

A Cross Sectional Study to Assess the Prevalence of Anxiety and Perception of E-Learning among School Teachers

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Abstract

Background: Though E-learning has been slowly finding its way into various academic programs, the Covid-19 pandemic has suddenly forced it upon us, with no option left. For a few months now it has been the only possible method of teaching and learning. Many of the schools, as well as faculty were using it to some extent, but were not completely prepared. This posed a challenge to them. In this context, it is necessary to understand the hardships faced by the teachers, their perception about e—learning and the anxiety caused to them.

Method: A cross sectional study was conducted over a period of 4 weeks. A sample of 100 school teachers was randomly selected by convenience sampling. A structured, pre-tested questionnaire through Google forms was used to collect the data. The questionnaire assessed the benefits and disadvantages of e-learning as perceived by the teachers. Anxiety was assessed using the Hamilton Anxiety Rating Scale. Data was entered in Excel sheet and observations were tabulated and presented as proportions, using pie charts.

Results: 32% of the teachers felt that visual orientation is a positive aspect of e-learning, 67% felt that e-learning offers better opportunities for students to improve their skill set. 34% expressed that they were able to complete only 61-80% of the assigned subject matter for the day. Lack of face to face communication, poor network connectivity, and inattentiveness of students were listed as the disadvantages of e-learning. Despite training having been provided to conduct e-learning, 90% of the teachers experienced mild anxiety.

Conclusion: 58% of the teachers believed that E-learning could definitely be used on a regular basis, whereas 42% felt certain modifications and measures need to be in place before the actual process of complete E-learning could be thought of as a modality to teach school children.

Keywords: Anxiety, Perception, School Teachers, Feasibility, E-Learning.

Introduction

Teaching with the aid of electronic resources is what is meant as e-learning. It acts as a vehicle for knowledge transfer^[1] and as a system of delivering formal education. It encompasses a wide range of applications^[2] and processes. With the advancement in information and

communication technology online access to teaching resources have become an easier task. It is a storehouse of skill set advancement and a hub where various skills can be acquired or improved. It has helped in creating a hub of education where intellectuals from different spheres of education share their intellectual property and in turn gain a few.

Until now it was used in limited settings, mostly in the corporate sector where it was used to train the employees and upgrade their skills. However, the existing Covid pandemic has left us with no choice, as it is the only possible way of maintaining continuity in the education of students.

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A few years ago, this same concept was slowly tried and introduced in mostly the elite schools of the country to provide a better visual orientation to students to improve their understanding of the concepts of certain subject matter. This was in the form of smart classes^[3]. Even though smart classes did not quite make a huge impact in the curriculum, it did bring about a change in the way how classroom teaching was perceived. It introduced the possibility of using the internet to assist class-room teaching and increase the effectiveness of teaching. This initiated a change and made the world a smaller place for the young minds sitting in the classroom. They were able to visualise whatever they learnt, and thus better assimilate the concepts of various scientific topics. In a nut shell, everything was right there in front of them on a miniscule screen of a few inches.

E-learning gives a lot of flexibility^[4], both to teachers and students alike, eliminates the barriers of individualisation of students in the class-one need not be afraid of standing in front of others and speaking. It is also cost effective, takes into consideration the individual differences in the learners, and minimises the issue of scarcity of academic staff.

In the present situation, the schools barely had time to get ready to introduce e-learning. This study was conducted to understand the perception among the teachers about the various benefits and drawbacks, and to assess the anxiety levels among them regarding the same.

Methodology

Study Design: Cross Sectional Study

Sampling: Convenience Sampling

Duration of Study: 4 Weeks (June 4 2020- July 4 2020)

Procedure: A cross sectional study was conducted among 100 school teachers, randomly selected from schools affiliated to various boards and medium of instruction, from various states of India, through personal contacts. The data was collected over a period of 4 weeks from June 4,2020 - July 4,2020. The study assessed the anxiety among school teachers caused by introduction of e-learning and their perception about the feasibility of using e-learning as a regular teaching modality for school students. Data was collected using a pre tested structured questionnaire (in English

language) in the form of Google forms, after obtaining verbal consent from the teachers. Teachers who found it difficult to manage the Google forms were administered the questionnaire through a phone call and responses documented. The questionnaire assessed various parameters, including the benefits and drawbacks of E-learning and the anxiety among school teachers was assessed using the Hamilton Anxiety Rating Scale^[5]. The data was entered in an Excel sheet and presented as tables and pie charts.

