

# Feedback of Students on Effectiveness of WhatsApp as an E-Learning Tool during Lockdown in India due to Covid-19 Pandemic

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## Abstract

The recent Covid 19 pandemic has affected the entire globe in the last few months. It has resulted into lockdown across the country w.e.f., 24th March, 2020. Due to lockdown, it has been anticipated that students might be massively suffered and as a result of that MHRD and UGC have issued notification asking teachers to take classes using different online teaching learning tools. Zoom has been a big success in this period. But due to the fact that it does not safeguard the privacy of the users, many teachers have shifted to Google classroom, hangouts or other tools. It has also been witnessed that teachers have started to use whatsapp for sharing of study materials or presentation slides. Therefore, the current study endeavors to know how teachers are using whatsapp as an e-learning application during All India lockdown period due to covid 19 pandemic. The study also focuses on to stimulate the relationship between different advantages arising out of whatsapp and its effectiveness as a tool of e-learning. A total of 202 college and university students from different parts of the country have participated in the study as sample respondents.

**Keywords:** Covid 19 pandemic, Lockdown, E- Learning, WhatsApp, Effectiveness of WhatsApp, Technical advantages, Educational Advantages, Instructional Advantages

## Introduction

The recent outbreak of Coronavirus, commonly known as Covid 19 has affected the entire globe in the last few months. The pandemic has made nations to go for complete lockdown for a specific period of time. It has resulted in educational institutions across the globe being closed for fighting the virus as precautionary measures. Indian educational institutions too are not an exception. The aftermath of this lockdown may have an adverse effect among the students. All the exams, classes have been put on hold until further notification. At this moment of emergency, the Government bodies like UGC and MHRD have issued notifications asking the teachers to conduct classes through the use of e-learning tools. The use of modern Information Technology in the schools, colleges and other educational institutions has been made compulsory. Nowadays the concept of E-classroom and online mode of classes is very much a part of academic curriculum. Modern study concept includes MOOCS, SWAYAM etc. So it has become essential on the part of teachers to be techno friendly with the latest Information technology available with regard to classroom teachings. In this

respect the sudden lockdown in the Nation has adversely affected the regular classes and also overall progress of the students' academics. The use of technologies in this situation has become more than essential to cope up with the completion of syllabus. In this regard, students have been encouraged to make use of online technology so that they can interact with the overall content and also have a high space in learning. Learning also becomes more fun with the use of animations and graphics, thus making the students more engaged in learning. Different messaging platforms have potential to enhance learning (Smit, 2012), learners' being active in their studies (Cifuentes & Lents, 2010) interaction between teacher and student (Cifuentes & Lents, 2010), students' motivation (Plana et al, 2013). All these benefits can be witnessed in studies related to whatsapp (Gon S, et al, 2017; Bouhnik et al, 2014). The use of Whatsapp as an e- learning mode is developing rapidly. The mode of study materials which can be provided through Whatsapp includes sharing of videos, power point presentations, pre- prepared notes etc. "Whatsapp has technical, educational and instructional advantages.

