

Covid -19 Pandemic and Online Education: an Empirical Study with Reference to Students and Employees"

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ABSTRACT

Electronic learning offers many methods which decreases the limitations of traditional education. E-learning appeals to organizations that a strong need or desire to deliver consistent training across multiple locations. Today's new economy is characterized by industrial change, globalization, knowledge sharing and information technology revolution thus, traditional classrooms do not satisfy the needs of new world of lifelong learning. This paper aims to provide a discussion about the satisfaction level of students among E-learning and employees among work from home by online mechanism. This study examines the evidence of the effectiveness of online learning by organizing and summarizing the findings and challenges of online learning into positive, negative, mixed and null findings. The research was Descriptive in nature and both primary and secondary data has been collected for this purpose. Taken as a whole, there is robust evidence to suggest online learning is generally at least as effective as the traditional format.

Keywords: - E-learning, online learning, web-enhanced, blended learning, hybrid learning, significant learning, technology-mediated instruction.

I INTRODUCTION

Technology, communication & ICT applications have presented our generation with numerous opportunities. Technology has touched each and every field in some or the other way. Education through e-learning applications have opened up horizons of e-learning from distance, efficient method of learning and added quality to knowledge sharing activities & some technology experts had developed application for e-meeting for working people too. There has been a significant amount of research by scholars, academicians & technology experts with technology at its prime focus but the effectiveness of e-learning and e-meeting in extensively shaping the future of students and employees & adding quality to their thinking & values has not been discussed much. This study therefore reviews the literature that is available on online & offline sources in the form of books, scholarly articles and research writings from peer reviewed journals. The aim of the literature review is to understand the scholarly works on the topic of e-learning and e-meeting both from the technological point of view and for its effect on the students as well as on employees during covid-19 pandemic. This research will help us to know the effect of e-learning as well as e-meeting on students and working people as to know how they cope up with the continuity of knowledge during corona virus pandemic.

II LITERATURE REVIEW

This research includes a review of literature relating to e-learning as against traditional forms of classroom teaching attitudes and perception of faculty and students towards e-learning. The following is a brief description on the literature review that has been undertaken.

Jakobsone & Cakula (2015) aimed to go a new perspective on knowledge sharing process & better understand the future of automated learnings support system involving the use of new technological opportunities. The major study

question was how the automated learning support system could develop the efficiency & quality of further knowledge flow & other sustainable cooperation between educational institutions & entrepreneurs. The researchers found that the analysis of the information system as an online learning, support platform, improved quality of knowledge flow & recommendations for advancing work-based learning besides the encouragement of efficient management technologies.

E-learning can deliver the following substantial positive effects.(1) Students are more engaged & able to develop 21st century skills. (2) Teachers have a positive attitude towards their work & are able to provide more personalized learning. (3) Family interaction and parental involvement may increase. (4) Economic progress can result from direct job creation in the technology industry as well as from developing a better educated workforce. (The Positive Impact of E-learning-2012 UPDATE, White Paper on Education Transformation).

Sangeeta Kakoty,et.al. (2011) analyses the current e-learning procedure and showed the new dimension of research work on the area that follows the importance e-education system and recent market of e-learning procedure. This study showed that globalization of education, cross-culture aspects and culturally complex student support system in distance as well as e-learning environment is a prospective research area.

Internet education is soon to be the dominant form of education in the world. It emphasized that a lot of efforts is being dominated into furthering the work methods and communication among students & professors aimed at bettering the quality of this kind of studying.(Mirjana Radovic-Markovi,2010).

E-learning has been extensively not just for academic purposes for students but also for business and corporate employees training on various upcoming industrial revisions (Judith B. Strother, 2002).

This literature review suggested that despite the enormous growth of e-learning in the education & its perceived benefits, the efficiency of such tools will not be fully utilized if the users inclined to not accept and use the system. Therefore, the successful implementation of e-learning tools depends on whether or not the people are willing to adopt & accept the technology.

III OBJECTIVES AND METHODOLOGY

(a) **Objectives** -The following were the objectives for conducting the study;

- (i) To measure the level of satisfaction among students on online learning mechanism during covid-19 pandemic
- (ii) To measure the key challenges faced by learning in an e-learning program via meeting apps during covid-19 pandemic.
- (iii) To measure the level of satisfaction on work from home employees via meeting apps during covid-19 pandemic.

(b) **Hypothesis** - The research is based on the situation that over a period during COVID 19 which in turn have helped them to get the online education. For the purpose of testing the hypothesis, has developed null hypothesis as;

- (i) H0= There is no significant difference in the satisfaction level towards online learning on the basis of age.
- (ii) H1= There is a significant difference in the satisfaction level towards online learning on the basis of age.

