

The Mental Health Effects of the Covid-19 Pandemic in College Students

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Abstract

During the year 2019, the entire world was faced with a new invisible threat that changed life in just a few short months. This invisible threat became known to be as COVID-19, an infectious disease caused by a coronavirus named SARS-CoV-2. COVID had started in Wuhan, China as an epidemic within the community, but quickly spread to other countries, and soon enough America was in a nationwide pandemic. A pandemic is an outbreak of a contagious disease that spreads across a large region or worldwide. COVID-19 is characterized as an acute respiratory illness that can cause a range of symptoms, such as a fever, runny nose, nausea, shortness of breath, loss of taste or smell, and in severe cases, death (Down et al., 2020) With such a new illness surfacing causing devastating loss of life, America went into a lockdown where loneliness and social isolation became so common in essentially everyone. One major population that took a toll on the pandemic were college students. By March of 2020, universities shut down entirely and sent students home to resume learning from online virtual classes because of the high-risk environment campuses are for COVID-19 transmission. It has been found that there is a significant correlation between the negative mental health impacts with college students in isolation, such as depression and anxiety due to the physical and social inactivity as well as major lifestyle changes such as unemployment, home confinement, and overstimulation from technology (Ammar et al., 2021). The COVID-19 pandemic caused significant negative repercussions to the mental health of college aged students nationwide due to added stressors while being in lockdown, such as housing issues, loss of loved ones, financial hardships, social isolation, and excessive technological device use.

Keywords: Mental health, COVID-19, SARS-CoV-2, college students

College Students and Mental Health Background

Being a young adult and going through college can take a major toll on someone mentally due to the stresses that come with school. For students who live on campus, meeting new friends, taking more intense classes, getting involved with extra-curriculars, and in some cases being far from home in a new place can all be a lot to handle at once. For students who commute to school, feeling isolated or left out from others and having less of an opportunity to be involved in activities or clubs due to a commute can also negatively impact them. New lifestyle changes in college are not always easy to handle and can negatively impact mental health by causing anxiety and or depression in a lot of cases. Anxiety is characterized as a nervous disorder where feelings of uneasiness and apprehension can occur and impact behavior or cause panic attacks (Centers for Disease Control and Prevention [CDC], 2021). Anxiety symptoms, such as fear and worrying, can occur in stressful or social situations, which most students experience frequently. Depression is another mental health disorder that affects mood or loss of interest in activities and in daily life. People with depression are typically sad and may have changes in their sleep, appetite, behavior, energy, or concentration (CDC, 2021). Before the pandemic, anxiety and depression prevalence were linked to 30% of college students in some sample studies (McNealy & Lombardero 2020). This percentage did not even factor in the number of students who do not seek treatment, which counts for two-thirds of the student population, so the prevalence of mental disorders in college aged students can, in theory, be significant higher (McNealy & Lombardero 2020). The rate of college students who experience mental health illnesses are only increasing, but when the COVID-19 pandemic became a new barrier, those rates escalated even further. COVID-19 especially impacted students negatively because they were already vulnerable to the changes going on around them while in attending school.

COVID-19 Origin and Immediate Financial and Housing Impacts

The first laboratory-confirmed case of coronavirus (COVID-19) in the United States was reported to be in January of 2020 in Santa Clara County, California (Ortiz et al., 2021). From January and onward, cases of the virus continued to grow as tests became more accessible for Americans across the country. In March of 2020, universities began to cancel in-person classes and move coursework online due to the outbreak reaching campuses and local communities. By April of 2020, there were statewide stay-at-home orders taking place for all citizens and non-essential businesses. Life in America had changed in the blink of an eye. Families were now all back in their homes whether they were sick, working from home, unemployed, or students. With not much to do since almost everywhere had closed besides essential businesses, such as convenience stores, restaurants, pharmacies, and healthcare facilities, people had to find new ways to stay motivated and happy.

