Educational Quest: An Int. J. of Education and Applied Social Sciences: Vol. 14, No. 03, pp. 181-187, December 2023
DOI: 10.30954/2230-7311.3.2023.6
Peer Reviewed Journal

Effectiveness of E-learning During the Pandemic: Perceptions of Selected Parents in Manipur

Pansy Laishram* and Damodar Nepram

Department of Economics, Manipur University, Manipur, India

*Corresponding author: pansylaishram@yahoo.com

Received: 13-08-2023 **Revised:** 20-11-2023 **Accepted:** 01-12-2023

ABSTRACT

The COVID-19 pandemic has brought a new way of imparting education which has become extremely popular. Educational institutions started taking classes, giving notes, and taking exams online using mediums like Google Meet, Zoom, WhatsApp, etc. This paper examines the effectiveness of this new technique of learning called e-learning based on the perceptions of the parents. It is a quantitative descriptive research in which a questionnaire survey method was employed. A total of hundred parents were selected and asked to fill out a form circulated online through a google form. The results obtained from the analysis conclude that online learning system conducted during the pandemic was helpful but it was no substitute for offline learning. The new method of learning also posed a burden to the low-income parents and created a learning divide between students attending government and private schools.

Keywords: COVID-19, E-learning, Private-Government Schools, Smartphone

The COVID-19 epidemic has transformed how education is being imparted. Online learning, also known as e-learning, using mediums like Google Meet, Zoom, WhatsApp, etc., has become a new pioneering method of giving education in addition to the traditional face-to-face learning. It is indeed a big shift for a developing country like India and many other developing countries as the transformation came too soon. The government has to provide adequate infrastructure which may be lacking especially in rural areas. In addition to that, teachers started taking classes without proper training while students also have to sit behind a device to understand what was taught with less interaction opportunities. However, as time passed, people gradually accepted e-learning as a medium of getting education in spite of the difficulties.

The irony of e-learning is its effectiveness. How do we measure it? There are many ways to doing it. In this paper, the success of e-learning is measured through a number of parameters such as class attendance of students, attentiveness while attending online classes, effort put up by schools, etc. In addition to this, we try to ascertain the views of parents who send their children to government and private schools separately. This is because COVID-19 has caused a big digital divide, where e-learning catered mostly to the urban literate elite, and the left behind are the poor who are unable to afford the many conditions that come with e-learning. Furthermore, parents in these households might also have suffered from financial setback caused by the pandemic. Children or students whose parents are in the higher income brackets are lucky as most of them already have the necessary e-gadgets like computer, laptop or a tablet. They can learn better through a more significant visual medium.

How to cite this article: Laishram, P. and Nepram, D. (2023). Effectiveness of E-learning During the Pandemic: Perceptions of Selected Parents in Manipur. *Educational Quest: An Int. J. Edu. Appl. Soc. Sci.*, **14**(03): 181-187.

Source of Support: None; **Conflict of Interest:** None

LITERATURE REVIEW

Students from less advantaged backgrounds are more likely to fall behind during this pandemic. Di Pietro *et al.* (2020) studied the factors that affect e-learning at home using available literature and emerging dataset in the early period of the COVID-19 spread. They predicted that childrenare likely to suffer, but students from poor economic background are likely to suffer more in COVID times as they have less access to digital devices and suitable home environment. Bahasoan *et al.* (2020) took up the initiative of evaluating online learning and concluded that online-learning does serve the purpose of learning as it was the only alternative available but the cost incurred or borne was more. Network and quota constraints were the major obstacles in online learning. In a study relating to Assam, Boruah (2020) observed that the coming of COVID-19 and subsequent e-learning has many positive and negative points. It increases digital learning and literacy but negatively affects poor students. Students might be unable to afford handsets, while school closure leads to the suspension of mid-day meal programmes. ASER (Rural) Wave I (2020) report which was conducted through phone survey found that parents purchasing smart phones in the country after the advent of COVID-19 increased from 36.5% in 2018 to 61.8% in 2020. It further observed that 74.2% of the children going to private schools had smartphones while it was just 56.4% for those going to government schools.

