

# *Effects of COVID-19 on College Students' Mental Health*

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**Abstract:** The incidence of mental illness among college students has increased significantly in recent years. This upward trend is aggravated by the COVID-19 pandemic since the worldwide pandemic is expected to negatively impacts people's mental health. This study intends to investigate the specific effects of the COVID-19 pandemic on the mental health of college students and some common factors that lead to those impacts. The results of previous studies show that the COVID-19 pandemic can increase the incidence of mental illness among people who have direct contact with coronavirus disease as well as people who do not have direct contact with coronavirus disease. Empirical data shows that college students' likelihood of experiencing mental disorders related to depression and anxiety increased significantly while the pandemic is at its peak. College students around the world were all impacted similarly by the COVID-19 pandemic. The study supports that the difficulty of adapting to the online learning system is one of the main elements that harm the psychological health of college students. Another study suggests that the lack of physical activity during the pandemic resulted in an increase in the incidence of mental disorders among college students.

**Keywords:** Covid-19, mental health, college students, stress, E-learning

## **1. Introduction**

College students have a high incidence of mental health disorders because many college students experience not only academic pressure but also the stress of independence and family responsibilities. Studies show that around 26% of American adults are diagnosed with a mental health disorder each year [1]. Among all the mental health conditions, anxiety spectrum disorder is the most common type of mental illness experienced by college students. Studies show that 11.9 % of college students have developed at least one anxiety disorder [2]. Depression is the second most prevalent mental illness among college students and its incidence rate is 7 to 9 % for college students. The symptoms of those mental disorders have caused severe trouble in many college students' daily life. The evidence proves that people should pay attention to college students' mental health since the incidence rate of mental illness is high for college students.

Moreover, college students' likelihood of developing mental disorders is still on the rise. A report from the United States college counseling center directors claims that approximately 52% of their clients have severe mental illnesses in 2014, which is higher than the 44% reported in 2013[1]. This indicates that the incidence of mental illness in college students is rising. Based on a meta-analysis examining if the incidence of mental health issues among college students changed between 2009 and 2015, the diagnosis and treatment of several mental illnesses significantly

increased within the population of college students. Despite the increasing diagnosis rate of mental illness, a lot of college students remain undiagnosed and do not receive appropriate treatment since they do not want to see a therapist. There are around 50–80% of college students with mental illnesses choose to not have treatment in the past year. If they are included, the rise in diagnosis and treatment of mental illness would be more pronounced.

The incidence rate of mental illness for college students increases due to increased stress from school and family. The occurrence of the COVID-19 pandemic makes college students more vulnerable to mental illness since it creates more new stressors and accentuates many existing stressors. The study aims to examine how the COVID-19 pandemic impacts college students' mental health and identify major stressors that lead to those effects. This study intends to investigate if the pandemic plays a role in the increased incidence rate of mental disorders for worldwide college students by analyzing existing data. If there is evidence to prove that the outbreak of the COVID-19 pandemic has a positive relationship with the increase in mental disorders among college students, this paper will also discuss some common factors that caused college students to become more vulnerable to mental disorders during the pandemic.

## **2. The Impacts of COVID-19 on the Mental Health of College Students**

A coronavirus that can trigger respiratory diseases in human populations resulted in the COVID-19 pandemic. The outbreak of COVID-19 human cases began in December 2019 in China, and it rapidly spread around the world [3]. The coronavirus disease has affected countries on all seven continents and achieved pandemic status. In addition to the threat to physical health, COVID-19 also inevitably causes harm to people's mental health. Patients with COVID-19 become more vulnerable to post-traumatic stress disorder (PTSD) and depression after recovering. The mental health of people who did not get coronavirus disease is affected by the stress caused by preventative measures of COVID-19. During the COVID-19 pandemic, people can only do social contact through internet-based media and applications such as Zoom and Skype since face-to-face social contact with each other was restricted in order to keep social distancing. These methods enabled people to fulfill their basic need for social interaction but they cannot replace the need for in-person human contact which is a model of interaction that reduces the risk of developing depression. As a result, people became more likely to experience symptoms of depression due to the limits of direct social contact during the pandemic. Despite the harm to people's physical health, COVID-19 had caused damage to people's mental health through PTSD and depression.

Among all the people affected by COVID-19, college students were one of the groups that were seriously harmed. A study aimed to testify to the negative impacts of COVID-19 on college students' mental well-being indicated that approximately 71% of the subjects claimed to experience increased anxiety and stress because of the COVID-19 pandemic [4]. The majority of subjects claimed that they were concerned for their health and the health of people they care about during the pandemic. The second most common stressor is difficulty with concentration. Due to the lockdowns of college campuses, most students had to study at home, but the subjects reported that they had a hard time paying attention to their school work since they were constantly interrupted by their family members. The subjects worried that their academic performance was negatively impacted due to the fact that they often failed to concentrate on their schoolwork at home. Around 44% of the subjects reported that they had experienced some depressive thoughts and 8% of the subjects even had suicidal thoughts. In conclusion, COVID-19 was proven to negatively impact the mental well-being of college students.

