

# A Study on the Impact of Online Education on the Physical Health of Students

Sujit Ramachandran Nair  
Department of Management,  
Kochi Amrita Vishwa Vidyapeetham

**Abstract:-** The education sector like all other sectors throughout the world went in an online mode due to the lockdown imposed on the context of the covid-19 pandemic. This online education enabled the educational institutions to conduct their classes with the help of different online platforms. This also enabled the students to attend their lectures and classes from the place comfortable to them. But this online education also impacted the health of the students mentally as well as physically. This paper focuses more onto understanding the physical issues that were faced by the students while attending the online classes and discusses about their preference of mode of classes (online/offline) by analyzing the responses from the students of different age groups who attended online classes.

**Keywords:-** Covid-19 Pandemic, Online education, Health issues, Physical Wellbeing.

## I. INTRODUCTION

The Covid-19 Pandemic that originated in China and spread worldwide had a great impact on the economy as a whole. Many businesses of different sectors got impacted largely due to the pandemic. Even the education sector got impacted due to the same. Due to the lockdown that got implemented due to the pandemic, most of the business sectors shifted their daily works in an online mode. The education sector also shifted to an online mode. The pandemic gave rise to online education worldwide. The educational institutions worldwide started to provide their courses through various online platforms. Due to this, the students were able to attend their schools and colleges while sitting at their convenient places. Also, the Massively Open Online Courses (MOOC's) gave the students a platform to improve their knowledge, Skills and Aptitude. It became easy for the students to attend their classes. It also gave the students various opportunities in their academics. But this online education also had some negative impacts on the students. One of the impacts was on their health. The online classes affected both mental as well as physical health of the students attending the online classes. This paper discusses about the physical issues faced by the students while attending the online classes.

## II. LITERATURE REVIEW

The coronavirus disease 2019 (COVID-19) was detected in China in December 2019 and was later declared as a global pandemic by World Health Organization (Chakraborty, P., et al. (2021)). Due to this pandemic, a worldwide lockdown was imposed because of which, the entire world stood still. Amid the lockdown, most of the organizations shifted their processes to an online mode. Even the education sector got shifted to online mode in most of the countries. As India's Union Government's decision for a nation-wide lockdown came into effect from 25<sup>th</sup> March 2020, the educational institutions in India also started to conduct the classes in online mode (Muthuprasad, T., et al. (2021)). The academicians and instructors of educational sectors in India shifted to remote teaching mode (Saxena, K. (2020)). The rapid and transformational ways of online education changed the way of approach towards learning and teaching (Palvia, S., et al. (2018)).

Due to emerging technologies, the online classes became acceptable among the students (Singh, M., et al. (2021)). The Massively Open Online Courses (MOOC's) worked towards the phenomenal growth of online education among the students (Jindal, A. et al. (2018)). Students used online platforms as instructed by the respective educational institutions to attend online classes (Sujarwo, S., et al. (2020)). But as students are spending more time to attend online classes, they face many health related issues due to which Ministry of Human Resource Department (MHRD) recommended that the classes conducted should be of a duration of 45 minutes (Unnisa, V. (2021)). By reducing the class time, training students and easing availability of the gadgets, the online education could be made effective (Noor, S., et al. (2020)).

## III. MOTIVATION FOR STUDY

In the covid-19 scenario, the online education that has been implemented due to the pandemic, has led to many health related issues that are faced by the students who attended online classes. Both the mental as well as physical wellbeing of the students was a matter of concern. Many studies have been conducted to understand the mental issues that were faced by the students. The motive of this study is to understand and discuss the physical issues faced by the students. This study also focuses onto understanding the education modes (online/offline) preferred by the students.

#### IV. METHODOLOGY

##### A. Data Collection

The data for this study was obtained by sending the questionnaire to students attending online class through the medium of google forms.