The effectiveness of e-learning also depends on the availability of adequate infrastructure. Noori (2021) found that students in Afghanistan suffered from the lack of adequate infrastructure and inadequate resources. Garad *et al.* (2021) observed that adequate e-learning infrastructure and skill in using them are necessary for distance learning. They stressed the need for government and educational institutions to provide more infrastructure and conduct training programmes on e-learning. Similarly, Almaiah *et al.* (2020) observed that there were many challenges and factors affecting the successful implementation of e-learning during the pandemic. Challenges like adequate finance, technical issues, and management were identified, while usage depends on technological factors, e-learning system quality, awareness and skill among users, trustworthiness of e-learning system, etc. Abuhammad (2020) used face-book as a platform to gather information regarding barriers to online learning during the pandemic in Jordan. The study found a number of problems ranging from lack of finance, want of technical expertise, poor internet speed, etc.

Learning outcomes, attitudes and satisfaction were the most common parameters for assessing learning effectiveness in higher education. Tsang *et al.* (2021) examined the effectiveness of online learning during the COVID-19 period based on a sample of students from Hong Kong. They mentioned that student-student interaction, teacher-student interaction, course designs, etc. are essential factors in determining learning effectiveness.

Ebohon *et al.* (2021) have similar opinion about the role of interactions and suggested the need for designing interactive online classes. Brossard *et al.* (2020) explored the disparities across and within countries in children learning outcomes and elaborated on the importance of parental engagement and the availability of child-oriented books during such difficulties. Similar opinion on parental involvement was also expressed by Lawrence and Fakuade (2021). But they also commented that a high level of commitment from the learners is needed for online learning. Basar *et al.* (2021) studied the effectiveness of online learning in Malaysia. They observed that students generally had computers and smartphones, but their motivation for online learning was low, and they preferred conventional face-to-face learning.

A broad literature review on online learning during COVID-19 revealed that parents in general support the use of online learning as it was considered to be the only means available for providing education. However, they felt that the effectiveness of online learning depends on three broad factors. One is the income and affordability of electronic gadgets required for e-learning. Second is the availability of adequate infrastructure like electricity and internet connectivity. Finally, the way how the course design is made along with attitude of students and parents are also important factors.

RESEARCH METHODOLOGY

Sample design

The present study used primary data collected

through a questionnaire survey circulated online via google form. The questionnaire was divided into two parts. Part A collected information on the demographic profile and the availability of e-gadgets for learning at home of the respondents. Part B focussed on the parent's notion on the effectiveness of e-learning during the pandemic. A total of 100 parents were selected through purposive sampling. Five parents reported not to have smartphones. Forms were circulated through WhatsApp to those with the necessary gadgets. Ten failed to respond and the analysis is done based on the 85 responses.

Methods

For the second part of the questionnaire, the parents were requested to respond to a number of questions to extract opinions on the learning responses of their children. The answers were then analysed based on the Likert scale methodology. The individual has to select one of the four choices given to him which are basically of his acceptance or rejection of the question raised, i.e. A: agree, SA: strongly agree, D: disagree, and SD: strongly disagree. To make the data interpretation simple and easy to understand, A: agree and SA: strongly agree will be taken synonymously as acceptance, while D: disagree and SD: strongly disagree will be taken as rejection.

RESULTS AND DISCUSSION

Socio-economic profile of the respondents

Ten of the 100 parents selected failed to respond to the questionnaires as mentioned earlier. A total of five students studying in government schools did not have the opportunity to use this facility due to a lack of gadgets. However, parents made sure that the children get tuition, a widely prevalent practice in Manipur. Also, when it comes to cost or affordability, many parents in the state, instead of purchasing a smartphone which will cost around ₹ 8000 to ₹ 10000, consider it better to spend at least ₹ 500-800 per month for tuition. In addition, internet connectivity is a must for e-learning, not to mention the charges that come along with it. A minimum data pack of 2 GB is required for daily classes. Internet recharge prices have risen, adding more to the cost of affording e-learning.

Socio-economic profile of the remaining 85 parents is given in Table 1. Most of the parents in the sample (58) sent their children to government schools and were below 50 years of age. On the other hand, 27 of the respondents sent their children to private schools and most of them were below 40 years of age. The income of the parents differs widely. Ninety percent of the parents who had children in government schools had a monthly income of below ₹ 20,000. A few with a monthly salary of above ₹ 50,000 and above sent their children to the few prestigious government schools. In the case of private schools, only seven parents had a monthly income below ₹ 10,000, while most of the parents enjoyed a much better income. As far as the educational status of the parents are concerned, most of them had bachelor's degree (48%) while those sending their children to government schools (77%) had high school level education only.

