

Post COVID-19 Pandemic Effects on the Mental Health of College Students

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Abstract- Research suggests that the COVID-19 pandemic has affected the mental health of college students on a large scale and in a sustained manner. This study focuses on the mental health aspects that evolved in certain more negative directions after the pandemic, such as anxiety, depression, stress from academic learning, and sociophobia (Husain, et al, 2021). Data collection methods that have been employed are questionnaires and interviews among college students to determine the prevalence of mental health issues. In new studies, it is discovered that student's anxiety and concerns related to their academic and life's trajectory have not decreased even if institutions and learners have returned to the new typicality. It reveals the areas of disruption of routines, changes in finances, and the transitions between online and face-to-face contexts that have occurred. Even though some learners have learned to adapt and be strong, some still feel lonely and have learned to burn out in their academics (Zheng, et al, 2021). Symptoms of mental health problems are identified as the last critical area of students' experience, as universities are deemed to learn that they need to address interventions for the post-pandemic effect. It is for the same reason that further mental health services, lenient academic measures, and sustainable programs that foster community entirety should be encouraged post COVID-19 pandemic.

I. INTRODUCTION

COVID-19 is a disease that started late in 2019 and posed various challenges to global society. When nations endeavored to slow the virus transmission, rigorous measures were taken, which included restrictive measures such as lock-downs, social distancing, and closure of schools (McLafferty, et al, 2021). All these measures were, though essential, highly dramatic, which affected millions of people,

especially college students. Several students had to change from traditional classroom learning to online learning making them alter their learning schedules, interactions, and even their psychological well-being. These psychological influences that the pandemic has had on college students have not left even as restrictions ease up and schools re-open.

College life was significantly defined by different transitions related to academic, social, and individual development. These significant events were halted by the pandemic leading to the worsening of mental illnesses among students. During the pandemic, research showed college students had higher levels of anxiety, depression, and stress due to their education, employment, and general health concerns. Indeed, it may be mentioned that for numerous students and instructors, the transition to distance education led to their social isolation and loneliness since direct contact, as well as personal communication, with other learners and teachers, was significantly limited. Thirdly, the pandemic-associated financial challenges. Loss of employment, reduced family income, and the rising cost of living boosted stress levels.

These issues have continued even with the reopening of schools today to face-to-face learning. Instead, post-pandemic life has brought new stressors into the lives of individuals. Most learners are struggling with the consequences brought by COVID-19, including interrupted study routines, loss of motivation, and challenges in adjusting to the class environment. However, the question mark on the possibility of future outbreaks of similar pandemics or other health risks continues to foster concern among students. This has a negative effect on the mental health of students, family background, and access to professional counseling services (Cullen, et al, 2020). International students, especially, have had to endure additional sources of stress arising from movement restrictions

and uncertain means of accessing medical care in the affected regions during the pandemic.

The purpose of this study is to examine the mental impact of COVID-19 on college students in the post-pandemic scenario. It aims to find out the particular difficulties in the area of mental health among students, including nervousness, sadness, and stress-related exhaustion. This research will use questionnaires, interviews, and analysis of data collected from similar studies to offer insight into the effects experienced by students and the likely progression of these effects in the future. The study will also examine the strategies students have found to surround themselves and how universities can help address the growing cases of mental health issues brought about by the COVID-19 pandemic.

Finally, this paper will call for a shift in focus by the education sector to incorporate mental health support among students as a recovery strategy after the post-pandemic period. It will stress the availability of mental health services, which can provide students with needed support during this period; changes in academic administrations' policies that can contribute to the COVID-19 burden detection among students; and social care networks that can assist students in overcoming the adverse effects of the pandemic (Miu, et al, 2023). From the findings of this study, this research hopes to play a role in formulating proper interventions or recommendations that would influence the well-being of college students after COVID-19.

II. LITERATURE REVIEW

The lives of people globally transformed due to the COVID-19 outbreak, and college students were not immune to the change's direct and indirect consequences. The COVID-19 outbreak elicited a range of negative impacts, including disrupted academic schedules, loneliness, economic difficulties, and the future's unknown course in influencing mental health. This literature review considers literature research, reports, and surveys on students studying at the college level post-COVID-19 impact on mental health, the issues faced, existing trends of such problems before and during the pandemic, and coping mechanisms realized due to the pandemic.

- **Mental Health of College Students Pre-Covid-19**
It is worth stating that mental health problems among college students have been on the rise even before the COVID-19 outbreak. Research has shown that this group is facing ballooning levels of anxiety, depression and stress resulting from academic demands, and transition costs. A summary of the psychological/emotional change stressors in the transition to college life is that students experience homesickness, burnout, and emotional issues in handling independence. However, mental health services that are offered on campuses have for most of the time not been adequate to cater to the growing need. These challenges were even worse before because of the pandemic since the virus affected routines and made an environment unstable (McLafferty, et al, 2021).

