Student's Attitude and Comfort towards Online Education in India

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ABSTRACT

The aim of this investigation was to study about the student's attitude and comfort level towards online education in India. It also aimed to study the relationship between personal variable and student's attitude and comfort level. The present study was conducted online in different district of India. The data were collected online from 547 students of different colleges with the help of a questionnaire developed in a Google form. The results indicated that more than half of the students (52.83%) were from Government institute (Central/state). The results also revealed that majority of the students (78.98%) had access to computers and Wi-fi in their institute while 61.61% students had access on the online material for study at home. More than half of the respondents (55.94%) reported sufficiently availability about the various online educational portals/tools /apps. More than half of the students (59.23%) agreed that short-term hands-on training/workshop about the available

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tools/apps/ portals will help in better understanding of the online mode of learning. 51.55% of the students responded that they did not enjoy online mode of learning more than the typical classroom teaching. The results showed a significant association for attitude and comfort level of students towards online teaching mode.

1. INTRODUCTION

Twenty first century is the age of science to spread knowledge through networking worldwide. Wonderful inventions are being made every day in the field of education. Online teaching has played a very important role in delivering education or knowledge to the needful globally. With the help of online education, the whole world has become more connected like a global hub. In the meantime, online teaching has become very popular now-a-days as the whole world is facing the challenges caused due to the pandemic, COVID-19,an airborne disease and people are bound to stay only inside their residing place. Firstly, students become more active and reflective learners. Secondly, students and teachers engage in learning through the use of technology and become more familiar with technology by using it. The teachers are using online education tools and methods to provide all the information and study material to students at their home place. The process of online teaching consists of various methods similar to those associated with traditional teaching. It is easier to get the feedback from the students at the same platform and to opt for the best methods for the students. It has been established by studies that students, who regularly used technology, are motivated to teach [1]. A major advantage of online teaching is that students can learn theoretical and demonstrate plan anywhere in the world with the saving of travelling time and cost. Online learning overlaps with the broader category of distance learning which encompasses earlier technologies such as correspondence courses, educational television and video-conferencing. Earlier studies on distance learning have concluded that these technologies were not significantly different from regular classroom learning in terms of effectiveness. It has also been reported that online education could be accepted on the basis of being inexpensive in comparison with face-to-face instruction. One of the biggest advantages of online education is that we can connect throughout the world without leaving our home. The present investigation was undertaken to study about the student's attitude and comfort level towards online education in India and to find out the relationship between personal variable and student's attitude and comfort level.

2. METHODOLOGY

The present study was conducted online in different district of India. 547 students of different colleges participated in this study. The data were collected online with the help of a questionnaire developed in a Google form. The questionnaire was prepared and pre-tested to collect the desired information as per objectives of the study. Based on the results of the pre-test, the questionnaire schedule was modified and finalized as per requirement. Data was analyzed and tabulated to draw the inferences. The data thus, collected were computed, tabulated and analyzed using frequency, percentage and correlation to draw meaningful inferences.

3. RESULTS AND DISCUSSION

3.1 Background of Responding Students

The personal profile of the examined students (Table 1) showed that 66.18% of the respondents were in 20-25 years followed by below 30 years (27.43%), 25-30 years (4.75%) and above 30 years (1.64%). Nearly half of the students (50.27%) were female followed by male (49.36%). Further, it was observed that more than half of the students (66.18%) were under-graduate while one-third of the students (32.18) had post-graduate education and remaining (1.64 %) were doctorate/PhD. Further, more than of the half students (52.83%) were from Government institutes (Central/state) and more than one-third of the students were from private institutes and rest from the deemed university (9.14). Regarding discipline, 70.02% of the students were from Science/Engineering/Pharmacy stream followed by Education (11.15%) and students were from other stream (10.05%), while (8.78%) students were from Arts/ Humanities/ Management**.**

Table 1. Personal profile of the responding students (n=547)

Variables	Frequency	Percentage
Age-wise distribution		
Below 30 yrs	150	27.43
20-25 yrs	362	66.18
25-30 yrs	26	4.75
Above 30 yrs	9	1.64
Gender-wise distribution		
Female	275	50.27
Male	270	49.36
Prefer not to say	2	0.37
Educational distribution		
Under-graduate	362	66.18
Post-graduate	176	32.18
Doctorate/PhD	9	1.64
Post-Doc		
Institutional distribution		
Government institute (central/state)	289	52.83
Private institute	205	37.48
Deemed university	50	9.14
Autonomous institute	3	0.55
Discipline-wise distribution		
Arts/ humanities/management	48	8.78
Science/ engineering/pharmacy	383	70.02
Education	61	11.15
Others	55	10.05