Table 1: Profile of the respondents

Sl. No.	Characteristics	Group	Government	Private
1	Age	<30	14(24.14)	5(18.52)
		30-40	5(8.62)	19(70.37)
		40-50	23(39.66)	3(11.11)
		>50	16(27.59)	0(0.00)
2	Income (₹)	10,000 <	23(39.66)	7(25.93)
		10,000-20,000	29(50.00)	2(7.41)
		20,000-30,000	1(1.72)	5(18.52)
		30,000-40,000	0(0.00)	2(7.41)
		40,000-50,000	1(1.72)	3(11.11)
		>50,000	3(5.17)	6(22.22)
		Not reported	1(1.72)	2(7.41)
3	Education level	High school	45(77.59)	8(29.63)
		Diploma	5(8.62)	2(7.41)
		Bachelor degree	6(10.34)	13(48.15)
		Master degree	2(3.45)	3(11.11)
		PhD	0(0.00)	1(3.70)

Note: *The data given are in numbers (frequency), while those in parentheses are percentages. The total number of parents here is 85.*

Table 2 gives the facilities available to the families of the 85 children with which they can access e-learning. Out of 27 students in private schools, 15 had access to only a smartphone, which was the primary device through which online classes were being conducted. Another 6 had access to

both smart phone and a laptop, while 2 had access to a smartphone, laptop, and desktop. And lastly, only 4 of the surveyed parents had access to all the mentioned devices. As for the parents whose children attend government schools, 56 of them had access to a smart phone only out of the total 58 parents surveyed. Only 2 of them had access to smart phone and a laptop. None of the parents had access to the mentioned devices in sl. no 3 and 4. When comparing students attending private and government schools with access to electronic devices required for e-learning, it can be seen from the table that smartphone is the only device used by almost of them. Some of the private schools had their separate school portals available for download on the play store and were easily accessible for the parents as well.

Table 2: Possession of gadgets among students

	Private	Government	Total
Smart phone only	15(56)	56(97)	71(84)
Smart phone, Laptop	6(22)	2(3)	8(9)
Smart phone, Laptop, Desktop	2(7)	0(0)	2(2)
Smart phone, Laptop, Desktop, Tablet	4(15)	0(0)	4(5)
Total	**27(100)**	**58 (100)**	**85 (100)**

Analysis of the responses

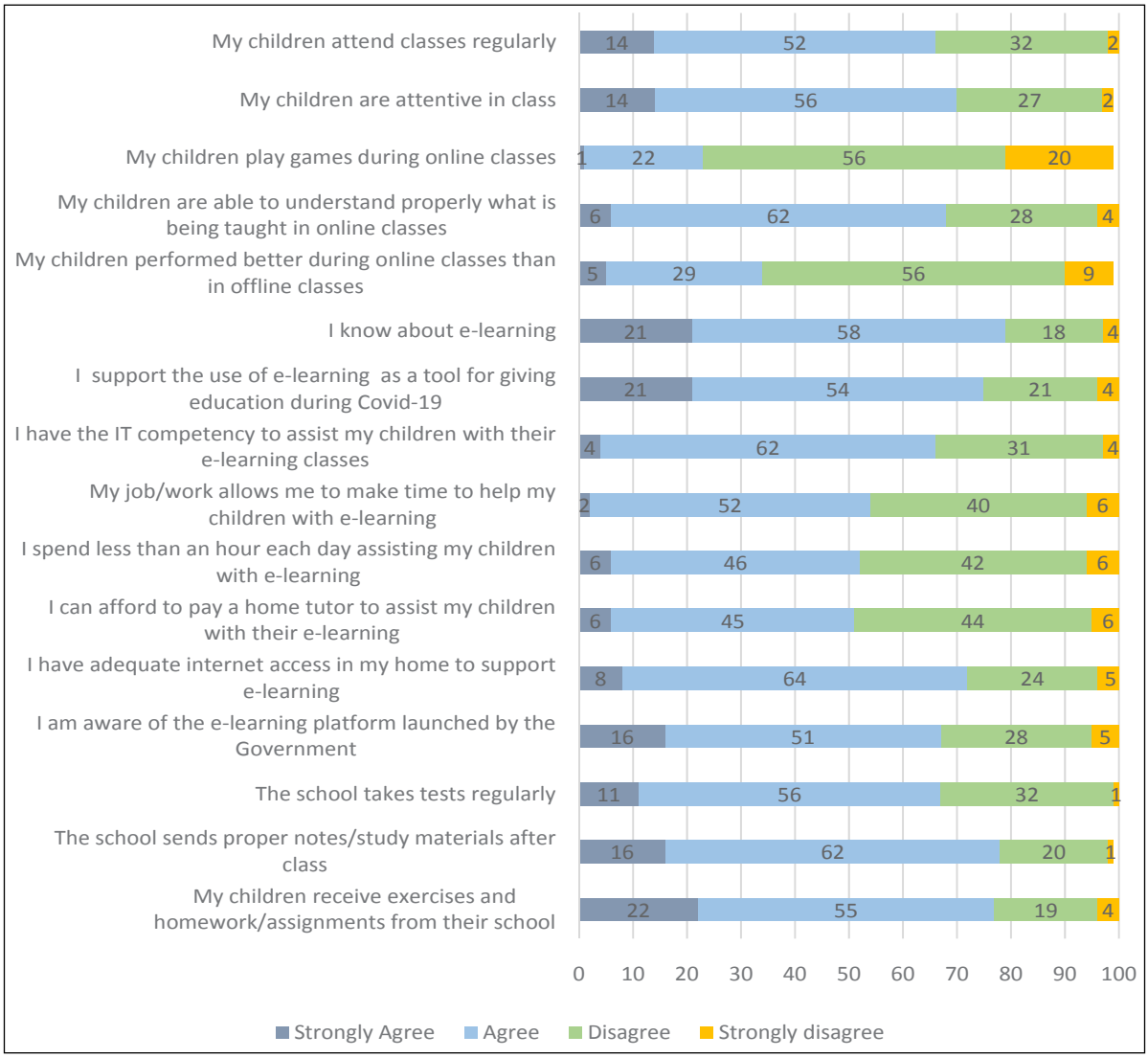
The questions raised can be broadly divided into three sections. The first is about the effectiveness of online learning provided to the students. It assesses the attentiveness of the child during online classes, regularity in class attendance, and the performance in online exams. This may be the main criteria to measure the success of e-learning. The second relate to the awareness of the parents to online learning and the facilities provided by them in their homes. The third section recounts the efforts put by the school authorities in terms holding classes regularly, how often they take class test, and the kind study materials given to the students. The responses of the parents to the various questions raised to them are illustrated in Fig. 1.

