

## Prevalence of Lifestyle Changes in Online Learning Technology among College Students During Covid-19 Pandemic

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### Abstract

**Background:** Several students' academic careers were affected by the COVID 19 pandemic over the world, and it even caused a considerable disruption to the education industry, which intensified psychological distress.

**Objective:** To estimate the prevalence of lifestyle changes happened in online learning by use of the Euro Quality of life 5D 5L questionnaire among college students during covid 19 pandemic.

**Methodology:** About 670 college students were included. A pre-structured questionnaire was used to collect information. Based upon the selection criteria, the participants were selected for the study. Participants were asked to fill the Euro quality of life 5D 5L questionnaire. The evaluator was assigned to score each question. A demographic pre structured questionnaire containing details of personal data and impacts on quality of life was collected.

**Result:** Mobility, self-care, regular activities, anxiety/depression and pain/discomfort are all heavily influenced, according to the statistical research. Results indicated that the overall health of the students were affected as the reported negative health (77.98%) was higher than the positive health (22.01%).

**Conclusion:** In this study, students taking college level professional courses in online during covid 19 pandemic have seen a high prevalence of effect in their physical, emotional welling and decreased in overall health have been explored.

### Keywords

Quality of life, College students, Online learning, Mental and physical health

### Introduction

After the Covid-19 virus has spread over the planet, human civilization has become more segregated from one another. The nation's education system, which plays a significant role in its financial destiny, has been badly compromised. The World Health Organization recommended using the acronym Covid-19, which stands for corona virus illness 2019, on February 11, 2020. The first instance of it was discovered on December 31, 2019, in Wuhan, China. The Covid-19 virus killed a 61-year-old man in Wuhan, China. The World Health Organization declared Covid-19 to be a pandemic on January 11, 2020 (Jena, 2020). On

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January 30, 2020, the Covid-19 pandemic was discovered for the first time in India in the state of Kerala, and the infected person had just returned from Wuhan, China. The first fatality brought on by COVID-19 was reported in India on March 12, 2020. Over 4.5 million individuals worldwide have been impacted by it. Over 3.2 million pupils in India have been impacted by various limitations and the statewide lockdown for Covid-19 (Kumaresan et al., 2022), according to research by UNESCO (Chu et al., 2022).

The first step in preventive should be to preserve communication gap, according to the WHO, who observed the corona virus pandemic scenario. As a result, a lockdown operation to isolate the infected persons was launched in every nation. The education sector's schools, colleges, and universities have all shut down. All school, college, and university exams, including entrance exams, were cancelled, and delayed indefinitely (Chu et al., 2022). The lockdown destroyed every student's schedule as a result. Despite being a unique situation in educational history, COVID-19 has opened several opportunities to shift from the demanding lecture learning paradigms to a new development of technological teaching. Due to the lockdown, several schools and universities have been forced to postpone classes, exams, internships, and other events in favor of online learning.

Teachers and students now have hope that they may conduct their online learning activities despite the shutdown. Teachers used numerous programs, including Zoom, Google Meet, Facebook, YouTube, and Skype, among others, to conduct lectures live through video conferencing and transmit homework to students. Such modifications, which are connected to pandemic-related social exclusion, may influence students' quality of life and may even help to exacerbate psychiatric issues (Hamid et al., 2020). A person's view of their state of affairs in light of their culture, aspirations, expectations, references, and worries is referred to as their quality of life (WHO, 2014). In addition, there is a connection between mental health and quality of life. University students have been proven to be at higher risk for insufficient physical activity, and a recent systematic analysis discovered a further drop in physical activity levels at any intensity in this cohort during shutdown (Azzi et al., 2022). It is undeniable that exercise and good mental health go hand in hand. Long durations of sitting or sedentary lifestyles have been proven to be strongly associated with an increased risk of non-communicable illnesses in adults, such as obesity and diabetes. Mental health problems are commonly caused by or coexist with these disorders.

The study was conducted to examine changes in physical movement, mental health, and lifestyle changes encountered by university students during the online learning era and to better understand the impact of college closures during the COVID-19 outbreak. The EQ-5D (euro quality of life 5 dimensions) scale now measures health in five dimensions with three levels of severity. It is utilized as a study's outcome measure (Herdman et al., 2011). The study's goal is to find out how lifestyle changes affect physical and mental health among college students using online learning technology.

### **Methodology**

The investigation is cross-sectional in nature. 670 college students in total participated in the study. A pre-structured questionnaire was utilized to collect the data. The study's inclusion and exclusion criteria were used to select participants. The individual was given a thorough explanation of the technique. The college students who took part in the study signed a written informed consent form. The EQ 5D questionnaire is given to all the participants. Each question will be given a score by the assessor. A demographic pre-structured questionnaire covering

information such as the student's name, age, course of study, and satisfaction with mobility, self-care, regular activities, pain/discomfort, anxiety/depression in online learning during the covid pandemic. The information was gathered using a Google Form which is circulated through what's app. The information was examined, interpreted, and documented.