The COVID-19 pandemic has caused mental illness among college students around the world. College students' mental health was harmed by the increasing psychological stress caused by the pandemic. College students from different nations have diverse sources of psychological stress, but

the pandemic was able to make college students all over the world become more stressed. A prospective cohort study conducted in the United Kingdom provided evidence that the lockdown enforced by the government impaired UK college students' mental well-being and increased their sedentary behavior, which could threaten their mental health if the lockdown continued [5]. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS), a scale that measures mental well-being using a 5-point Likert scale, was used to evaluate the mental health of the subjects. There is a 4-point average decline in WEMWBS scores during the lockdown, which was higher than the 3-point change that demonstrates a meaningful decline. Higher WEMWBS scores indicate better mental health, so the decline in WEMWBS scores indicates the mental well-being of UK college students was harmed during the lockdown. And the increase in sedentary behavior caused by the lockdown may potentially impair UK college students' mental health if the lockdown was prolonged. Although the acute increase in sedentary behavior cannot immediately harm college students' mental well-being, previous studies had demonstrated that prolonged periods of uninterrupted sedentary behavior are detrimentally associated with anxiety and depression. This study indicates that the COVID-19 pandemic severely impaired the mental health of UK college students. Similar results were found in a study that examined the mental well-being of Bangladeshi college students during the COVID-19 pandemic [6]. This study evaluated the subjects' anxiety, depressive symptoms, and mental health status through Generalized Anxiety Disorder-7 (GAD-7), Center for Epidemiological Studies Depression Revised Scale (CESD-R-10), and Mental Health Inventory-5 (MHI-5). Data showed that 40.2% of the subjects had symptoms related to anxiety and 72.1% had symptoms related to depression. 53% of the subjects were rated as having moderate to poor mental health status based on the MHI-5. The mental health crisis among Bangladeshi college students was caused by COVID-19 since 77.1% of the subjects claimed that COVID-19 made them feel more stressed. This study shows that Bangladeshi college students, like UK college students, had serious problems with the stress caused by the COVID-19 pandemic.

### **3. Stressors that Cause College Students to Become More Vulnerable to Mental Disorders**

As a measure to contain the spread of the coronavirus, many college students were forced to learn online with e-learning platforms like Zoom and Skype. The e-learning platforms were expected to be able to simulate a virtual classroom where the students can interact with their instructors and classmates. However, many instructors were challenged by these platforms because they were not familiar with new methods of teaching. And students were stressed by the online courses since they were not adapted to online learning. The instructors had a hard time teaching through e-learning platforms and the students had a hard time learning through e-learning platforms. Therefore, how to maintain good academic performance while using e-learning platforms became one of the main stressors that harmed the mental status of college students. A study conducted in Lebanon that studied the relationship between Lebanese college students' satisfaction with online learning and their levels of depression and anxiety found empirical evidence that there was a significant negative correlation between Lebanese college students' satisfaction with online learning and their depression and anxiety levels [7]. The students who were less satisfied with online learning had higher depression and anxiety levels. This result indicated that studying online had become a nonnegligible source of stress for college students in Lebanon during the COVID-19 pandemic. Despite college students in Lebanon, college students around the globe should all experience increased mental illness during the pandemic since many countries were forced to use remote instruction to replace traditional classroom teaching. Although online teaching was the best solution available to colleges, it inevitably caused negative impacts on college students' mental well-being.

In addition to online teaching, the COVID-19 pandemic also forced college students to reduce the intensity of physical activities they engaged in due to the lockdown. During the lockdown, college students were asked to stay at the place they live and not go out unless they had to. This policy caused many college students to only be able to do some home-based physical training instead of outdoor exercises or working out in gyms. In consequence, the intensity of physical activity significantly decreased among college students. The benefits of physical activity for people's physical health were well known. Evidence had been found that physical activity can also help people manage mental health issues including anxiety and depression [8]. Having physical activity can prevent people from experiencing anxiety and depression as well as relieve symptoms of anxiety and depression. And people may feel more stressed if they fail to maintain the intensity of physical activity they used to do before the pandemic. The findings of a study conducted with Ukrainian college students demonstrated that physical activity and the level of depression and anxiety have a significant negative relationship during the COVID-19 pandemic [9]. The study first found evidence that 43% of the subjects were physically activated according to the WHO recommendation ( $\geq 150$  min of physical activity/week) which was significantly lower than the previous record. This indicated that Ukrainian college students in general did less physical activity during the pandemic. And among the subjects, inactive subjects had higher levels of depression and anxiety than active subjects. This result indicated that having physical activity can help decrease the risk of experiencing anxiety and depression.

