

Physical Health Issues of the Students Faced by Online Learning and Its Impact on their Growth

Arepalli Sathibabu^{1*}, Dr Komarasamy G²

¹ Kare, India

² VIT Bhopal University, India

*Corresponding Author Email: arepallisathibabu@gmail.com

Abstract

The present study has started with the background of the research on the physical health issue of the online learning system and its impact on the growth of children. The purpose of the research with its aims and objectives is present. The entire method of the research is also described in this study. In the part of the results, three themes have been developed based on the objectives of the study and then those are discussed. This study has discussed the negative aspect of the effectiveness of online education. The present study also has given a discussion regarding the physical health issues of the students for online education.

A brief overview regarding the impact of e-learning processes that can affect various sectors of a student's life has been illustrated. Important factors such as technical knowledge, economic capability, technical issues and other aspects have been discussed in a proper manner which is relevant to the process of online learning. An overall discussion regarding the findings has also been portrayed that is meant to provide a summarized view of the research findings. The overall idea and concepts on which the entire study is based have also been included in a brief manner.

Keywords

Covid-19, Eyesight Issue, Online Learning, Personal Development, Physical Issue, Student Engagement.

INTRODUCTION

Research background

An online learning system is when a student takes courses online instead of in a physical classroom. The concept of online learning method was not famous before the "Covid-19 pandemic" [1]. During this pandemic, the country faced a lockdown situation and in that situation, all the organisations were closed as well as the educational institution. In the difficulties, the experts decided to give learning materials to the students through an online system. It was thought that online learning media can make students more enthusiastic to attend lectures [2]. These kinds of thoughts were effective and the use of online learning systems has drastically increased during the pandemic situation. The number of UK people who said that they had received an online course that grew from 4% to 17% [3]. It also is observed that the excessive use of online learning systems negatively affects students. This kind of learning system also is making various kinds of physical issues among the students and from that perspective, this topic is selected for research to know the negative impacts of e-learning on the health of students.

Aim and Objectives

The aim of this research is to acknowledge the physical health issues of the students faced by the students and their impact on their growth. The objectives of this research are:

- To understand the negative aspect of the effectiveness of online learning systems
- To evaluate the impact of an online education system on

the growth of the students

- To identify the physical health issues of the students created through the online education system

Research purpose:

This study is selected to research the negative impacts of the students' excessive using the online learning system. This kind of learning system has become interesting to the students and most of the students are enthused to accomplish their classes online. This kind of educational system has become more flexible than the conventional educational process. The perception of the students' online learning systems increases the e-learning methods [4]. The main purpose of this research is to present a discussion regarding the negative effectiveness of the online learning process and the impact of the online learning system on the growth of students. Another purpose of this study is also to identify the health issues of the students which are created by the excessive use of online mode in the learning system. The suggestions about the use of online learning system as it becomes effective for the learning system but does not affect the health of the student, are also included in the purpose of the study.

METHODS AND MATERIALS

Research design

The design of research is considered as the overall strategy which is selected by the researcher for the integration of different kinds of components to accomplish the study is a logical process. The design of the research is affected by the

types of research [5]. The research design is also impactful in ensuring the research problem. Various kinds of research designs may be used for completing a study and among various kinds of designs; four are popular such as experimental, explanatory, exploratory and descriptive. The present study is accomplished based on secondary qualitative data and it also explores some information related to the topic of the research. Thus the *exploratory* research design is appropriate for the present study.