Many people had thought the lockdown was only going to be for a couple weeks, but as COVID-19 cases continued escalating in the United States and around the world, businesses and people were forced to make substantial decisions. By April of 2020, employment rates were at their all-time low since 1939, dropping by 20.7 million (Ansell & Mullins 2020). With the leisure and hospitality, accommodation, and food service industry losing 6.9 million jobs during 2020 coupled with tight covid-19 restrictions everywhere, individuals traveled less and stayed at home more (Ansell & Mullins, 2020). During this time, people were forced to change their lifestyle and avoid recreational activities as much as possible in order to prevent the spread of the coronavirus. Less business equated to companies being forced to shut down permanently and unemployment rates skyrocketed, especially for students. There was even a significant decline in college enrollment due to campuses being temporarily closed causing layoffs to cut expenses

(Ansell & Mullins, 2020). In many instances, students were also left unemployed if they had previously worked a service on campus or internships through their university before classes moved remotely and they were forced to move back home. With 58% of students working on-campus and off-campus jobs before the pandemic began, 42% were below the federal poverty line (Lederer et al., 2021). No income due to unemployment was just one of the many added challenges students faced that greatly impacted anxiety and depression.

Another major setback faced from COVID-19 included housing. Not all college students were left with homes to go to when campuses closed. A handful of students were distinctively at risk for housing insecurity due to relying on their schools' accommodations during the semester. For example, most foreign exchange students do not have a permanent address while attending college in the United States, and with their home being overseas, they were left relying on their school to help with housing. The same went to students who were far away from their home state and transportation was not affordable or accessible for them at the time. The virus also caused the borders to close in order to limit travel around the world in hopes to contain the spread, but it caused students to feel stranded from family (Lederer et al., 2021). For other students who did not rely on campus accommodation and lived off campus in apartments or houses, paying for rent became extremely challenging.

Students also faced uneasy circumstances in family households from immediately moving out of dorms and going back home on such short notice. Students that moved back home for the remainder of the semester dealt with crowded living situations, and they were forced to be in an environment that was not ideal for semester studies. Many people look at home as a place to relax and get away from their school or work stress, but isolation forced people to adapt to their home and continue their jobs and education remotely. Living away from campus in

isolation and forcibly spending more time with family caused some students to develop increased levels of mental health disorders.

From a cross-sectional study that took place in New Jersey with 162 enrolled undergraduate students, ages 18-37, it was found that 73% were unable to focus on academic work while being at home (Kecojevic et al., 2020). Academic difficulties were associated with higher rates of depression, anxiety, distress, or somatization (Kecojevic et al., 2020). Somatization is characterized as physical symptoms in the body such as pain or fatigue that are associated with psychological concerns (Piontek et al., 2021). The study used a self-reporting scale called the Brief Symptom Inventory (BSI) to describe the extent of psychological distress as well as the Perceived Stress Scale (PSS). Results from these self-reported questionnaires were converted into t-scores, which represents units of measurement, to describe how significant the scores are. The closer to 1, the higher the accuracy of the score. Participants who showed higher levels of concern about the virus were more likely to have self-reported greater levels of anxiety and somatization. Depression, anxiety, and somatization from the BSI scale were at an average of 0.89 and stress from the PSS was at 0.84. These t-score values were found to be statistically significant to show that mental health illnesses were on a rise during the pandemic for college students. From this study, higher levels of depression were also significantly connected to job loss, reduced wages or hours of work, and inability to obtain hygienic supplies (Kecojevic et al., 2020).

Another study that focused on students during the covid-19 pandemic examined mandated relocation experiences from universities to back moving back home. This study published in the Journal of Psychiatric Research used self-reported worry, grief, loneliness, and depressive, generalized anxiety, and post-traumatic stress disorder symptoms in 791 college

students ages 18-30 during isolation (Conrad et al., 2021). Students were asked in this questionnaire their personal experience of relocating from campus and from there, their symptoms were assessed. People enrolled in college are already known for having a higher risk of mental illness due to so many added stressors, such as workload, social life, finances, or living away from home, but being forced against their will to move home added extra tolls that were unforeseen. This study found that one-third of the students surveyed reported to have worse psychological outcomes in comparison to students who were not forced to relocate from their campuses (Conrad et al., 2021).

The pandemic brought on many hardships for students. Moving back home or away from where school was regularly scheduled to be caused a series of challenges that contributed to a mental health decline in students. Many of them no longer needed to just worry about their own health, but their families as well once they had moved back home. Being safe from the virus became the most important thing inside households to prevent devastation. Nobody truly knew how COVID-19 could affect them until they contracted it. Students also worried about academics, protecting themselves from the virus, and missing learning and social opportunities at school. Students struggled more financially and experienced stress from economic hardship as well as stress from uncertainty of the future. Nobody could have predicted the severity of the Covid-19 pandemic, and being left in-the-dark about how the rest of your education may be added to all of the stress. Isolation became students' biggest perpetrator for mental health disorders due to a series of events that occurred after students were forced to move home. Some of these events included family hardships, lack of entertainment or escape from homelife, less physical activity, strict regulations in certain states and in universities, and lack of social isolation.

