL STUDY

KEY WORDS: Online Education, Distance Learning, Digital Teaching, Satisfaction, Difficulties.

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ABSTRACT

The concept of e-learning has emerged with the development of the Internet since the 1990s. Online learning, distance learning, distance learning, e-learning, Internet-based learning, and computer-assisted learning are terms that can be used interchangeably and are not unfamiliar to us. During this pandemic, these are the only sources used in the continuous learning process. The teaching and assessment of students is done through information technology, which helps to reduce the learning gap that arises from confinement. The creation of new online routes for the delivery of course content will become more prominent in the post-Covid world, as pandemic survivors and those who have survived the lockdown may not be as confident as they were in the pre-Covid world. Wards are sent to schools and universities, which can inspire schools and universities to provide online courses to meet their needs. The sudden shift to digital teaching was challenging for students, but it appears that they adapted quickly to the new situation. Online education plays a vital role in future development in lock down period.

INTRODUCTION

The Covid-19 pandemic outbreak forced many schools and colleges to remain closed temporarily. To continue the teaching and learning practice of educational institutions, our education system adopts an online learning model, which is an imperfect but quick crisis solution. The concept of e learning has emerged with the development of the Internet since the 1990s. Online learning, distance learning, distance learning, e-learning, Internet-based learning, and computer-assisted learning are terms that can be used interchangeably and are not unfamiliar to us. During this pandemic, these are the only sources used in the continuous learning process. The teaching and assessment of students is done through information technology, which helps to reduce the learning gap that arises from confinement. Students can now gain subject knowledge, solve puzzles with the help of instructors, quickly share learning materials, get quick feedback and be more flexible, discuss with their peers, and observe their academic progress in online classrooms. Students can learn anytime and anywhere, thereby developing new skills in the process leading to life-long learning. The government also recognizes the increasing importance of online learning in this dynamic world. The study's key goal is to find out various challenges and satisfaction level of students towards online education.

Statement of Problem

The current global pandemic has caused severe damage to one of the most important systems: education. It is undeniable that education is essential to promote the well-being and personal growth of a country, but it has been compromised by the emergence of Covid 19. The global blockade also disrupted educational institutions. This will be a big problem for students. Many exams are cancelled, learning changes, internal assessments are interrupted, students are assigned homework, and everything is affected by the corona virus. In March 2020, a nationwide lockdown was imposed, forcing some schools and universities to close, and instructing students to abandon normal classroom teaching methods. This has led to an immediate increase in the innovation and technology that teachers use to complete the course. The creation of new online routes for the delivery of course content will become more prominent in the post-Covid world, as pandemic survivors and those who have survived the lockdown may not be as confident as they were in the pre-covid world. Wards are sent to schools and universities, which can inspire schools and universities to provide online courses to meet their needs. This will create a new paradigm for

teachers and professors, as they will have to adapt to this changing situation in order to be more consistent in delivering lectures and course content through online channels. The present study confines itself to online education offered to students in Madurai district. The study tries to probe the opinions of the students residing in Madurai district with regard to these problems.

Literature Review

Liyan Song et al., (2004) had indicated that almost all learners agreed that course design, learner motivation, time management, and comfortableness with online technologies impact the success of e - learning experience. Participants indicated that technical problems, a perceived lack of sense of community, time constraints, and also the difficulty in understanding the objectives of online based courses as challenges.

Charles Juwah, (2006) had described that learning objects are important both for creating content and in underpinning some varieties of interactions within e - learning context, further as enhancing the quality of learning. Advances in technology and knowledge management are providing opportunities for sharing, re-using and for effectively managing learning content. However, the form, granularity and purpose of learning objects are critical for determining levels of re-usability and interactions. Thus, to make sure that learning objects meet their intended objectives in learning situations, further research is needed to define different classes of learning objects that best suit different communities of users.

Robin Goodfellow et al. (2010) have viewed that there's an implicit but significant connection between the ways in which national cultures are conceptualized, as occupying positions along a continuum between 'modern' (individualistic, low context, risk-accepting, and the like) and 'traditional' (collectivistic, risk-averse, high context, and the like.), and also the social constructivist psychological and pedagogical paradigm that characterizes Western/Anglo approaches to online learning. The practices of online collaborative learning, for instance, favour dispositions that are related to so-called Western cultural types: independence, low power-distance, acceptance of risk and low context and the like, and also the pedagogy of e-learning is strongly influenced by the equation of learner centred and collaborative interaction with empowerment.