(c) **Methodology** - The research methodology was then formulated considering the area of research. The criteria used for selecting studies reviewed were; both primary and secondary focus on e-learning and issues faced by students and employees during covid-19 pandemic. This research was supplemented by a questionnaire survey of learners & employers to ensure the data identified from the literature were grounded in reality. The research was descriptive in nature and the sample size taken was of 200 respondents. The type of sampling used in this paper was convenience sampling. The paper draws on in-depth qualitative comments from students and employees evaluation of e-learning module during covid-19 pandemic situation, to develop a picture of their perspective on the experience. Questionnaire that yields some basic qualitative data were administered. General questions on satisfaction and dissatisfaction identified the criteria that students used in evaluation, while specific questions of aspects of module generated some insights into the students learning process during covid-19 pandemic.

(d) **Interpretations** - Data has been interpreted by using statistical tools like, percentage and ANOVA test.

(e) **Limitations of the study**

- (i) The study is restricted to the selected sample of Madhya Pradesh. Therefore the results of the study cannot be generalized.
- (ii) The statistical tools used to analyze the data have their own limitations.
- (iii) All the limitations are applicable in primary data to this study.

III DATA ANALYSIS & INTERPRETATIONS

Question- Wise Analysis Mentioned Here:-

(a) **Q.1 What Is Your Profession?**

Table 1

Choices	Percentage	Count
Student	81.87%	149
Teacher	3.85%	7
Employee	14.29%	26

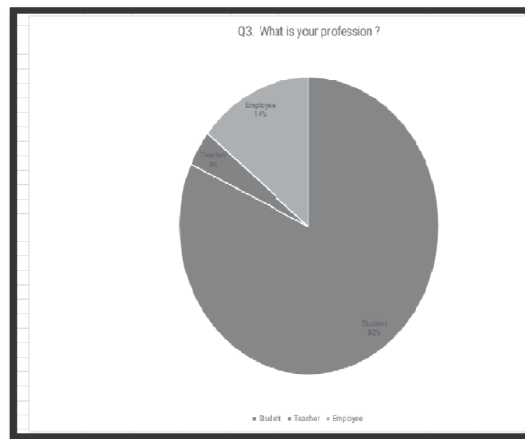


Fig.1

Fig.1 illustrates that out of our total sample size i.e 184 respondents collected from the survey ,majority are the students i.e (81.87%) followed by employees i.e (14.29%) & (3.85%) are teachers who are using online learning mechanism.

As we belongs to the students fraternity, so there is a wide majority of students out of 184 respondents other than employees and teachers in our survey who use online learning mechanism during covid-19 pandemic.

(b) Q.2 Which Application Are You Using For Online Education/Online Meeting?

Table 2

7. Which application are you using for Online Education/Online Meeting		
RESULTS		
Choices	%	Count
Zoom Ap.	79.88	131
Google Hangouts Meet	15.85	26
Cisco Webex Meetings	4.27	7

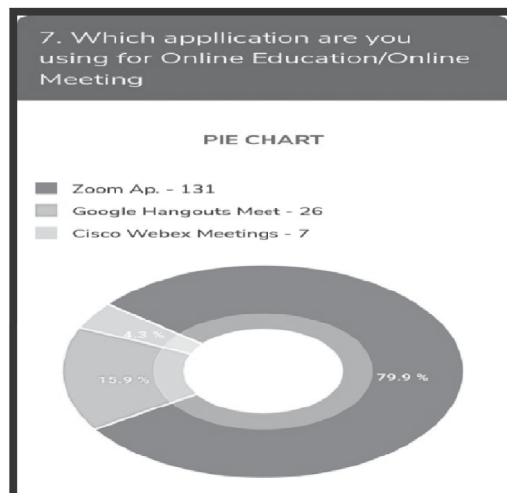


Fig.2

Fig.2 illustrates that (79.88%) respondents are using Zoom App , (15.85%) are using Google Hangouts & (4.27%) are using Cisco Webex Meeting App.

Majority of people are using Zoom App because it is easy and free and have much higher quality than

Hangouts, it has better call quality, ability to record meetings and allows multiple people within meetings to share their screens at once.

(c) Q.3 What Is Your Level Of Satisfaction In Online Mode?

Table 3

8. What is your level of Satisfaction in Online Mode		
RESULTS		
Choices	%	Count
Highly Satisfied	11.89	22
Satisfied	71.89	133
Dissatisfied	12.43	23
Strongly Dissatisfied	3.78	7

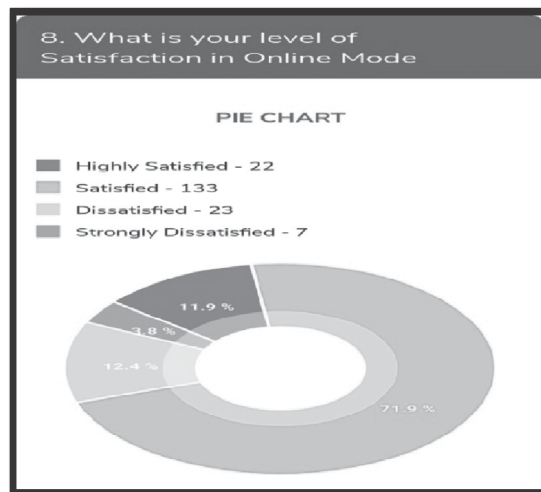


Fig.3

Fig.3 illustrates that (71.89%) respondents are satisfied with online mechanism & (12.43%) respondents are dissatisfied but (11.89%) respondents are highly satisfied & rest (3.78%) respondents are those who are strongly dissatisfied with the online learning mechanism.