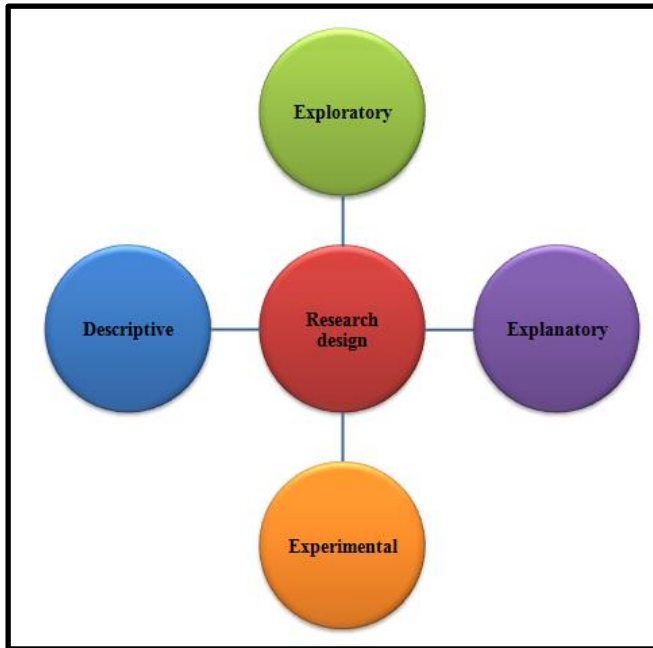


Figure 1: Research design (Source: Self-developed)

Research type

Research type is regarded as an integral part of the research methodology. The quality of the study also depends on the types of research. Types of research depend on data and techniques which are used in the study [6]. Thus the types of the present study also are decided based on the type of data those are used for the accomplishment of the study. Two kinds of research types are known to the researcher such as qualitative research and quantitative research. Among these two kinds of research, anyone can be followed or both types of research methods also can be followed. The present study is driven by using secondary qualitative data and the type of this research is *qualitative*.

Research philosophy

Research philosophy is a large topic of the research methodology and in the part of research philosophy; the researcher does not discuss the research topic in detail. The philosophy of the research is connected with researcher’s knowledge and the study’s nature. The philosophy of the research can be used in major milestones such as pre-tenure review and appointment [7]. The researcher of any study uses any one kind of research philosophy among “pragmatism, positivism, realism and interpretivism”. The “interpretivism” research philosophy is selected for this study as the

researcher interprets the data which are collected. The interpretivism research philosophy is also impactful in explaining the interests of the researcher for the study. This kind of research philosophy is also selected while the research of the study discovers a deep understanding of the subject matter of the study. As this study is completed based on the secondary qualitative data thus the selection of *interpretivism* research philosophy is appropriate for this research.

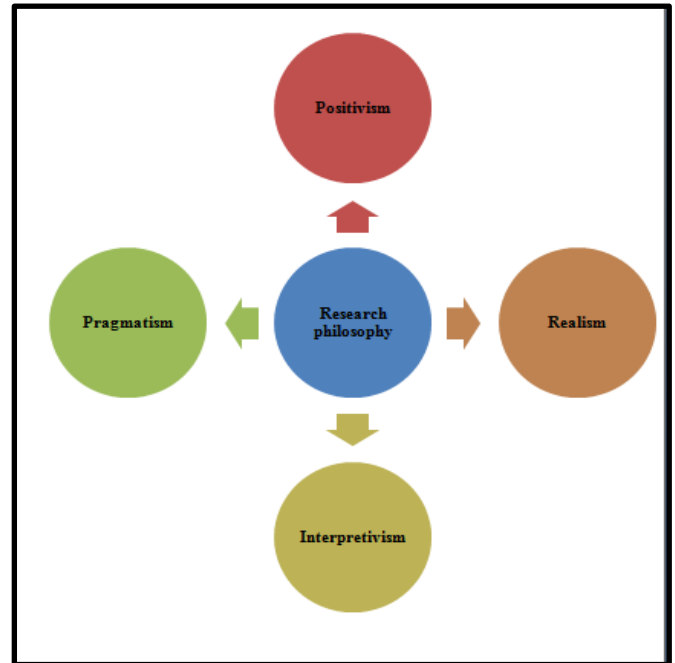


Figure 2 Research philosophy (Source: Self-developed)

2.4 Inclusion and exclusion criteria

Exclusion and inclusion criteria are important for selecting journals, articles, and many other sources to collect data for the accomplishment of the study. The conclusion and exclusion criteria are:

Inclusion criteria

- Those journals selected which are published after 2019.
- Some authentic websites are selected and the data which are provided after 2018 are taken for the accomplishment of this research.
- Those journals and articles are selected for taking information to complete the present study which is written and published in the English language.