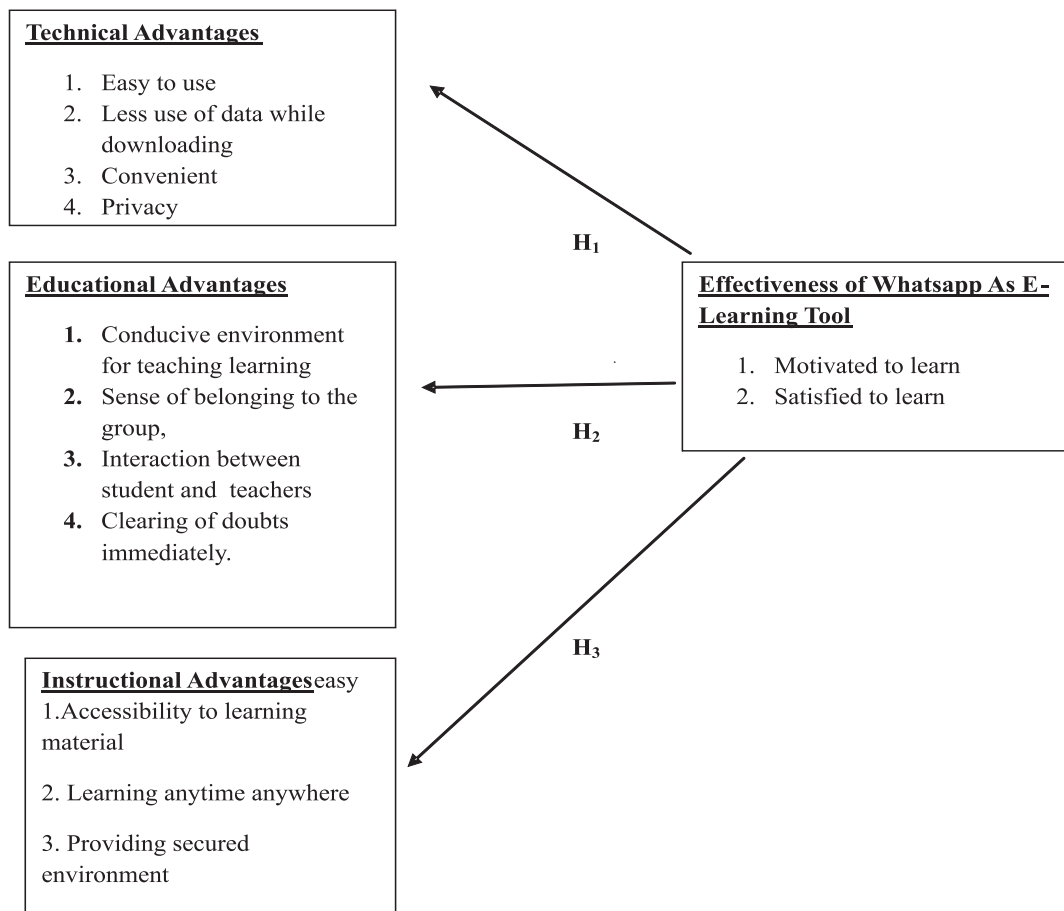
Technical advantages can be easy to use, convenient, less use of data while downloading, privacy ; whereas educational advantages are conducive environment for teaching learning, sense of belonging to the group, interaction between student and teachers and clearing of doubts immediately. Instructional advantages are easy accessibility to learning material, learning anytime anywhere and providing secured environment. "(Gon, S, et al. 2017). So, it is evident that WhatsApp has many advantages. But with these advantages has whatsapp really emerged as an effective e-learning tool during lockdown period? It is a big question. To get this answer, null hypotheses have been taken.

H1: Effectiveness of whatsapp as e learning tool is not related to technical advantages.

H2 : Effectiveness of whatsapp as e learning tool is not related to educational advantages.

H3: Effectiveness of whatsapp as e learning tool is not related to educational advantages.

**Figure 1: Conceptual Framework**



(Source: Outcome of literature review)

## Objectives

In relation to the previous studies conducted, the current study will try to accomplish the following objectives:

- ? To know how Whatsapp has been used by teachers as E-Learning tool during lockdown period.
- ? To check the effectiveness of whatsapp as e-learning tool during lockdown period taking into account its technical advantages, educational advantages and instructional advantages.

## Method

### Sampling Frame

The study tries to incorporate students from different educational institutions (both private and public) across the country. A Google Questionnaire has been prepared and link has been shared to known teachers in different colleges and universities in India. They shared the link with their students and the students shared the link with their peers. The students who participated in filling out the online questionnaire form were from Dibrugarh University, PDUAM (Tulungia), Women's college Tinsukia, ICFAI Business School (Jaipur, Hyderabad, Kolkata and Bangalore campuses). Link was open for three days and 202 students only responded within that time period. Five Point Likert scale has been used which ranges from strongly agree as 1 to strongly disagree as 5. The scales of this study have been taken from previous researches conducted. It consists of 13 items as technical advantages (4), educational advantages (4), and Instructional advantages (3) and effectiveness of whatsapp as e-learning tool (2).