Mohammad Ibrar (2012) in his study found that several

individuals preferring to continue their higher educational learning through online system. Since, online education offers flexibility time duration which allows the learners to be flexible with their schedules and might still manage to perform several obligations in life like having a full time work. Having online degree also will add weight to resume of job seekers. Further the author reviewed that online system is extremely much accessible to use upon, it only requires the presence of internet connection and computer so as to access the career education courses that are being offered by the various virtual schools within the net.

T.Muthuprasad et al. (2021) in their study pointed that the net learning was found to be advantageous because it provided flexibility and convenience for the learners. Students preferred well-structured content with recorded videos uploaded in university websites. They also indicated the necessity for interactive sessions with quizzes and assignments at the end of every class to optimise learning experience. On the other hand online classes can be more difficult than traditional classroom due to the technological constraints, delayed feedback and inability of the trainer to handle effectively the data and Communication Technologies.

Scope of the study

The present study is confined to analysis satisfaction level of students towards online education in Madurai District. A study does not cover other districts in Tamil Nadu and India. The study concentrates on the various challenges and satisfaction level of students towards online education.

Objectives of the study

1. To study the challenges faced by the respondents towards online education in Madurai district.
2. To analyses the satisfaction level of the respondents towards online education.

Methodology

The present study is based on both primary and secondary data. The primary data has been collected through structured interview schedule from the respondents of Madurai District. The secondary data have been collected from journals, periodicals, and reports related to online education.

Sampling Design

Since, the study was concerned with satisfaction towards online education in Madurai district. The researcher obtains the list of respondents in Madurai district. A sample size taken up for the study is limited to 120 respondents in Madurai District. However, much care was taken that all classes of respondents such as under graduate and post graduate are covered by using convenient sampling under non-random sampling method. The sample respondents are to be selected proportionately from the blocks of Madurai District.

Analysis and Interpretation

The analysis and interpretation of the sample respondents based on demographic factor, sources of awareness, challenges and satisfaction level towards online education.

Classification of respondents according to demographic profile

In this title an attempt has been made to study the demographic profile of the sample respondents. The following pages deal with the survey results.

Table 1: Demographic Profile of the Respondents

Sl.No	Variable		No of Respondents	Percentage
1.	Gender	Male	64	53.33
		Female	56	46.67
2.	Age Group	17 - 21	82	68.33
		21 - 25	38	31.67

3.	Educational Qualification	Under Graduate	94	78.33
		Post Graduate	26	21.67

Source: Primary data

It could be seen from the above table that out of 120 respondents, 53.33 per cent of the respondents were males and 46.67 per cent of them were females. It can be seen that majority of the respondents were males. After dividing the respondents on the basis of gender, they are further divided according to their age, in this 68.33 per cent of the respondents came under the age group of 17 to 21 years and only 31.67 per cent of the were in the age group of 21 to 25. Based on the education, 78.33 per cent are under graduates followed by post graduates (21.67 per cent).

Table 2: Device used for online education

Sl.No	Particulars	No of Respondents	Percentage
1.	Desktop	04	3.33
2.	Laptop	12	10.00
3.	Smart phone	104	86.67
Total		120	100.00

Source: Primary data

Out of 120 respondents only 3.33 per cent of the respondents were using desktop for online class, ten per cent of them were using laptop and remaining 86.67 per cent of respondents were using smart phone for their online class.

Table 3: Sources of internet connection

Sl.No	Particulars	No of Respondents	Percentage
1.	Google Meet	96	80.00
2.	Micro soft Teams	24	20.00
Total		120	100.00

Source: Primary data

It is clear from the above table, Maximum of 91.67 per cent respondents using mobile data pack for online education and remaining 8.33 per cent respondents were using wifi connection.

Table 4: App used for online education

Sl.No	Particulars	No of Respondents	Percentage
1.	Mobile data pack	110	91.67
2.	Wifi	55	08.33
Total		120	100.00

Source: Primary data

It could be seen from the above table, 80 per cent of the respondents using google meet app for online education and 20 per cent were using micro soft teams app. It reveals that majority of the respondents using Google meet app for online education.

Table 5: Cost spends for online education

Sl.No	Particulars	No of Respondents	Percentage
1.	0-200	06	05.00
2.	201-500	52	43.33
3.	Above 500	62	51.67
Total		120	100

Source: Primary data

From the above table, it was found that 51.67 per cent of the respondents spent above 500 rupees for online education, 43.33 per cent of respondents came under the category of 201 - 500. The remaining few respondents (five per cent) spent 0-200 for e- learning.