Exclusion criteria

- The journals are not in PDF format and have no volume number.
- Published articles after 2018 are not included in the resources of data.
- The resources which are not in the English language are also not selected.
- Blogs are excluded from the resources of information for this research.

Data collection and data analysis method

Data collection processes are selected according to the type of data those are used in the present study. The data collection method is regarded as the tool for completing the study [8]. As the present study is completed based on secondary qualitative data thus secondary qualitative data collection method is useful. The relevant data for this research is collected from scholarly articles, relevant newspaper articles and information from the authentic website such as *Statista*. The success of a study depends on the data analysis style many times. The explanation of the information which is collected is known as data analysis and the data analysis process develops the quality of the study [9]. It is previously mentioned that the present study is accomplished based on qualitative data and to analyse the secondary qualitative data, a thematic analysis style is followed. Some themes are made according to the objectives of the study and then those are discussed in the data analysis and result in part of this research. Thus the secondary qualitative data analysis method is used for the present research and that is appropriate for this.

RESULTS

Negative aspects of the effectiveness of the online learning system

The use of online learning systems has increased during the “Covid-19 pandemic”. The students easily adopted the online mode of the learning system and they are enjoying this kind of learning method. Revenue in the online education system is projected to reach \$0.54 billion in 2023 [10]. Apart from this kind of forecasting, it is identified that the use of the online education system is increasing and for excessive use of the online learning method students are facing huge issues. As for the negative effects of the online learning system, first of all, it is mentionable that a sense of isolation is created by the online education system [11]. In the conventional learning method, the student went to the educational institutions and communicated with other students and teachers about not only the subject of the study but also many things outside of their subject. In the online education mode, the students can communicate with teachers through technology and it does not give them any chance to communicate with other friends. This kind of learning system makes feel the students lonely and they become isolation centred.

In the conventional learning method, the students are taught about discipline and those are practices also in the educational institutions. On the other hand, through the online education system, students can learn about the discipline but they cannot get a chance to practise those disciplines [12]. Online learning method also requires much additional training which is important for adopting the online education system. That becomes time-consuming and that makes it late to complete the syllabus for the students. In this perspective, the online learning method is considered

inconvenient for a long time. The online teaching and learning system is completely dependent on technology [13]. Thus during the class, if any technological fault occurs then it causes disturbance in the class and many times the classes are postponed. The students become discouraged by this kind of situation and these are also negative effects of the online education system.

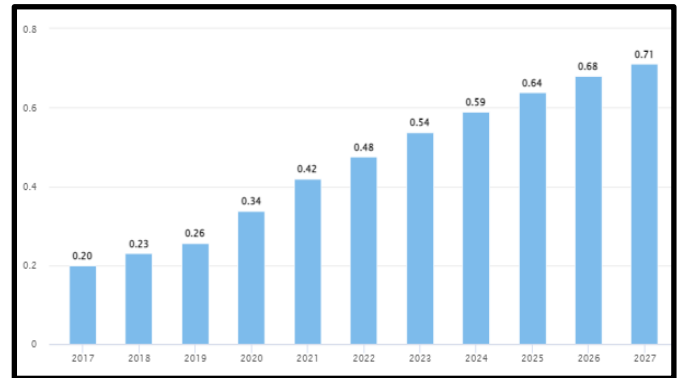


Figure 1: Revenue forecasting in the online learning platform of the UK [10]

In the online education system, the students do not get chances for body movement and scope for playing with classmates. In the online education system, students need to sit for a long time in front of the screen [14]. This is also not good for the health condition of the student. These kinds of issues also create mental problems as well as physical problems among the students and these are also considered the negative impacts of the online learning method. In the online education system, the exams also happen online and in this kind of online exam, the students get opportunities for cheating [15]. This also creates a knowledge gap among the students and that decreases the capabilities of the student to develop a good career for the future. After the discussion, the negative impacts of the online education system may decrease the strength of the students in any arguments.