The questionnaire consists of the issues that could be faced by the students while attending online classes. The questions were adapted from Birmingham (2021) and from a news article in Hindustan Times, Correspondent (2021) with contextual changes.

##### B. Method

The data for the research was collected from 111 students who attended online classes in India. The data set consists of responses from school students, under graduation (UG) students and post graduation (PG) students. Most of the responses were from PG students as compared to school and UG. Among the 111 responses received, 59.5% were from female respondents whereas the remaining 40.5% were from male students. The ages of the respondents ranges from less than 15 years to more than 25 years and most of the responses age group of 20- 25 years. The population for this study is 111 which consist of students from School, UG and PG Background which comprises of the students of educational institutions across Kerala, Tamil Nadu and Maharashtra. A questionnaire was circulated through the medium of google forms to the students. It consisted of the questions that cover about issues that may be faced by the students while attending the online classes. A sample size of 100 has been taken from the population for the analysis. This sample covers all the parameters mentioned above and is taken with the purpose of easy analysis.

##### C. Findings

Among the responses received, 100 responses were analyzed and following findings were found. Based on those responses, we can see that most of the students had spent more than 4 hours for attending the online classes (Fig. 1). The respondents were concerned about their physical health during the commencement of online classes. They had felt that their physical health was out of control. 65% of the respondents mention that they felt physically exhausted while attending online classes as compared to offline classes and their physical health got affected adversely. 63% of the respondents agreed that they faced issues relating to their eyesight. 71% respondents that they felt pressure on their head and also had evident headache. Due to lesser physical activity, 72% of the respondents experienced stiffness and 56% experienced numbness in their body. Some other physical issues that were faced by the respondents were obesity, sleeping issues and problems in eating habits. Although these issues were faced, many respondents mentioned that they were able to take care of their physical health by activities such as yoga, gym workout, dancing, etc. When it comes to preference of modes of classes, most of the students preferred offline classes as compared to online classes (Fig. 2).

#### V. DISCUSSION

The boost of online education amid the Covid-19 Pandemic gave the students the experience of attending their classes with the help of online platforms. This online education helped the students to attend the lectures from their convenient places but also led to experiencing many physical health issues. This study tries to understand these issues faced by the students. In the study, majority of the responses received were from the students of age group 20-25 years and most of them was from PG students as compared to school and UG students. Most of the responses were from female students and were from educational institutions from Kerala, Maharashtra and Tamil Nadu. The students faced many health related issues such as eyesight problems, stiffness, numbness, headache, etc.

It also discusses about disruption in the sleep schedule of students. The online classes felt more exhaustive as compared to offline classes due to above mentioned issues. Most of the students were not able to find time to take care of their physical health. This is due to the absence of physical activities of students as they sit in one position for a longer period of time. Also, constantly looking onto the screen resulted in eyesight issues and headache. Even then, it should be noted that some of the respondents were successful in taking care of their health by physical activities such as exercises, yoga, gym, dancing, etc.

The educational institutions could reduce the session timings and the work-load given to the students, so that they get sufficient time to take care of their physical health. Considering the mode of preference of education, most of the respondents prefer offline classes over online classes. This could be the result of all the physical and mental issues faced by the students while attending the online classes and also the absence of human interaction.

#### VI. CONCLUSION

Online education was definitely helpful to continue the lectures of educational institutions in the pandemic situation. From the study conducted, we can say that online classes do have a negative effect on the physical health of students. The students felt more exhausted in online classes as compared to offline classes due to multiple physical issues such as headache, eyesight issues, obesity, etc. Apart from these issues, the students also faced some mental issues such as stress, depression, anxiety, suicidal thoughts, etc. (Chakraborty, P., et al. (2021)).

From the study, we can also conclude that the students prefer offline classes over online classes. It is also to be noted that some students were comfortable in both online as well as offline mode.