According to the survey, majority of respondents are satisfied with online learning mechanism because it is easily available , saves money, saves time, flexible time schedule and environment.

(d) Q.4 Is Work From Home/Classes In Home Easy?

Table 4

9. Is work from home/ Classes in home easy ?		
RESULTS		
Choices	%	Count
Yes	62.98	114
No	37.02	67

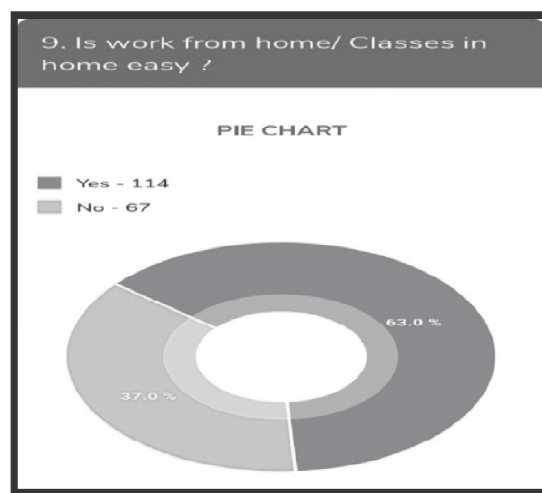


Fig.4

Fig.4 illustrates that out of 184 respondents (62.98%) employees/students said that work from home/ classes from home are easy & (37.02%) students/employees said that it is not easy to work from home/classes from home.

Because of its flexible time schedule and comfortable working environment, majority of respondents found it easy to do classes / work from home.

(e) Q.5 Do You Have Any Benefit From Online Mode, Please Suggest-

Table 5

Benifits	Count	Percentage
Saves time	121	29%
Saves money	80	19%
Easy	94	22%
Flexible schedule and environment	75	18%
Instructor availability	53	12%

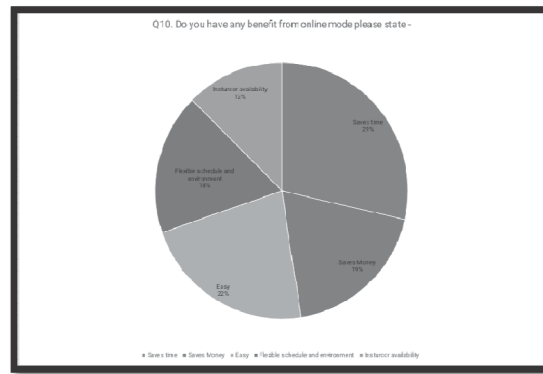


Fig.5

Fig.5 illustrates that out of 184 respondents (29%) respondents said that the benefit of online mode is it saves times, (19%) said it saves money, (22%) found it easy, (18%) said that it has flexible time schedule and environment and rest (12%) said that it has good availability of instructors.

According to the survey, there are some benefits of online learning mode that it saves time, saves money, it has flexible time schedule and environment and it is easy to access. Instructor’s availability is also good.

(f) Q.6 Can You Share Notes/Files By The Means Of Application?

Table 6

11. Can you share notes/ files by the means of application ?		
RESULTS		
Choices	%	Count
Yes	65.93	120
No	34.07	62

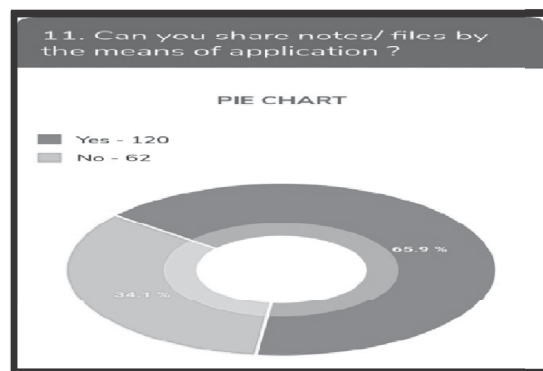


Fig.6

Fig.6 showed that (65.93%) students and employees shares notes/ files by means of application during online learning mechanism & (34.07%) said that they does not share any file/notes via application.

Majority of repondants said that they shares files/notes via screen sharing and recording by means of application.