To find out weighted arithmetic mean, the following scores

were given I Rank ----- 10 Points, II Rank ----- 9 Points, III Rank ----- 8 Points, IV Rank ----- 7 Points, V Rank ----- 6 Points, VI Rank ----- 5 Points, VII Rank ----- 4 points, VIII Rank ----- 3 Points, IX Rank ----- 2 points, X Rank ----- 1 point.
Table 6 brings out the difficulties faced by respondents through online education.

Table 6: Difficulties faced by respondents through online education.

Sl. No	Difficulties	Rank										Total
		1	2	3	4	5	6	7	8	9	10	
1.	Poor quality of Audio & video	54	4	46	-	-	-	-	12	-	-	120
2.	Technical difficulties	52	26	16	-	-	4	22	-	-	-	120
3.	Health Issues	-	76	8	34	-	2	-	-	-	-	120
4.	Lack of practical classes	12	-	6	22	70	-	10	-	-	-	120
5.	Cost issues	-	76	8	34	-	2	-	-	-	-	120
6.	Absence of Written practice	-	-	32	-	4	-	46	38	-	-	120
7.	Lack of discipline	2	24	-	-	-	38	-	2	54	-	120
8.	No face to face contact	-	-	4	-	-	-	42	-	4	70	120
9.	Poor network	-	-	-	2	20	18	-	52	24	4	120
10.	Lack of motivation	-	-	8	-	2	-	-	28	38	44	120

Source: Primary data

On the basis of the points given and ranks obtained, the total score thus derived was divided by the total number of respondents for each factor to arrive at the mean score. Among the ten factors is given, the one which had the highest mean score was identified as the most important factor influencing the respondents connected in online education. The weighted arithmetic mean has been calculated for various reasons, the following table 7 shows the weighted arithmetic mean for various reasons.

Table 7: Weighted Arithmetic Mean for the Ranks

Sl.No	Challenges	Weighted Average method
1.	Poor quality of Audio & video	8.16
2.	Technical difficulties	8.25
3.	Health Issues	8.3
4.	Lack of practical classes	6.51
5.	Cost issues	8.3
6.	Absence of Written practice	4.81
7.	Lack of discipline	4.5
8.	No face to face contact	2.31
9.	Poor network	3.6
10.	Lack of motivation	2.33

Above table has revealed that among ten factors Health Issues and Cost issues were the most important factor influencing respondents concerned with online education followed by technical difficulties. It also reveals that No face to face contact and lack of motivation were the least weighted average score among the ten factors.

To find out weighted arithmetic mean, the following scores were given I Rank ----- 5 Points, II Rank ----- 4 Points, III Rank ----- 3 Points, IV Rank ----- 2 Points, V Rank ----- 1 Point.

Table 8: Satisfaction of respondents towards online education

Sl.No	Satisfaction	Rank					Total
		1	2	3	4	5	
1.	During pandemic time, e-learning will take part of the education effectively	34	48	22	10	6	120

2.	Job opportunities while learning	24	40	28	22	6	120
3.	Sending Reading material Effectively	20	38	36	18	8	120
4.	Video Content supplemented with reading material	22	36	38	16	8	120
5.	Platform for posting queries and clarification	24	44	30	16	6	120
6.	Collecting feedback after the class	28	36	40	10	6	120
7.	Device compatibility to the applications used for online classes effectively	24	42	36	12	6	120
8.	Availability of sufficient data pack to enjoy the internet facility	22	40	30	14	14	120
9.	More interaction and greater ability to concentrate	18	44	32	14	12	120
10.	User friendly software/hardware	22	40	40	8	10	120

Source: Primary data

Among the ten factors is given, the one which had the highest mean score was identified as the most important factor influencing the respondents connected in online education. The weighted arithmetic mean has been calculated for various reasons, the following table 9 shows the weighted arithmetic mean for various reasons.

Table 9: Weighted Arithmetic Mean for the Ranks

Sl.No	Challenges	Weighted Average Method
1.	During pandemic time, e-learning will take part of the education effectively	3.78
2.	Job opportunities while learning	3.45
3.	Sending Reading material Effectively	3.36
4.	Video Content supplemented with reading material	3.4
5.	Platform for posting queries and clarification	3.53
6.	Collecting feedback after the class	3.58
7.	Device compatibility to the applications used for online classes effectively	3.55
8.	Availability of sufficient data pack to enjoy the internet facility	3.35
9.	More interaction and greater ability to concentrate	3.35
10.	User friendly software/hardware	3.46

Above table has revealed that among ten factors, during pandemic time, e-learning will take part of the education effectively was the most important factor influencing respondents concerned with online education followed by Collecting feedback after the class. It also reveals that Availability of sufficient data pack to enjoy the internet facility and More interaction and greater ability to concentrate were the least weighted average score among the ten factors.