#### 4. Discussion

This study found evidence to suggest college students' mental health status is negatively impacted by the COVID-19 pandemic. The study showed evidence that college students in general became more vulnerable to several common mental diseases, including anxiety and depression due to the stress caused by the pandemic. And this study also analyzed some specific factors related to the pandemic that led to the increase in mental illness among college students. These outcomes should attract people's attention to the negative effects of the COVID-19 pandemic on the mental well-being of college students in order to help find methods that can treat the problems caused by the pandemic.

The study provided examples of a few factors related to the pandemic that proved to have detrimental effects on college students. With the causing factors provided, people just need to develop methods to resolve those factors to reduce the harm to college students' mental status caused by the pandemic. The study demonstrates that discomfort with E-learning leads to an increase in anxiety and depression levels. And another example shows that the decrease in the intensity of physical activities due to the lockdown when the COVID-19 pandemic was at its height can make college students become more vulnerable to mental diseases. People can use methods to deal with the stress caused by both factors or focus on one particular factor. Efficiently using social media platforms to communicate with other people in society is a way that can reduce the stress caused by E-learning and lack of physical exercise during the pandemic [10]. Social media is a platform that allows college students to share their worries with their peers and comfort each other during the COVID-19 pandemic, so it can relieve the stress caused by the inadaptation of online learning and the stress used to release through physical exercise. People can also use strategies to focus on reducing the stress caused by E-learning like focusing on the positive side of events. Many college students may find it difficult to complete all their schoolwork online without having direct contact with their professors and classmates. However, if they can think positively, it is an opportunity for them to learn in a whole new way. Thinking positively can make college students pay more attention to the novel experiences they get through E-learning and ignore some of the difficulties they have, and their stress levels should decrease as a result. And meditation activities

can effectively help college students who are stressed by the lack of physical exercise during the COVID-19 pandemic. Physical exercise is a way to release stress, and meditation is also proven to be beneficial in helping people relieve stress. Therefore, meditation can be used to replace the role of physical exercise in managing people's mental health to a certain extent. This study provides evidence indicating that college students' mental health status was severely harmed by the COVID-19 pandemic and examples of factors that are known to contribute to the harm in order to draw people's attention to the danger to college students' mental health caused by the pandemic and come up with methods that can deal with that danger.

## 5. Conclusion

This study demonstrates that the rise in the incidence of mental diseases among college students is primarily contributed to the COVID-19 pandemic. The negative impacts on mental health can apply to both people who had coronavirus disease and people who did not have coronavirus disease. After analyzing the data from several studies, it can be concluded that college students became more vulnerable to mental disorders since the pandemic increases their stress levels. The stress caused by COVID-19 increases the likelihood of college students developing common psychological diseases including depression and anxiety. College students from different countries have similar reactions to the stress generated by the pandemic which indicates that the pandemic has created negative impacts on college students' mental health status across the globe.

Two common stressors that lead to the increase in college students' vulnerability to mental disorders are difficulties with online instruction and lack of physical activity. The use of e-learning platforms in many colleges makes students become more stressed because they had a hard time learning how to manage their studying through e-learning platforms. The stress originates from the discomfort of online study exacerbating the deterioration of college students' mental well-being. Another stressor that impairs the mental health status of college students is the lack of physical activity. Physical activity can help people avoid experiencing mental disorders as well as treat the symptoms of many mental disorders. However, the COVID-19 pandemic forces people to reduce the intensity of their physical activity which threatened their mental health. Therefore, the lack of physical activity is a factor that increases the incidence of mental illness among college students during the pandemic. After knowing the specific sources of stress caused by COVID-19, people can then come up with methods to reduce the negative impacts on college students' mental health.

There are several limitations within the present study. First, the study only analyzes data from previous studies related to the COVID-19 pandemic and the transformation of college students' mental health status in the pandemic. This study focuses on investigating the impacts of COVID-19 on the mental health status of college students from various perspectives. The comprehensive conclusion of the study is developed by deeply examining the outcomes of multiple existing studies. However, it would be better if a whole new experiment is designed for this study. In addition, the data examined in this study is a little bit outdated since most of the data is collected before 2021. The data used in this study reflects the transformations in college students' mental status caused by the COVID-19 pandemic when it was at its peak. After two years, the COVID-19 pandemic is more controlled, but it can still affect college students' mental health. Therefore, the study should have more studies from the recent two years in order to make the conclusion more valid.

Future studies should keep researching the sources of stress caused by COVID-19 that can severely impact college students' mental health. And future work may also focus on developing methods that can effectively deal with the stress related to the COVID-19 pandemic. Further study is needed to investigate if the COVID-19 pandemic these days has different impacts on college students' mental health compared to its impacts in the beginning.



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