Isolation Impacts and Strict COVID Regulations

Isolation forced people to deal with what was right in front of them. Families were now back together in the same household for longer than they expected due to a stay-at-home order. People were no longer able to really go out and do the same activities they did to get away from the stresses of home life or work. Public places were closed or had limitations to hours and capacity. Regulations were put in place to prevent the spread of the virus such as staying six feet apart from others and limiting the amount of people in a certain space. Unfortunately, hundreds of thousands of lives were lost due to the COVID-19 pandemic, leaving people to grieve in untraditional ways because of the regulation's businesses put in place. Students, along with everyone else in the country, also could not attend proper wake or funeral services due to gatherings being limited for health safety reasons. Also, people were unable to see their loved ones in hospitals because only sick patients were allowed to be inside. Although these issues were dealt with by people nationwide, there were also reasons as to why students were more vulnerable for developing mental health disorders during isolation of the COVID-19 pandemic.

Isolation forced students who were physically active on campus, whether they were playing a sport or just walking to classes every day, to now be sedentary at home. There were restrictions on outdoor activities and complete closure of fitness centers. Students who utilized their gyms or recreational centers at school were unable to exercise after schools sent everyone home. Exercising was now another thing that students were unable to do as often or at all, causing a decline in overall health. One major benefit of physical activity is that it increases overall health and sense of wellbeing from the release of endorphins. Endorphins are known as the happy hormone because they are hormones that are released during certain activities, such as during exercising. Endorphins can reduce pain, reduce inflammation, and most importantly,

improve mood (Grossman, 1985). Without the release of endorphins, people may start to experience higher levels of depression and anxiety. It is common to hear that exercising can help make someone an overall healthier and happier person for this specific reason, but when students were unable to continue with their regular physical activity levels, their mood drastically declined.

A study was conducted and published in the *Journal of Exercise Therapy and Rehabilitation* that surveyed the physical activity levels of 320 students using the Short-Form International Physical Activity Questionnaire (IPAQ) and then assessed anxiety and depression in these participants using the Hospital Anxiety and Depression Scale (HADS). The participants were divided into three groups: low intensity physical activity, moderate physical activity, and high physical activity (ÖZKUL, 2020). 36.6% of students were in the low intensity group, 40.9% were in moderate, and 22.5% were in the high physical activity group (ÖZKUL, 2020). After the groups were compared, it was found that the low physical activity group had a significantly lower mental health than moderate and high physical activity groups (ÖZKUL, 2020). Based off of the HADS scale, the rates of anxiety and depression were shown to have increased in college students, whose ages range from 18-24, during the pandemic (ÖZKUL, 2020). This study, along with many others, came to the conclusion that a lack of physical activity caused the prevalence of mental illness. For many people who enjoy exercising, whether it be going to gym, playing a sport, or any other form of physical activity, being in isolation took away the majority of that time spent doing something that made them happy.

Another added challenge of isolation were the strict regulations put in place to limit the spread of the virus. When people went out in public spaces, they were forced to wear a mask to protect themselves and others, as well as maintain a distance of six feet in between other people.

The Centers for Disease Control and Prevention (CDC) also recommended to frequently wash hands for twenty seconds with soap and warm water. Before the vaccine was created, excessive hand washing was all that people could do to feel safe, which in turn caused more stress and anxiety for people to try and protect themselves. The CDC also recommended that people who were in direct contact with someone who tested positive for COVID-19 were supposed to quarantine for two weeks. This became a major burden for students when they were eligible to return to school for classes in the fall of 2020. Not being able to recognize or meet other students due to wearing a mask and spacing away from others, as well as not having the same freedom on campus with social events caused major upticks in mental illness. Students also worried about contracting the virus because campuses became a hotspot for covid due to the amount of people and interactions that take place. Also, when students were required to quarantine from COVID-19 contact tracing, they may have felt even more lonely being separated or being sick away from others for a full two weeks.