### Sampling unit

Sampling unit for this study are only those students who have been taught by their teachers using whatsapp during the lockdown period due to Covid 19 phenomenon.

### Sampling Technique

Snowball sampling technique has been adopted.

### Research Tools

SPSS 20 has been used in order to analyze the data. Certain tests like Reliability test and Regression Analysis has been done. .

### Limitation

The study has only 202 respondents. Also, the study does not incorporate students from all the academic institutions of India. Henceforth, findings of the present study cannot be generalized.

### Reliability Statistics

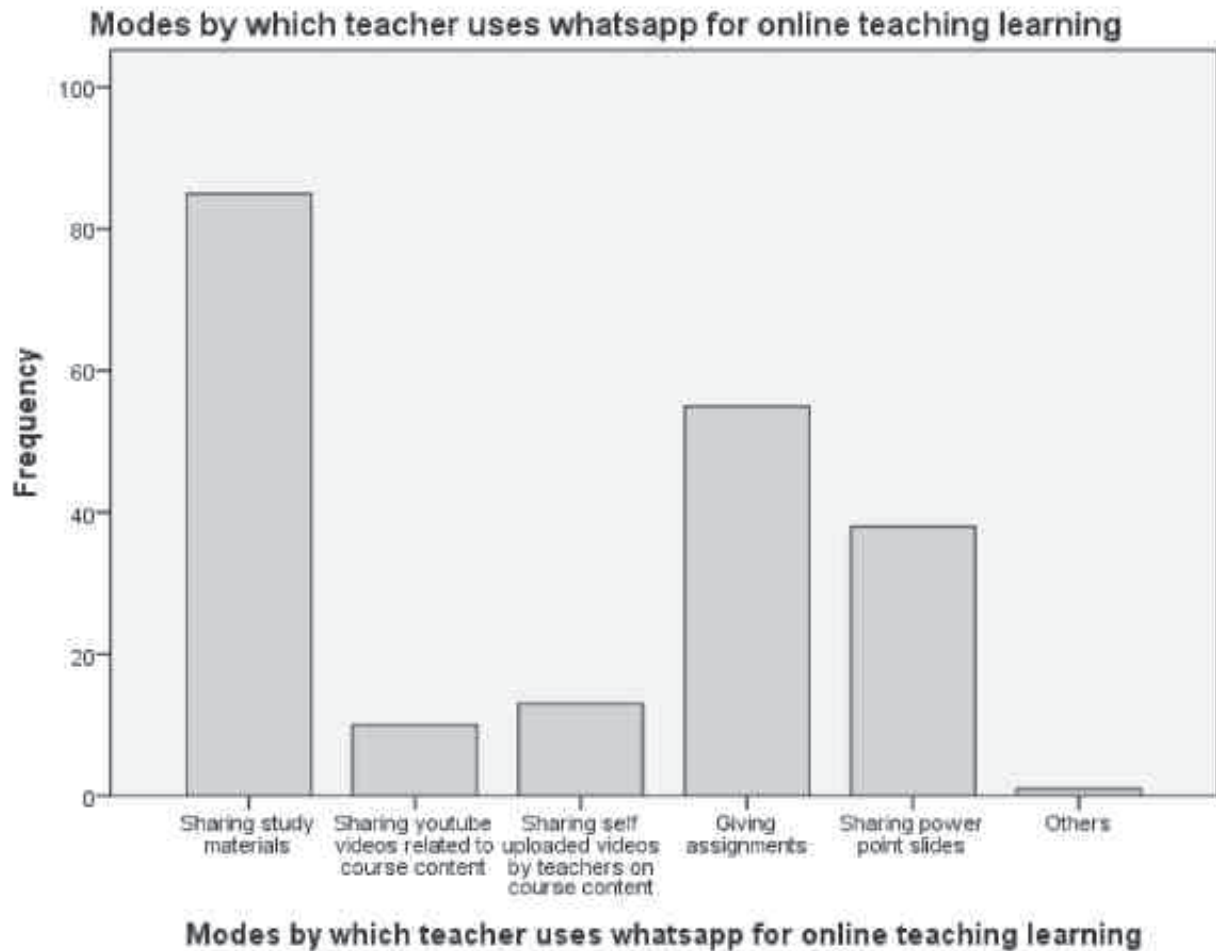
“Reliability concerns with the measurement of a phenomenon that provides consistent result” (Carmines and Zeller, 1979). “Cronbach Alpha coefficient is a frequently used internal consistency measure of reliability when Likert scales have been used” (Whitley, 2002). The reliability coefficient of 0.70 is adequate for research instruments (Whitley, 2002).”