3.1.1 Attitude and comfort level of students towards online learning tools in India

The results regarding the attitude and comfort level of students towards online learning tools in India have been presented in Table 2. Majority of the students (78.98%) had access to computers and Wi-fi in their institute, while 61.61% students had access to the online material for study at home. More than half of the respondents (55.94%) reported sufficient availability of the various online educational portals/tools /apps. Further, more than half of the students (59.23%) felt that short-term hands-on training/workshop about the available tools/apps/ portals helped in better understanding of the online mode of learning nearly half of the students (51.55%) responded that they did not enjoy online mode of learning more than the typical classroom teaching. Similar results were reported by Dhiman et al. [2].

The usage of e-learning tools is most important now a day in teaching learning process and with the development of blended and flipped learning strategies it could be enhanced reported by Gupta & Singh [3]

Further, it was seen that 77.51% of students reported teachers sending PPTs/Link to online text E-books regarding mode of teaching (Fig. 1). More than half of the respondents (68.93%) observed classroom teaching in combination with online tools was best and most convenient way of learning majority of the students (84.28%) considered face to face classroom interaction with teacher always matter (Fig. 2), while 38.21 %feel burdened because of the sudden need to learn about various modes of online learning and 17.37% cent of the students reported that reading on phone/laptop was stressful as compared to books. Further, availability of a number of online sources and their usage created confusion among 51.37% of the students. Among the major limitation in adoption of online mode of learning was 'Availability and speed of internet' as reported by 59.23% followed by "Reading on phone/laptop is stressful as compared to books' (17.37%), 'Not clear understanding of available options' (12.80%), while, 10.60% reported that 'Finding the material of your interest out of the vast information is time-consuming' as a constraint (Fig. 3). Suri and Sharma, [4] reported that worldwide communication and internet connection speed, web content had grown richer and more interactive which is beneficial for online learners.

Table 2. Attitude and comfort level of students towards online learning tools (n=547)

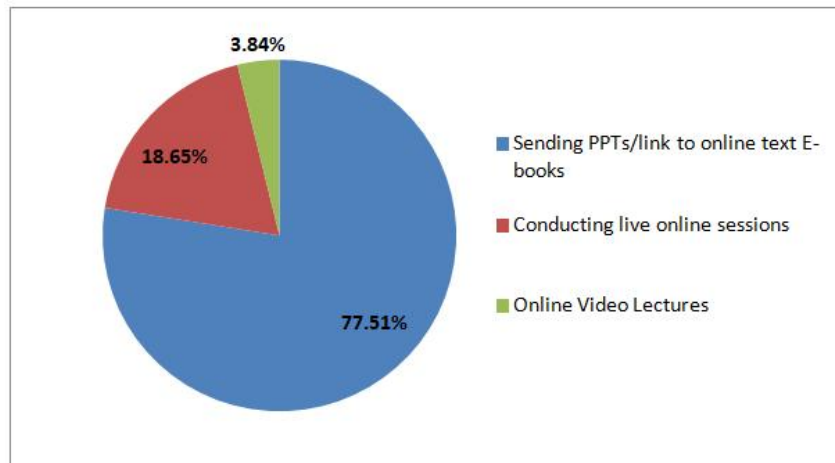| Variable	Frequency	Percentage
Access to computers and Wi-fi in institution		
Yes	432	78.98
No	75	13.71
Neutral	40	7.31
Personally access the online material for study at home		
Own computer/laptop		
None	11	2.01
Own mobile phone	337	61.61
Both	199	36.38
Sufficient availability of the various online educational portals/tools /apps		
Yes	306	55.94
No	60	10.97
Partially	181	33.09
Short-term hands-on training/workshop about the available tools/apps/ portals helped in better understanding of the online mode of learning		
Yes	324	59.23
No	77	14.08
Neutral	146	26.69
Enjoyed online mode of learning more than the typical classroom teaching		
Yes	128	23.40
No	282	51.55
Neutral	137	25.05
Mode of teaching currently used by teachers		
Sending PPTs/link to online text E-books	424	77.51
Conducting live online sessions	102	18.65
Online Video Lectures	21	3.84
Most convenient method of online learning		
Blackboard based classroom learning	83	15.17
Online mode of teaching with videos and ppt covering complete syllabus	70	12.80
Classroom teaching in combination with online tools	377	68.93
Not sure	17	3.10
Face to face classroom interaction with teacher		
Yes	461	84.28
No	48	8.77
Not sure	38	6.95
Feeling burdened because of the sudden need to learn about various modes of online learning		
Yes	209	38.21
No	200	36.56
Neutral	138	25.23
Availability of a number of online sources and their usage creating confusion		
Yes	281	51.37
No	102	18.65
Neutral	164	29.98
Major limitation of online mode of learning		
Availability and speed of internet	324	59.23
Not clear understanding of available options	70	12.80
Finding the material of your interest out of the vast information is time-consuming	58	10.60
Reading on phone/laptop is stressful as compared to books	95	17.37