Results

1. Of all the 100 teachers, mean age of the teachers was 38.7 years(range - 24y-60y), comprising 68 males and 32 females
2. Of all the 100 teachers, 85 teachers worked in schools situated in urban area and 15 teachers worked in schools situated in rural areas. About 60 teachers worked in private schools, 30 in aided schools and 10 in government schools. About 43 teachers were affiliated to CBSE board,45 to state board and 12 to other boards(as shown in Table 1)
3. Of all 100 teachers, 32 percent teachers opined visual orientation as reason for favoring e- learning among other reasons of reduced travel time,convenience and reduced administrative pressure as other reasons for favouring E-learning(figure 1).Teaching content was provided before hand to about 77 percent teachers and was regularly updated in about 84 percent teachers.
4. Of all 100 teachers, 34% of the teachers opined that they could complete only about 61- 80% of the subject matter for the day while taking online class. (figure 2)
5. Of all 100 teachers, 67% of them agreed that online classes opens window for students to see a wider world and enhance their skill set while 33% of them didn't agree with the notion. 65% of the teachers didn't find the need to invest to buy new laptop or mobile to conduct online classes and remaining 35% teachers had to invest.(as seen in Table 2)
6. Of 100 teachers, more than half of them(54%) received training on basic aspects of E-learning whereas 46% teachers didn't receive any training. (TABLE 3). Out of 100 teachers, more than 1/3rd of them(37) felt that lack of face to face communication is the major problem faced while taking online classes.(figure 3)

7. Of 100 teachers, majority of them(90) had mild anxiety i.e., hamilton score between 0-17 and remaining have moderate anxiety(5) and severe anxiety(5) i.e., Hamilton score of 18-24 & 25-30 respectively(figure 4)

Table 1 shows the urban-rural distribution of the schools where the study participants teach.

Table 1

| | No. of Teachers |
|-------------------------------|-----------------|
| Total Sample Size | 100 |
| Location of the school | |
| Urban | 85 |
| Rural | 15 |

Table 2 assess if online classes help in student skill set advancement and the need for investing in e-gadgets to take online class.

Table 2

| | No. of School Teachers |
|--|------------------------|
| Total Sample Size | 100 |
| Online classes helps in expanding the horizon of children | |
| Yes | 67 |
| No | 33 |
| Need for investment to buy laptop/mobile | |
| Yes | 35 |
| No | 65 |

Table 3 indicates the number of teachers to whom primary training was provided for taking online classes

Table 3

| | No. of School Teachers |
|-------------------------|------------------------|
| Total sample size | 100 |
| Traning received | |
| Yes | 54 |
| No | 46 |