(g) Q.7 Is There Any Negative Point Of This Mode?

Table 7

12. Is there any negative point of this mode		
RESULTS		
Choices	%	Count
Not having proper connecti...	55.61	109
Device getting hot, because of ...	24.49	48
Any other device problem	19.90	39

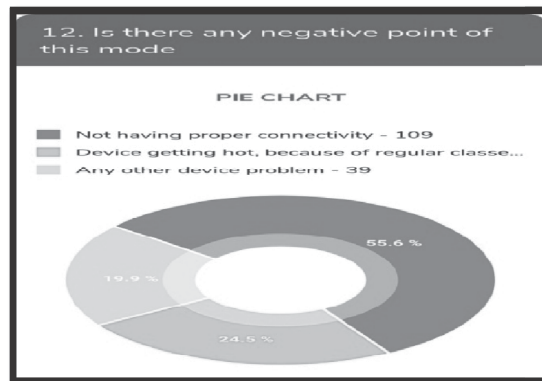


Fig.7

Fig.7 illustrates that (55.61%) students/employees said that not having proper connectivity is the most significant negative point of online mode, (24.49%) students/employees said that device heating due to back to back classes is also an issue, and the rest (19.9%) said that other than these, any other device problem is also the negative point of this mechanism.

(h) Q.8 Do You Want Online Mode Should Be Used After Lockdown Also?

Table 8

13. Do you want Online mode should be used after Lockdown also..?

RESULTS		
Choices	%	Count
Yes	55.43	97
No	44.57	78

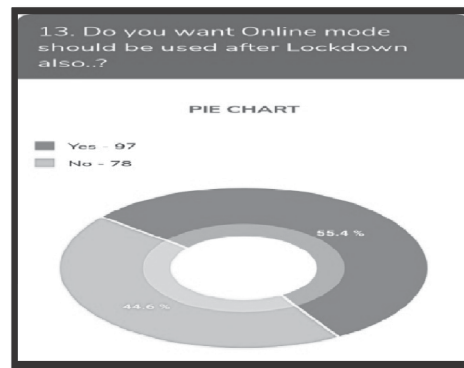


Fig.8

Fig.8 illustrates that (55.4%) respondents said that online mode should be used after the lockdown also and (44.57%) respondents said that it should not be continued after lockdown also.

According to the survey, out of 184 respondents, majority of respondents want this online learning mechanism to be continued after lockdown also due to its comfortable working environment, money saving and flexible time schedule. Minority of the respondents found that it does not provide the taste of traditional form of learning,

also due to the missing effect of face to face interaction which provides huge motivation.

IV ANOVA TEST

Further to test the hypothesis, one-way anova test has been applied, assuming that data is normally distributed and the F value comes to be 2.031 and P value is 0.005 which is less than 0.05 indicates that there is a significant difference in the satisfaction level towards online learning mechanism on the basis of age.

ANOVA

VAR00002

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	17.590	24	0.733	2.031	0.005
Within Groups	57.011	158	0.361		
Total	74.601	182			

V CONCLUSION AND SUGGESTING SCOPE

(a) **Conclusion** - Online education is here and is likely to stay and grow. The review of its history clearly showed online education has developed rapidly and fueled by Internet connectivity, advanced technologies and a massive market.

Throughout this study, the primary focus was to measure the level of satisfaction among students and employees during online learning mechanism/ during work from home. Also to find out the key challenges they are facing during covid-19 pandemic. It started with a basic overview of online education as studied and perceived by Mirjana Radovic Markovici, (2010), which served as the theoretical framework for this study. We then examined how presented theories have applied to various aspects of effectiveness of online learning mechanism and development. We first examined the profession of employees and online environment over time, its evolution and the technological impacts on online learning mechanism also their preferences of online

focused our attention on the key challenges like poor internet connectivity, heating of device and other problems faced by the students and employees during online learning mechanism to determine the best and most desirable practices and strategies for online learning. Within the realm of online learning, we directed our attention onto the flexibility and instructor's availability and other benefits of online learning mechanism promoting social presence, interactions and collaborations among students, employees and instructors.

(b) Suggestions

- (i) Online learning is a very efficient and latest process of learning but it requires proper connectivity. If internet connectivity will be good, then only E Learning will be favourable.
- (ii) There can be a little doubt that online education is destined to continue to grow, possibly at ever fast speed. That being the likely case, more research should be conducted to investigate the effectiveness, efficiency and improvement of online teaching and learning.

- (c) **Future scope for research** -This research was conducted considering the whole Madhya Pradesh as a sample. Similar researches could be conducted to focus on every state of the country and streamline the most preferred applications. The research findings could be compared with other states and countries to determine the effectiveness of e-Learning and the growing economy. This would help in obtaining the emphasis on various factors such as technology, study materials and availabilities, etc.

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