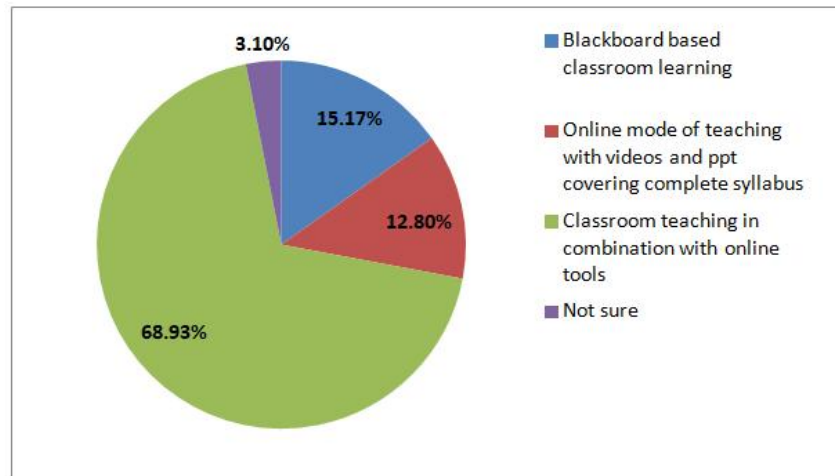**Fig. 1. Mode of teaching currently used by teachers**

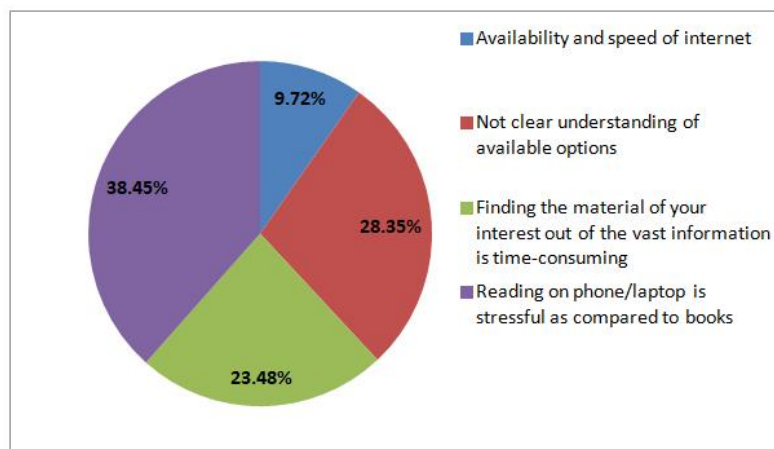**Fig. 2. Most convenient method of online learning**

Fig. 3. Major limitation of online mode of learning

Anusha and Ritu [5] found that most of the students had access to various e-learning devices such as smart phone, laptop and computer. All students had internet access and majority of them were using it at college, hostel and home.

4. CONCLUSION

The results indicated that more than of the half students (52.83%) were from government institute (central/state) and majority of the students (78.98%) had access to computers and Wi-fi in their institute, while 61.61% students had access of the online material for study at home. More than half of the respondents (55.94%) reported sufficient availability of the various online educational portals/tools /apps. More than half of the students (59.23%) agreed that short-term hands-on training/workshop about the available tools/apps/ portals helped in better understanding of the online mode of learning. Nearly half of the students (51.55%) responded that they did not enjoy online mode of learning more than the typical classroom teaching.

CONSENT

As per international standard or university standard, Participants' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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