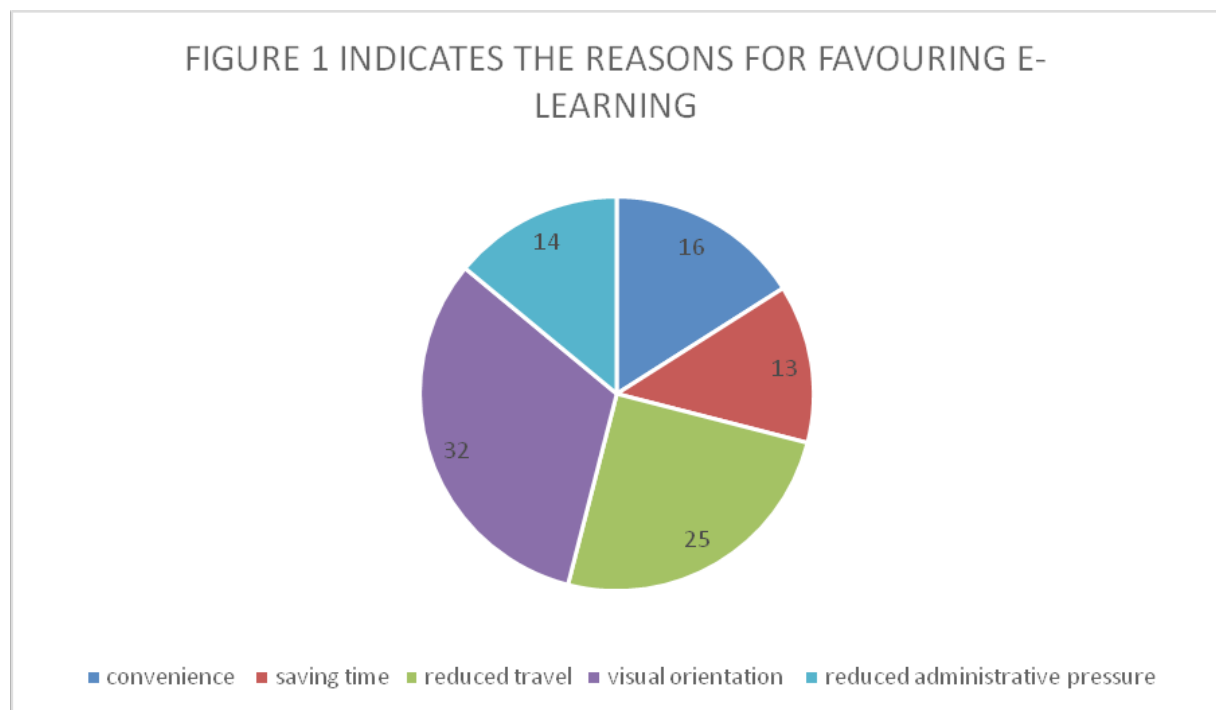


Figure 1

FIGURE 2 INDICATES THE % OF SUBJECT MATTER COMPLETED DESIGNATED FOR THAT HOUR WHEN TAKING AN ONLINE CLASS.

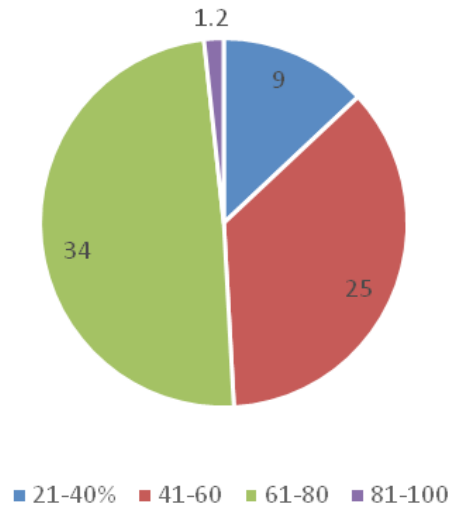


Figure 2

FIGURE 3 SHOWS THE REASONS FOR NOT FAVOURING E-LEARNING.

