Use of video conferencing software platforms for learning among Indian students during covid-19 pandemic times

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Abstract

The purpose of the present study was to investigate how Indian students used video conferencing software platforms for learning amid the pandemic. An online survey questionnaire by using Google Forms was used to collect the data from 106 participants across the country. The participants consisted of 59 % female and 41% male students ranging from primary to PhD/Postdoc level. Out of this, 88(84%) participants hooked on various video conferencing platforms for learning. Google meet (96.60%) and Zoom (95.50%) were the most used platforms by the participants. Multimedia learning (75%) and self-paced learning (68.2%) were the top advantages of online learning as cited by the respondents. Lack of face to face interaction and internet problems were the frequent hurdles faced by the students. Overall, 62.50% of participants were satisfied and 6.81% were dissatisfied with using online video conferencing platforms for online classes during pandemic times.

KEYWORDS: Online learning, Video conferencing, Online video conferencing platforms, Education in India, COVID-19.

Introduction

The deadly COVID-19 pandemic has challenged the entire educational system all over the globe. The adoption of asynchronous learning during this period let the smooth functioning of the teaching and learning activities(Daniel, 2020). The present study is carried out to know the use of video conferencing platforms for learning by Indian students. The result of the study would drop points to revive the educational system in the country during these kinds of unknown pandemics.

Objectives of the study

- To ascertain the perceived benefits after the use of video conferencing software platforms for learning.
- To know the major hurdles in the use of video conferencing software platforms for learning among the students.
- To find out the overall satisfaction in the use of video conferencing software platforms for learning among the students.

Methodology

Data for the study was collected by using an online survey questionnaire made by Google Forms and previewed at https://docs.google.com/forms/d/1cF74kHw2OG iVJqcrgZ8zfyW2KXdGFrsU8KF8NdOWXc/edit?usp=forms home& https://docs.google.com/forms/d/1cF74kHw2OG iVJqcrgZ8zfyW2KXdGFrsU8KF8NdOWXc/edit?usp=forms and previewed by using IBM-SPSS.

Data analysis and interpretation

The gender-wise breakup of the sample

As per Figure 1, the majority of the participants were female (59%) compared to their male counterparts who were accounted for 41% of the total sample population.

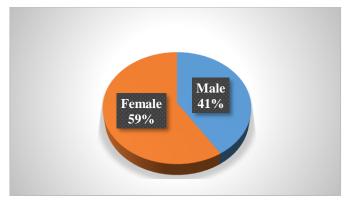


Figure: -1 Gender-wise break up

Use of various video conferencing platforms

According to Figure 2, the most used video conferencing platforms among the Indian students were Google Meet(96.60%) followed by Zoom(95.50%), Webex (69.30%), Google Classroom (44.30%) and Friends Room(9.10%).

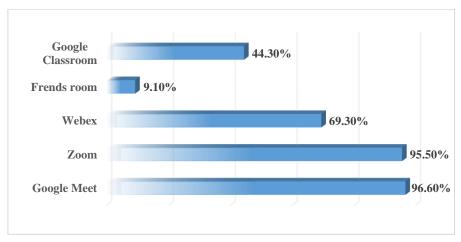


Figure: -2 Use of various video conferencing platforms

Perceived benefits after using video conferencing software platforms

According to the data in Table 1, 68.2% of the participants agreed that the use of video conferencing platforms helped them in self-paced learning. While nearly half of the participants (48.9%) agreed that their communication got improved. Only a few participants (4.5%) disagreed with the statement that the use of conferencing platforms did not give a way for multimedia learning. The majority of the participants cited the benefit of recorded lectures (71.6%) while 27.3% of the participants were neutral regarding the statement that video conferencing platforms could save time and effort.

Table:-1 Benefits in use of video conferencing software platforms

Response	Agree	Neutral Disagree		
Self-paced	60	24	4	
learning	(68.2%)	(27.3%)	(4.5%)	
Improved	43	31	14	
communication	(48.9%)	(35.2%)	(15.9%)	
Multimedia	66	18	4	
learning	(75%)	(20.5%)	(4.5%)	
Recorded lectures	63	20	5	
	(71.6%)	(22.7 %)	(5.7%)	
Save time and	60	24	4	
efforts	(68.2%)	(27.3%)	(4.5%)	

Hurdles in the use of video conferencing software platforms

As per Table 2, the major problems faced frequently/always by the participants were lack of face to face interaction(36.4%), health issues(15.9%), internet problems(11.4%), technical issues& network issues(10.2%) and difficulty to use(8%). These findings correspond to the study findings of Pakaya et al. (2021) Singh et al. (2020) and Kaur & Sharma (2020).

Table: -2 Hurdles in the use of video conferencing software platforms

Response	Always	Often	Sometimes	Ever	Never
Technical issues and Network	9	35	42	0	2
issues	(10.2%)	(39.8%)	(47.7%)	(0%)	(2.3%)
Internet problems	10	30	45	1	2
	(11.4%)	(34%)	(51.1%)	(1.1%)	(2.3%)
Health issues	14	29	36	1	8
	(15.9%)	(33%)	(40.9%)	(1.1%)	(9.1%)
No face to face interaction	32	20	30	1	5
	(36.4%)	(22.7%)	(34.1%)	(1.1%)	(5.7%)
Difficult to use	7	20	37	4	20
	(8%)	(22.7%)	(42%)	(4.5%)	(22.7%)

Overall satisfaction

According to Figure 3, the majority of the participants (62.50%) were satisfied with the use of video conferencing software platforms for learning followed by 11.38% highly satisfied, 19.31% neutral,6.81% dissatisfied it was seen that no participants were highly dissatisfied.

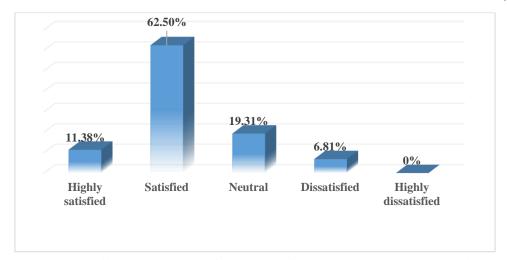


Figure: -3 Overall satisfaction in the use of video conferencing software platforms

Findings, conclusion and recommendations

The study was carried out to know the use of video conferencing platforms for learning by the Indian students during the COVID-19 period. The study reported that the most used video conferencing platforms were Google Meet and Zoom. The participants agreed that the use of video conferencing platforms helped them in self-paced learning and multimedia learning. The major problems faced by them were lack of face to face interaction and health issues. Overall, the majority of the participants were satisfied with the use of video conferencing software platforms for learning. The study can be concluded that the use of asynchronous learning during the pandemic in India was found productive. Even though, there must be a digital divide among the students especially between rural and urban since the country is a developing one. So, the following recommendations were proposed.

- Government should offer free devices to underprivileged students for attending classes.
- Students, as well as the teachers', should be imparted training on the use of platforms for effective use.

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