**Table 1: Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.967	.969	13

## Results and Discussion

**Figure 2: Uses of Whatsapp by teachers as E- Learning Tool during Lockdown Period**



(Source: Field study)

Interpretation: Figure 2 depicts that sharing of study materials (42.1%) is the most common use of whatsapp as e-learning followed by giving assignments (27.2%), sharing power point slides (18.8%), sharing of self uploaded videos on course content (6.4%) and sharing of YouTube videos on course content (5%) and others (0.5%).

### Testing of Hypothesis Using Regression Analysis

“Stepwise multiple regression analysis focuses on predicting the relationship between two variables and also

the correlation between them. One can analyze the relationship between a set of independent or predictor variables and a dependent variable or criterion variable through multiple regressions”. (Ho, 2006)

**Table 2: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.878 <sup>a</sup>	.772	.768	.38624

a. Predictors: (Constant), Instructional advantages, Technical advantages, Educational advantages

The value of present adjusted R<sup>2</sup> for the present regression model is 0.768 which indicates that 76.8% of variations in effectiveness of whatsapp can be explained by three independent variables.

**Table 3: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	99.849	3	33.283	223.108	.000 <sup>b</sup>
	Residual	29.537	198	.149		
	Total	129.386	201			

a. Dependent Variable: Whatsapp as an effective tool for e-learning

b. Predictors: (Constant), Instructional advantages, Technical advantages, Educational advantages

**Table 4: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.159	.078		-2.051	.042
	Technical advantages	.342	.067	.381	5.138	.000
	Educational advantages	.220	.082	.219	2.703	.007
	Instructional advantages	.305	.069	.323	4.446	.000

a. Dependent Variable: Whatsapp as an effective tool for e-learning

In the above table, we can see that technical advantages ( $B = .342$ ,  $p < .000$ ), educational advantages ( $B = .220$ ,  $p < .007$ ) and instructional advantages ( $B = .305$ ,  $p < .000$ ) which suggests that all these independent variables are related dependent variable. It also indicates that all the variables are statistically significant. Unstandardized coefficient has been used to formulate the regression equation as:

$$Y = .342 + .220X_1 + .305X_2$$

Here, Y = Effectiveness of whatsapp; X<sub>1</sub> = Technical

Advantages ; X<sub>2</sub> = Educational Advantages; X<sub>3</sub> = Instructional Advantages

Henceforth, we can say that all the null hypotheses taken have been rejected. And it shows that there is a relationship between effectiveness of whatsapp as e-learning tool to technical advantages, educational advantages and instructional advantages.

### Conclusion

Covid 19 pandemic has shown the path to all the persons related to teaching fraternity that online teaching –learning is a way to go in future. Classroom can never be restricted to a physical infrastructure and it is proven by the fact that multiple e-learning applications have been gaining popularity during this lockdown period. Though one has to accept that, online teaching- learning has some limitations like poor internet connectivity, inadequate knowledge to handle with online applications etc but there are some applications which are used by people on a daily basis. One of such is Whatsapp messenger. The study shows that whatsapp has a great potential to be exercised as an e-learning app. During covid 19 all India lock down period, many teachers have adopted whatsapp as a professional e-learning tool. As it is accompanied with multiple advantages, so it is expected that even after the lockdown period gets over, teachers across the nation can use this application for online teaching-learning purpose.

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