- **Psychiatric Disturbance in The Course of Covid-19 Outbreak**

In mid of the year 2020, COVID-19 enhanced the discontinuation of face to face class, enclosed halls, and the removal or reduction of social events which resulted to heightened loneliness among students (Husain, et al, 2021). The changes of the pandemic increased anxiety and depression because the changes were sudden. A survey, conducted by the American College Health Association in September 2020, showed that 63% of the students felt that their stress levels increased, 48% of the students felt lonely and 43% felt more depressed than before the pandemic.

- **Social Isolation and Loneliness**

The measures taken to social space during the pandemic had the most devastating impact on students' social life. For the majority of the learners, college years are an opportunity to find new friends, get involved in various activities, and become an essential part of the college community. Many people lost their chances for such interactions during the pandemic, which caused them to experience loneliness and isolation (Heinberg, et al 2021).

- **Academic Stress and Burnout**

Though stress relating to academic issues is familiar to college students, the pandemic amplified it due to the questions created by distance learning and graduation. The sudden removal of structure related to

conventional face-to-face delivery, coupled with a disparity in the ownership of tools necessary for online learning, resulted in a disorganized learning environment.

- Financial Instabilities

Students or their families underwent furloughs or lost their jobs, income decreased, and financial instability added to other stress factors (Wang, et al, 2021). To those who previously relied on their wages earned from part-time employment for their tuition fees and other living costs, the loss of jobs had implications on the multiple factors of life, including academic endeavors.

- Post-Pandemic Mental Health Challenges

In this study, we found out that despite the gradual return to normalcy across the globe, college students still struggle with their mental health. Research also indicates that the students' psychological well-being may remain affected for a long time with many learners still presenting high levels of anxiety, depression, and academic stress even when schools have reopened (Husain, et al, 2021). The period that followed the pandemic also has its share of challenges – finding routine after removing masks, handling learning losses from remote learning, handling new variants of the virus, all of which sustaining mental health issues.

- Coping Strategies and Resilience

The pandemic has brought mental health issues, but some students have been able to transform and cope with the changes that have befallen the country. Teletherapy and mental health apps also enabled the students to get other forms of assistance during the pandemic, especially when they developed feelings of anxiety and depression.

III. METHODOLOGY

The following subsections describe the research method, data collection, and analysis techniques that will be used in the study to establish the impact of COVID-19 on college student's mental health. This method was deemed suitable to capture quantitative data and the overall psychological impact; thus, a mixed-method approach was applied. Combined with

the surveys and the interviews, a clearer view of mental health problems affecting college students after the pandemic.

IV. RESEARCH DESIGN

This research aimed at incorporating both quantitative and qualitative methods. This approach was adopted to get a rather broad perspective of the impact of the COVID-19 experience on college student's mental health (Copeland, et al, 2021). From survey data, it was possible to have a quantitative measure of how severe anxiety, depression, and stress were in the sample. This paper used qualitative data collected through the administration of semi-structured interviews with the students, where they provided more profound descriptions of personal experiences, management strategies and buffer factors, and mental health issues experienced in the post-pandemic period. By combining these two approaches, the research sought to achieve two objectives: It is pertinent to:

- (1) define the magnitude of mental health concerns among college students after the pandemic and
- (2) identify what factors caused it.

- Data Collection Methods

The study utilized two primary data collection methods:

- Surveys (Quantitative Data):

An anonymous, self-completed cross-sectional online questionnaire was administered to a purposive sample of college students to ascertain the general mental health effects of the COVID-19 outbreak. Some of the components of the survey involved issues to do with mental health, including anxiety, depression, stress, and social isolation (Copeland, et al, 2021). Besides, the survey was taken on age, gender, academic year, and family income apart from the above mentioned standardized measures.

Another part of the survey covered questions related to the shifts in academic achievement, availability of mental health services, and Toledo students' interactions with other people before and during the pandemic.

- Interviews (Qualitative Data):

Meaningful interviews were also carried out on selected students for a more detailed experience of their experience. Thus, the interviews were designed to reveal how the students dealt with the adversities of the pandemic situation, whether they had access to support, and what measures they took to address their mental health.

The interviews were carried out through technological means mainly video conferencing to ensure the participant felt safe during the conversation.

- Sampling Techniques

Only purposive and convenience sampling methods were employed to select the respondents for the survey and the interviews.

- Survey Sampling:

The step was conducted to ensure that many students from different colleges in the country would complete the survey. The survey was conducted online using email and social media accounts to reach many students. Since this was an exploratory study, the purposive sampling technique was used to recruit students affected by the pandemic in their learning and social interactions. The survey was conducted for four weeks and the valid responses that were recorded were three hundred.

Inclusion criteria for the survey included:

1. Still in college or university, attending classes in the capacity of auditor.
2. Transitions to online learning at least one semester because of the pandemic experience.
3. Sixty-six percent of them showed a willingness to provide informed consent.

Interview Sampling:

Here, purposive sampling was adopted to find 20 students out of the total 50 students to conduct the interviews. The interview participants were selected according to the survey results by choosing respondents that had either high levels of Self-identified mental health issues or distinct methods of dealing with them and only students were chosen as the category. This made sure that the qualitative

methods and data would therefore present a rather diverse range of experiences and perspective.