Identification of physical health Issues for online learning

The online education system has become interesting for students but it creates physical issues among students. The online education system has created issues in eyesight among children [16]. In this kind of education system, the students need to sit in front of the screen and they also have to keep their sights on the screen continuously for a long time. That creates eyesight problems among the children. A survey was conducted among the people of the UK regarding the eyesight problem during the lockdown of 2020. In the survey, most of the people agreed that the eyesight problem has increased during the lockdown situation [17]. Apart from this, it can be identified that in the lockdown situation, the use of the online system increased the eyesight problem among the students.

In the online learning system, the students miss various kinds of physician activities on the grounds of educational institutions such as walking, running, skipping and many other sports. Online education does not allow students to

practise physical education [19]. The physical activity of the students increases their physical strength and immunity power. The online education system stops the students from playing in the schools and that also contributes to decreasing the physical strength of the students. As the students need to sit in front of the screen for a long time thus it also creates physical issues such as pain in the spinal cord and pain in the knees. The online education system also insists that students do not do body movement and from this kind of tendency, the student becomes lazy. The online education system also protects the students from the direct sun rays and which causes the deficiency of vitamin D in the health of the students.

Characteristic	Share of respondents
Strongly disagree	9.1%
Disagree	15.8%
Don't know	15.5%
Neither agree nor disagree	20.8%
Agree	27.1%
Strongly agree	11.7%

Showing entries 1 to 6 (6 entries in total)

Figure 3: Results of the survey [17]

The lack of physical activity in the online learning system and the health of the students also faces the deficiency of calcium. Initially, the students became interested in the online education system but later they started to become bored with the online learning system [19]. As the students lose interest in the online education system thus they face depression and anxiety. The excessive depression and anxiety of the students also create physical issues. The students lost muscular strength due to excessive depression in their studies. After the discussion, it is also identified that the online education system also is involved in decreasing the strength of the students.

Impact of online learning on the growth of students:

In the online learning system, the students do not get opportunities to interact face-to-face. The online education system negatively impacts communication among students [20]. That also is considered an obstacle to the growth of the students. These kinds of issues do not allow the student to develop communication skills and interpersonal skills. This issue also insists the student go into isolation and feel demotivated. This is a big issue in the growth of the students. In the online education system the students are tied up in their rooms and which increases inertia among the students and the students also cannot know about the acts which are occurring outside of them. As the students get negative results from the online education system then the educational authority needs to focus on the minted use of the online system. It needs to schedule a particular time for using the online education system as the students are not much affected by the negative results of this method.

Online Learning or e-learning can be considered an

effective process which uses digital technologies along with a mix of conventional methods for learning. It can be useful for distant learners who can indulge in this process to fulfil academic needs through the use of hardware and software [21]. Important technologies such as computers, the internet and several electrical peripherals are used in the online learning process that can help learners to participate in this type of program regardless of their location and time. The collaboration between several conventional and modern technologies can be reflected in the process of e-learning where a mixture of videos, sound, text, interactive graphs and charts can be observed. The implementation of these types of learning processes can ensure the growth of technical knowledge along with engagement levels that can be beneficial for a learning program.

The reduced requirement for long-distance travelling, options for flexible scheduling and other types of beneficial features have made it preferable among learners from different regions and backgrounds. The rise of online learning can also be perceived as a drawback for students belonging to weaker economic backgrounds. The essential equipment and facilities such as personal computers, laptops, stable internet connection and other electrical equipment may cost higher depending on the region. Reasons such as this can cause students with poor economic backgrounds to fall back into the race of the learning process where offline learning is not available as an option [22]. Apart from that, technical issues, poor network level and complex applications can often create issues for learners and teachers to indulge in the learning programs. The rise of fatigue levels is also evident in the process of online learning which can hinder the learning outcome or growth of a student at a significant level.

DISCUSSION:

The rise of the pandemic has made it necessary for learners around the world to implement modern effective methods that can be useful for maintaining a steady flow in the learning process. Several medical guidelines formulated by the governments of different countries have made it essential for citizens to maintain physical distance which can hinder the learning process of students. Indulging in the online learning process can help individuals to maintain social distance along with continuous involvement in the learning process at the same time. It is essential to break the chain of covid-19 virus song learners which can be formulated through the use of online learning. The usage of online methods such as Google Hangouts, Skype, Microsoft Team and other video calling applications has increased dramatically during the pandemic period [23]. Important aspects such as Attitude, perception, infrastructure and the process of knowledge absorption can be considered accountable for creating a significant impact on the students in terms of e-learning.