It can be ascertained that e-learning is an effective medium of giving education. As high as 66% of the parents felt that their children attend classes regularly. To a question whether they are attentive in class, 70% responded positively to it while 68% said that children are able to understand properly what is being taught in the class. Very few parents (23%) felt that their children play online games during classes. However, only 34 % of the parents is supportive of the view that performance of children is better as compared to offline class. This response mostly came from parents of those children who attend private schools as well as government schools residing in city areas where online classes were taken on a regular basis.

The awareness of the parents when it comes to e-learning is 79% while those with IT competency is 66 %.Those who support the child in learning is measured at 54% while the remaining could not help them. Parents who are aware of online learning are likely to provide adequate infrastructure at home. The survey revealed altogether 72% of the parents have adequate internet access at home. A large proportion of the parents mentioned that the schools send study materials and take test regularly.

To get a better picture of the acceptability of online learning,we divide parents into two,i.e., one who sends his or her child to government schools and the other to private schools. This is considered necessary as there are income differentials among the parents and a large proportion of children in government schools use only mobiles as a means of learning. This might have an effect to learning outcomes on children. Let's us denote parents sending children to government schools as category I parents and those sending to private schools as category II parents for easy explanation. The responses of the parents are given in Table 1 appendix in terms of the acceptability (agree and strongly agree) on the questions raised to them.

We make one important observation. The students were,in general, attentive in class and parents support use of e-learning as an alternative to offline learning during COVID-19. However, the acceptability degree varies and seems to be higher among those sending children to private schools. For example, of the 27 parents sending their child to private schools, 78 % responded positively of understanding well to what has been taught in class. But the proportion has been reduced to only 64% on being asked to parents who send their children to government schools. Similarly, 81% of the category II parents responded that their children



Note: *The figures show the responses in percentage. The percentages may not exactly be 100 when added due to rounding of the numbers.*

Fig. 1: Response of parents on e-learning

attend classes regularly, but the it was only 59 % for the other parents.

The effectiveness of e-learning depends onthe availability of e-gadgets at home such as laptops, computers, smartphones, etc. A large proportion (93%) of parents sending children to private schools (category II parents) have adequate internet access at home, while the same is measured at 72% for category I parents. The Government of India launched many e-learning platforms, such as Swayam, Diksha, etc. which are available free for use by the general public. The awareness of such programmes was also more among parents sending children to private schools. On the effort by schools, nearly85 % of the category II parents claim that schools take test regularly while this is 59% among category I parents. Similarly, 89% of parents sending children to private schools responded that schools send class notes regularly while it is 74% among the other group.