Findings

- Majority of the sample respondents are male.
- Most of the respondents are lying under the age group of 17 to 21 years.
- Majority of the respondents are under graduate level.
- 86.67 per cent of respondents were using smart phone for their online class.

- Maximum of 91.67 per cent respondents using mobile data pack for online education.
- Most of the respondents using Google meet app for online education
- 51.67 per cent of the respondents spent above 500 rupees for online education.
- Health Issues and Cost issues were the most important factors having difficulties faced by the respondents through online education.
- During pandemic time, e-learning will take part of the education effectively was the most important factor having satisfaction towards online education.

Suggestions

i. Since the majority of the respondents depend on smartphones (86.67%) and mobile data packs (91.67%) for attending online classes, educational institutions should ensure that learning platforms and study materials are mobile-friendly and consume minimal data. Providing recorded lectures in compressed formats, sharing PDF notes, and collaborating with telecom providers for subsidized educational data packages would greatly reduce students' financial and technical burden.

ii. As more than half of the respondents (51.67%) spend above 500 for online education and reported cost issues as a major difficulty, institutions and government bodies should introduce financial assistance schemes, internet fee reimbursements, or special concessions for economically weaker students to make online learning more affordable and inclusive.

iii. Considering that health issues were one of the major problems faced by respondents, institutions should design online classes with shorter durations, scheduled breaks, and limited screen time. Awareness programs on digital wellness, proper posture, and eye care should be conducted, and mental health support services should be made accessible to students.

iv. Since most students use Google Meet for online education, proper training should be provided to both faculty and students to use digital platforms effectively. Institutions should also enhance technical support systems and incorporate interactive features such as quizzes, discussions, and breakout sessions to improve student engagement and participation.

v. As the majority of respondents are undergraduate students aged between 17 and 21 years, teaching strategies should be designed to match their academic and developmental needs. Interactive learning methods, skill-based programs, career guidance sessions, and collaborative activities should be encouraged to maintain motivation and enhance learning outcomes.

vi. Since respondents expressed that e-learning played an effective role during the pandemic and showed satisfaction towards it, institutions should adopt a blended learning approach in the future by combining online and offline methods. Theoretical components can be delivered online, while practical and laboratory sessions can be conducted offline to ensure better academic effectiveness.

vii. To overcome connectivity challenges and improve access, especially in rural areas, there is a need to strengthen digital infrastructure, expand broadband facilities, and establish community digital learning centers. Such measures will promote equal educational opportunities and enhance overall satisfaction towards online education.

CONCLUSION

The present study concludes that online learning played a significant and effective role in sustaining education during

the pandemic period. The findings reveal that the majority of respondents were young undergraduate students who primarily relied on smartphones and mobile data packs for attending online classes, with Google Meet being the most commonly used platform. Although students expressed satisfaction with e-learning as an effective alternative during the crisis, they also faced notable challenges such as health-related issues and financial burdens due to internet expenses. Despite these difficulties, online education was positively perceived as a necessary and beneficial mode of learning during emergency situations. Therefore, with improvements in digital infrastructure, cost support measures, health awareness, and interactive teaching strategies, online education can continue to complement traditional classroom methods and contribute to the development of a flexible and inclusive education system.

REFERENCES

1. Garg, A. (2021). Online education: A learner's perspective during COVID-19. *Asia-Pacific Journal of Management Research and Innovation*, 16(4), 279–286.
2. Goodfellow, R., Lea, M. R., Gonzalez, F., & Mason, R. (2009). Learning cultures in online education. *Design and Technology Education: An International Journal*, 14(3), 1360–1363.
3. Ibrar, M. (2012). An overview of online education in India. *International Journal of Education Administration and Policy Studies*, 4(1), 6–13.
4. Juwah, C. (2006). *Interactions in online education: Implications for theory and practice*. Routledge Taylor & Francis Group.
5. Muthuprasad, T., Aiswarya, S., Aditya, K. S., & Jha, G. K. (2021). Students' perception and preference for online education in India during COVID-19 pandemic. *Social Sciences & Humanities Open*, 3(1), 100–101.