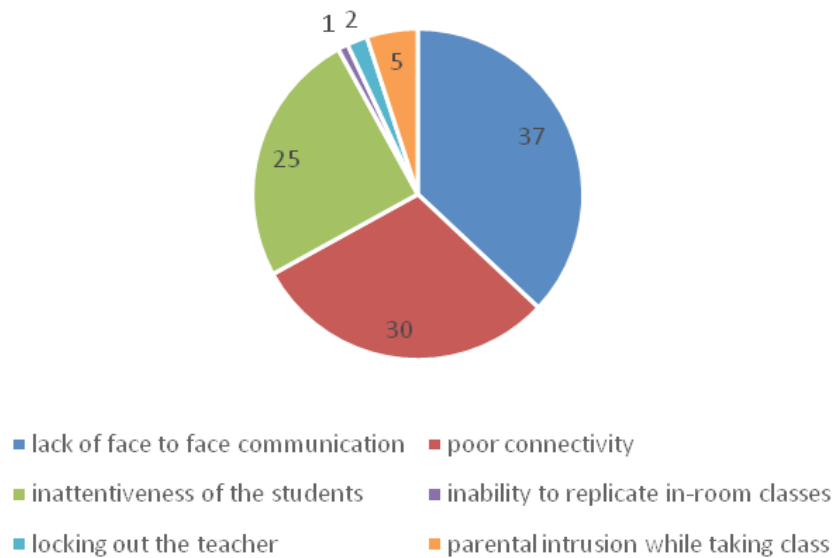


Figure 3

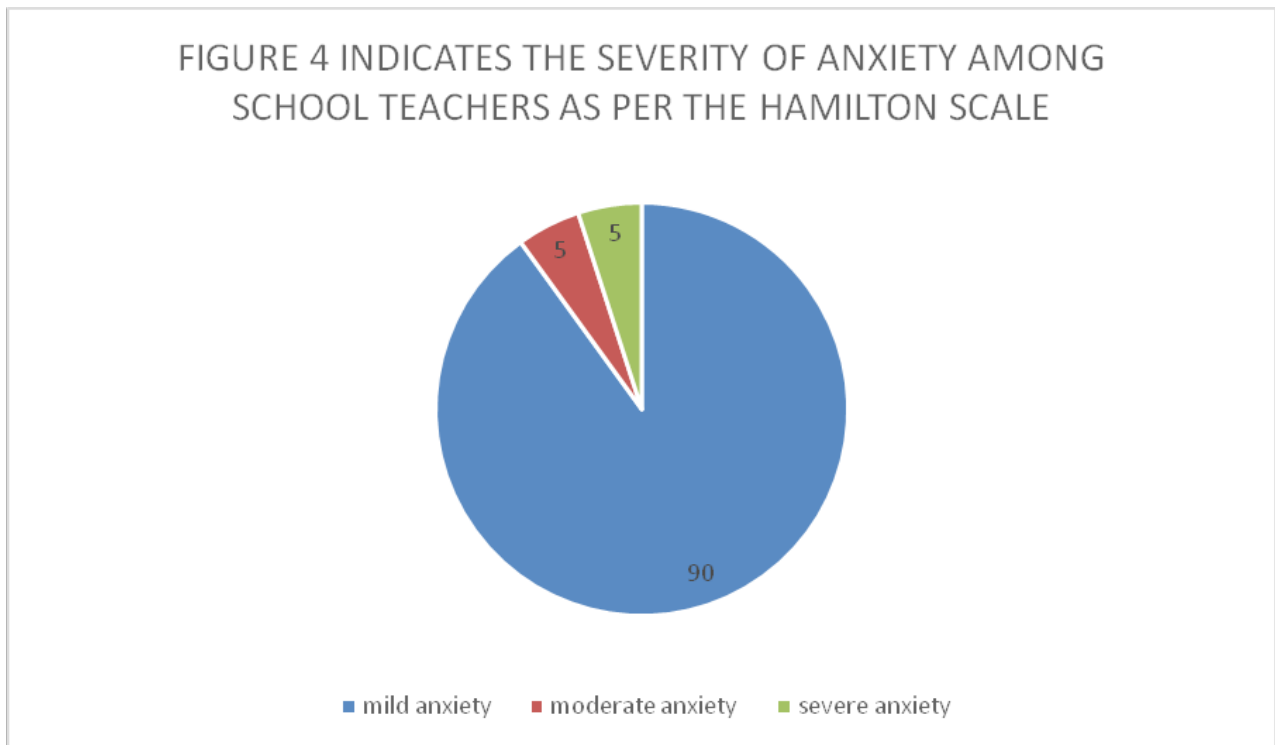


Figure 4

Conclusion

58% teachers believed that E-learning could definitely be a way for teaching school students in the future whereas other 42% teachers felt certain modifications and measures need to be in place before the actual process of complete E-learning could be thought about as a modality to teach school children. 90 teachers experienced mild anxiety whereas another 5 teachers experienced moderate and severe anxiety respectively.

Ethical Clearance: Taken from ‘Institute Ethics Committee, Kims Hubli.’

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Conflict of Interest: Nil

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