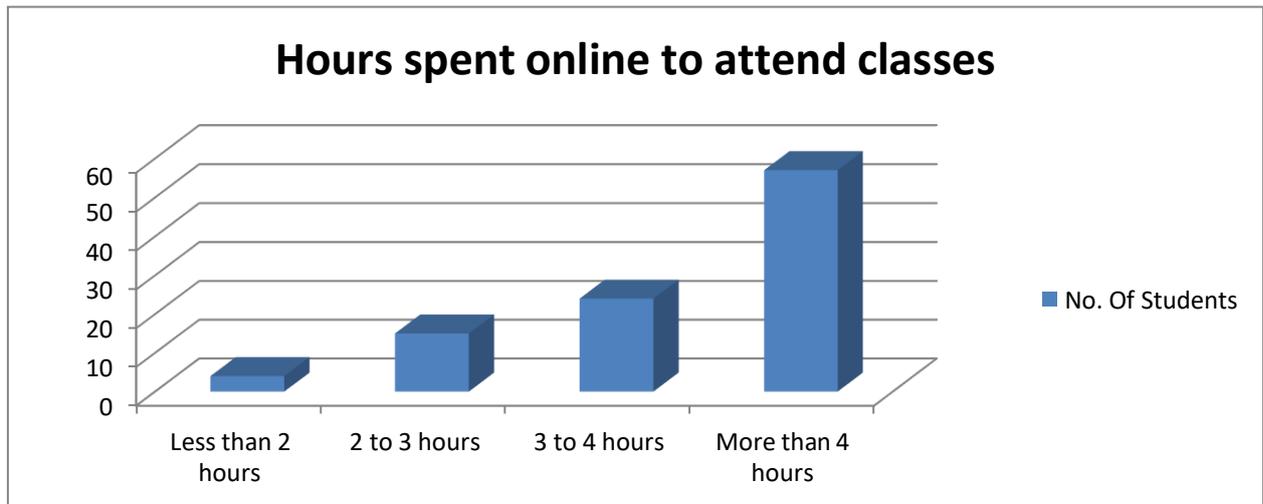


Fig. 1

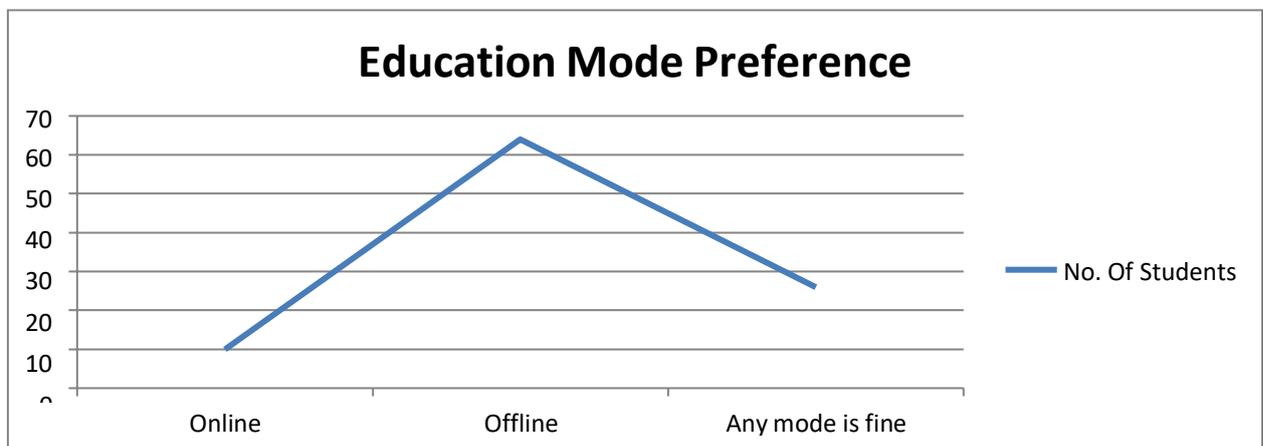


Fig.2

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