CONCLUSION

It may be concluded that e-learning during the pandemic was useful as it was the only alternative available to continue learning. It became a successful medium to get education. However, data collected from the survey revealed a clear distinction between students attending private and government schools. Students attending government private schools were mostly from higher income families and have

better learning outcomes. To make the transition to online learning successful, schools should have their own e-learning portal open to all, and proper infrastructure should be installed. Teachers must be appropriately trained, whether private or government school teachers. Parents need to be prepared physically and mentally as children need their support and guidance to embark on this new method. The government should also take a holistic approach to make this new learning method available to all and ensure that no student is left out.

REFERENCES

Abuhammad, S. 2020. Barriers to distance learning during the Covid-19 outbreak: a qualitative review from parents' perspective. *Heliyon*, **6**(11).

Almaiah, M.A., Al-Khasawneh, A. and Althunibat, A. 2020. Exploring the critical challenges and factors influencing the E-learning system usage during COVID-19 pandemic. *Education and Information Technologies*, **25**: 5261–5280.

ASER Centre, 2020. ASER 2020 Wave I Release ASER 2020 Wave 1: Release - ASER Centre.

Bahasoan, A., Ayuandiani,W., Mukhram, M. and Rahmat, A. 2020. Effectiveness of Online Learning in Pandemic Covid-19. *International Journal of Science, Technology & Management*.

Basar, Z.M., Mansor, A.N., Jamaludin, K.A. and Alias, B.S. 2021. The effectiveness and challenge of online learning for selected school students-A case study. *Asian Journal of University Education*, **17**(3): 119-129.

Boruah, A. 2020. COVID 19 and its impact on the educational sector of Assam. *International Journal of Electrical Engineering and Technology*, **11**(9): 201-205.

Brossard, M., Cardoso, Kamei,A., Mishra,S., Mizunoya,S. and Reuge, N. 2020. *Parental Engagement in Children's Learning. Innocenti Research Brief*, 2020-9, UNICEF.

Di Pietro, G. Biagi, F., Costa, P., Karpinski, Z. and Mazza, J. 2020. *The likely impact of COVID-19 on education: Reflections based on the existing literature and recent international datasets*, EUR 30275 EN, Publications Office of the European Union.https://doi.org/10.2760/126686

Ebohon, O., Obienu, A.C., Irabor, F., Amadin, F.I. and Omoregie, E.S. 2021. Evaluating the impact of COVID-19 pandemic lockdown on education in Nigeria: Insights from teachers and students on virtual/online learning. *Bulletin of the National Research Centre*, **45**: 76.

Garad, A., Al-Ansi, A.M. and Qamari, I.N. 2021. The role of e-learning infrastructure and cognitive competence in distance learning effectiveness during the COVID-19 pandemic. *Cakrawala Pendidikan*, **40**(1): 81-91.

Lawrence, K.C. and Fakuade, O.V. 2020. Parental involvement, learning participation and online learning commitment of adolescent learners during the COVID-19 lockdown. *Research in Learning Technology*, **29**: 1-16.

Noori, A.Q. 2021. The impact of COVID-19 pandemic on students' learning in higher education in Afghanistan. *Heliyon*, **7**(10).

Tsang, J.T.Y., So, M.K.P., Chong, A.C.Y., Lam, B.S.Y. and Chu, A.M.Y. 2021. Higher Education during the Pandemic: The Predictive Factors of Learning Effectiveness in COVID-19 Online Learning. *Education Sciences*, **8**(11): 446.

Appendix

Table 1: Acceptance level among parents (percentages)

Questions circulated	Government School	Private school
	A+SA	A+SA
Child performance		
My children attend class regularly	59	81
My children are attentive in class	66	81
My children play games during online classes	24	22
My children are able to understand properly what is being taught in online classes	64	78
My children performed better during online classes than in offline classes	38	26
Parents awareness & facilities provided		
I know about e-learning	72	93
I support the use of e-learning to teach my children during Covid-19	67	93
I have the IT competency to assist my children with their e-learning classes	59	81
My job/work allows me to make time to help my children with e-learning	47	70
I spend less than an hour each day assisting my children with e-learning	48	59
I can afford to pay a home tutor to assist my children with their e-learning	47	59
I have adequate internet access in my home to support e-learning	62	93
I am aware of the e-learning platform launched by the Government	53	96
School effort		
The school takes tests regularly	59	85
The school sends proper notes after every class	74	89
My children receive exercises and homework/assignment from their school	71	93

Note: *Acceptance = Agree (A)+ Strongly agree (SA)*