**Euro Quality of Life:** A self-administered, health-related quality-of-life survey is called the EQ-5D-5L. The five of the descriptive system are mobility, self-care, usual activities, pain or discomfort, and anxiety or depressive symptoms. There are five levels for each dimension: no problems, slight problems, moderate problems, severe problems, and extreme problems. The EQ-VAS was also used with students to provide a comprehensive self-assessment of their health on a scale ranging from 0 (worst possible health) to 100 (perfect health) (worst imaginable health) (Feng et al., 2021).

## Results and Discussion

According to the statistical analysis, male 40%, female 60.1% are participated in the research on based on gender analysis. The time spent by the subjects in online learning analysis, 15.4% of spent in 3 hrs duration, 30.6% of spent in 3-6 hrs duration, 54.1% of spent in more than 6 hrs duration are reported. In courses participated by the subjects 48.9% of medical students, 24.2% of engineering students, 19.9% of arts students, 7% of other courses students took part in the study. In anxious /depression analysis, 11.1% of them have no problems, 9.4% of them have slight problems, 17.4% of them have moderate problems, 32.3% of them have severe problems, 29.8% of them have extreme anxious /depression has reported .In mobility analysis, 12.6% of them have no problems, 9.9% of them have slight problems, 11.1% of them have moderate problems, 31.9% of them have severe problems, 34.9% of them unable to do mobility has reported .In usual activities analysis, 11.8% of them have no problems, 10.5% of them have slight problems, 13.5% of them have moderate problems, 36.8% of them have severe problems, 27.4% of them unable to do usual activities has reported.

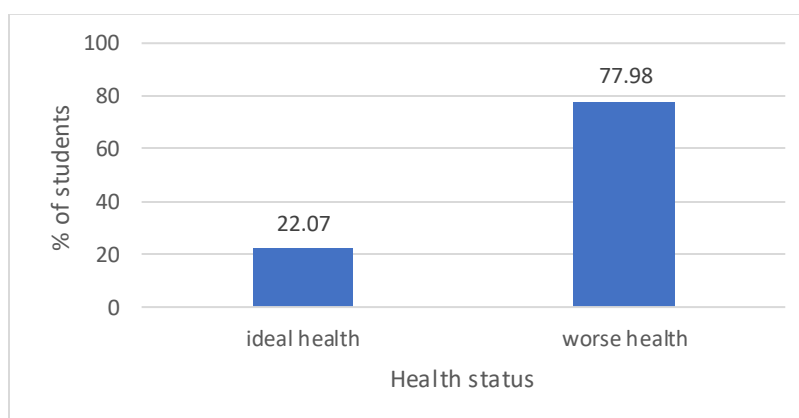


Figure 1. Health status of study participants

In self -care analysis, 14.2% of them have no problems, 10.9% of them have slight problems, 13.8% of them have moderate problems, 35.9% of them have severe problems, 25.1% of them unable to do usual activities has reported. In pain and discomfort analysis, 10.9% of have no problems, 11.4% of them have slight problems, 15.3% of them have moderate problems, 35.1% of them have severe problems, 27.3% of them have extreme pain has been reported. In general health analysis, 77.98% of worse health and 22.01% of ideal health have been reported as shown in Figure.1. Mobility, self-care, regular activities,

anxiety/depression, and pain/discomfort are all heavily influenced, according to statistical research. The Covid-19 epidemic therefore affects the lifestyles of college students who participate in online learning.

Many educational institutions created online activities in response to the pandemic's extension, quickly transforming the teaching-learning process. Such changes, which are linked to social isolation during the pandemic, may influence students' life quality, contributing to the aggravation of psychological disorders and changes in their usual lifestyle's. The participants were given a questionnaire regarding their quality of life, which is a self-assessment tool. Increased duration of online courses through computer, tablets and smart phone usage was also connected with a poor quality of life in emotional stability was found by Chusak et al. (2022). A cross-sectional study employing WHOQOL-BREF on a large sample of Brazilian students (703) found a reduction in physical, psychological, and environmental dimensions according to the findings of Azzi et al. (2022).

According to the findings of a cross-sectional study by Chu and Li (2022) on 181 undergraduate students using physical activity, psychological distress, and a student life stress questionnaire, both male and female university students' physical exercise drastically reduces during the online course period while their mental health is unaffected by college closures. Even though many studies have reported on the life quality in online learning during the Covid-19 pandemic, only a few studies have explored the findings of the health rate among college students during the covid pandemic (Pradeep et al. 2023). The purpose of this study was to look at how people's lifestyles change when they have limited mobility. It demonstrated how home confinement affects physical activity, depression, social participation, self-care behavior, and the frequency with which they use technology among college students. According to our findings, students' overall health has deteriorated over the optimum health of 100 because of the rising use of online learning, which has a negative impact on college students' physical and mental health.

## Conclusion

The purpose of the study is to determine whether college students who were enrolled in online courses during the COVID-19 pandemic underwent any changes in lifestyle. The results suggest that during the COVID-19 pandemic state, students enrolled in online college-level professional courses have observed a high prevalence of lifestyle changes. Due to the increasing usage of online learning, which has a detrimental effect on college students' physical and mental health, students' total health has declined below the healthiest population of 100.

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