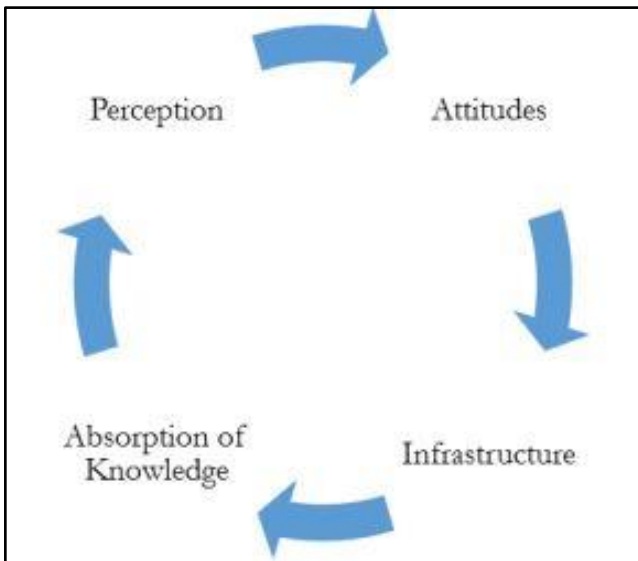


Figure 4: E-learning cycle [23]

The negative impact of the pandemic has made it necessary for learners and teachers around the globe to incorporate modern techniques in their learning process. The implementation of online learning is considered a necessary measurement for overcoming these issues which occurred during the pandemic era. During this type of participation, it can be necessary for participants to stare at the computer screen for a longer period [24]. This kind of activity can cause eye strain which can create further health complications. Higher amounts of screen time are often considered inappropriate due to its involvement in several health complications which makes it essential for learners to limit their screen time for overall health maintenance.

During an online learning program, the movement of a learner often gets decreased due to circumstantial requirements. Lack of outdoor activities and a limited amount of interaction with peers can also cause students to feel trapped [25]. Lack of physical activities can degrade bodily motor functions that can decrease physical efficiency. Apart from this strain and pain in several body parts due to lack of movement can also be portrayed as physical complications which have been observed in several cases [26]. The impacts of online learning can also be observed which are known to create a significant impact on several factors of student life.

As per the results, it can also be stated that online classes can be considered liable for improving the learning process along with providing scope for enhancing the existing knowledge base. Online learning methods are also known for providing a broader area to the students for exploring further which might not be possible in offline classrooms [27]. Apart from that it can also reduce the learning cost by mitigating several aspects such as expenses for travel, food and others [28]. The modernization of the learning process and implementation of effective strategies can help students to improve their knowledge base and skill-set that can be useful in both personal and professional life. The overall findings further suggest that although online learning can enhance the

learning process and broaden the knowledge base, it can also cause physical issues to occur due to longer exposure to electrical equipment.

5.0 CONCLUSION:

The overall objective of this study is to portray several health issues which can be considered as expected results of online learning. The rise of online learning practices in the modern era can create both positive and negative impacts on several aspects that are relevant to physical complications and personal growth. A brief overview of the aim of this study along with relevant objectives has been portrayed that can provide a direction to this paper. Several areas such as health issues, negative aspects and different areas which can get impacted through the promotion of the e-learning process have been discussed. Apart from that a brief overview of the selected methods and materials with their selection criteria, have been provided which are meant to shed light on the perspectives of the researcher.

The results which were gathered during the construction period of this study have also been explained in an effective manner that can justify the objectives. Providing proper justification and explaining the findings in a brief manner can be useful to highlight the importance of this study in the current era. . By providing an evaluation of the potential health issues along with several positive aspects of a development process of a learner, the results also facilitate the needs of the objectives. This paper can also be used as guidance for papers which include similar types of research issues. The overall study or findings of this study suggests that the factors such as physical issues, skill development, and student engagement are interconnected which makes it necessary for learners and teachers to take a proper measurement before indulging in learning programs that are based on online portals.

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