Wherever students were during isolation, mental health disorders increased. From family hardships, illness, academic struggles, strict regulations, and lack of physical activity, students were at a loss of what to do to stay happy. The worst factor of them all was social isolation. People need one another to stay happy, it is what makes the world go round. Strict lockdown measures and regulations forbade people from being near one another. For a long period of time during the pandemic, billions of people were confined to their homes. University students of all classes lost out on experiences that the virus took away from them. Freshman had just finished their first semester and did not get to fully go through an entire year of classes and have a spring semester. They lost opportunities to make new friends and get fully acclimated to campus life. Sophomores and juniors were finally starting or continuing to take their core classes for their

majors. These classes may have included essential hands-on learning experiences that were completely cut out or moved to an online setting. Seniors unfortunately did not get to experience their very last semester of college. Some seniors were not able to have their graduation at full capacity, it could have been postponed or cancelled, or some schools even had virtual ceremonies. No matter what year students may have been in, everyone lost out on their overall college experience by not living or commuting to school and not being able to participate in the everyday academic and social life with campus events.

Social connections during the college years and developing and strengthening relationships can help with psychological adjustment in the future, but these connections may have been cut short due to the pandemic (Marler et al., 2021). The sense of social belonging has been correlated to a greater sense of psychological well-being (Marler et al., 2021). From a study that used The Sense of Belonging Scale (SBS), the extent to which students feel a sense of belonging on their campus, it was measured at 91% with 238 undergraduate students surveyed (Marler et al., 2021). This same study tested the participants by using the Depression Anxiety Stress Scale-Short Form (DASS). The DASS form measured for depression, anxiety, and stress related to the COVID-19 pandemic specifically. It was found that from the same 238 undergrad students that surveyed with the SBS scale, 94% of them also experienced 21 negative emotional symptoms (Marler et al., 2021). University students become part of a culture where they feel like they belong to a community. The community would be everyone on campus along with the social events that are presented around them continuously to get involved. Feeling part of a community is essential to mental health (Marler et al., 2021). Students felt less motivated to do schoolwork as well as more detached and isolated from their university with online learning. Online learning and moving home then resulted in excessive technological device use.

Excessive Technological Device Use

When students had to move their course load to completely online learning, they began to use their technological devices more frequently than ever. Device screen time was put at an all-time high for people due to the social distancing norms and nationwide lockdowns (De' et al., 2020). Students were not only using their devices for normal purposes like messaging, social media, or streaming, but they were also now using it full time for coursework and virtual classes. Zoom, a video-conferencing service, usage was ten times higher during March of 2020 and only continued to rise as more schools shut down and adapted for virtual learning (De' et al., 2020). Also, entertainment was now solely dependent upon the internet because the lockdown resulted in people not being able to go out of their homes and do what they normally do. With the overstimulation of technology and less human interaction, students also began to feel lonely and depressed on top of already stressing over having more work for their online learning in comparison to their in-person classes.

With more use of the internet nationwide, the issue arose of misinformation about the coronavirus being spread online. Another major factor that contributed to the excess use of technology in students included them researching and seeing new information about COVID-19. The virus was so new right at the beginning of the lockdown that people did not know what was true about symptoms, quarantine, and other COVID-19 related information. Social media platforms like Instagram and Facebook played a huge role for students in relaying information. “While many colleges and universities provide students with information related to COVID-19 from reliable sources, there was a high potential for misinformation and disinformation to spread through online sources and social media often used by young adults further contributing to stress, anxiety and depression among students.” (Kecojevic et al., 2020). Anxiety and depression were

increased in students that frequently used social media during the pandemic because they were never able to really escape the thought of COVID since it even followed them online.

Students who were struggling with their mental health were now unable to properly use their resources that were given to them on campus as well. Whether that was going to therapy or counseling through their school's health service centers, meeting in person provides a very different experience for students who need to talk or get advice from a professional. Online therapy was offered by colleges to help continue those same services, but it may have felt like more of a burden when students were already using their devices for everything else. Not being able to get out of a space that made students unhappy and go to therapy in the first place, as well as feeling isolated since these resources were no longer in person, also contributed negatively to students who needed to combat their mental health issues.

Conclusion

The relationship between the COVID-19 pandemic and the mental health in college students was arduous. There were significant negative repercussions to student's mental health almost immediately from the start of the pandemic that included stressors in lockdown, housing issues, loss of loved ones, financial hardships, social isolation, and excessive technological device use. Although these issues are still very prevalent since the virus has not fully gone away yet, there is hope for a better future with more positive rates of mental health declining. With vaccines being created and the nation adapting better to be able to have life continue on, students can finally be back in school and still be safe, protected from the virus at the same time. Spreading mental health awareness as well as creating interventions for the uptick in mental health disorders during COVID-19, such as anxiety and depression, should be researched further

for students to access in order for there to not be the same issue arising again if another pandemic were to ever occur.

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