- Ethical Considerations

Ethical concerns were upheld throughout this study so that participants would not be harmed. The students were briefed on the study's aims and activities, including the survey and interviews, as well as the anonymity of the process before they engaged in them. Participants read the study information and signed consent thus ensuring that they understood various aspects of the study, including anonymity of their answers. It was an opt-in study and the students were allowed to withdraw from the study at will without facing any repercussions.

Because of the sensitive nature of the information, participants were also given counseling services contacts of every institution of their choice. People who experienced increased levels of distress were advised to consult a professional.

Data Analysis: Data analysis involved both quantitative and qualitative methods.

Quantitative Analysis: Analysis of the survey data collected was done using analysis software commonly known as Statistical Package for the Social Sciences (SPSS).

V. LIMITATIONS

Insights gleaned from this study on the mental health burdens experienced by college students in the aftermath of the pandemic should be explored further, but this research has limitations. However, a potential limitation of our study was that the surveys and interviews relied on self-reported data; hence perception of symptoms and feelings may be under or over reported by students. Further, the convenience sampling procedure may reduce the potential to generalize the findings to college students in general.

VI. FINDINGS

This section consist of results obtained from questionnaires and interviews administered to college students regarding the impact of COVID-19 on their mental health. The results are presented in accordance with the major concepts revealed which embrace such

topics and concerns as the rising rates of anxiety, depression, and stress, the effects of social isolation, academic difficulties, financial concerns, and ways to cope with these issues.

1. The occurrence of Anxiety, Depression as well as Stress

The results of the survey demonstrated that many college students reported increased feelings of anxiety, depression, and stress during and after the pandemic. When it comes to mental health, 72 percent of the 300 students who participated in the survey said they suffer from moderate to severe anxiety symptoms. The same students also showed percentages of 63 percent for depressive symptoms. On the same note, 68% of the students said that they suffer from a lot of stress in terms of academic performance and their personal lives.

From the students' point of view, several causes of stress were highlighted which included COVID-19, fear of contracting the disease, and adjustment to new education and social paradigms (McLafferty, et al, 2021). Some of the things evidenced by the students were that many of them felt out of control, this was triggered by the shift from face-to-face learning to online learning, which was later followed by the feeling of being lonely.

Female students' responses showed higher levels of anxiety and depression in contrast to male students. The same is true in other studies during the pandemic where women had it worse concerning their mental health since more of them faced immense care giving roles and stress. In addition, about two-thirds of first-year college students experienced at least one form of mental health problem than students in the last year of college for the same semester, which could be attributed to factors such as transition from high school to college.

2. Impact of Social Isolation

They postulated and proved that the absence of contact or social isolation was one of the key determinants of poor mental health among college-going students. COVID-19 led to campus closure, and the shift to online learning disrupted college society, and this led to respondents reporting feelings of loneliness, lack of friendship, and few people to turn to (Cullen, et al, 2020). Interviews gave quantitative data, which may

be discussed concerning the results; qualitative data contributed to these findings since students explained the impact of the absence of face-to-face communication and social interactions on mental health.

3. Academic Challenges and Burnout

The shift to the online platform affected the academic learning of college students in that many students experienced high levels of academic stress and burnout (Heinberg, et al, 2021). The survey showed that 65% of students experienced difficulties with attention during online classes, and 60% of students mentioned their decreased efficacy in contrast to the pre-COVID-19 period.

4. Financial Stress

The study also revealed the effects of financial stress on college students' mental health. This would be due to the pandemic, which led to changes in economic status through a loss of jobs or income changes among the students or their families. Under the survey findings, it was evident that 48 % of the students encountered financial difficulties during the pandemic, which amplified their stress and anxiety. Employment for independence felt a sense of insecurity due to business shutdowns and the loss of jobs from part-time employment the students used to engage in. Apart from meeting living expenses, financial pressure influenced other student decisions, which included either dropping out or leaving college (Jones, et al, 2021). Some of the students expressed that they had thought about withdrawing because they could not afford fees or because they were not sure of their academic status.

5. Coping mechanisms

The survey revealed that 35 percent benefited from exercising through physical activity to enhance their mental health.

Social support was also mentioned in the qualitative interview data. Students who remained connected with friends and family via video conference calling applications or social media used during the pandemic reported improved levels of well-being. Teletherapy and mental health apps also helped student access helpful information for dealing with their mental health issues (Miu, et al, 2023).

6. Long-Term Effects

The results imply that experiencing the COVID-19 pandemic has underlying long-term negative psychological consequences for college students. Students characterized that they were still dealing with heightened levels of anxiety and stress despite the physical classes. In the survey, 55% of students stated that their mental health had not yet recovered from the pandemic, and they worried how these challenges would influence their further academic performance and career (Husain, et al, 2021).

VII. DISCUSSION

The COVID-19 virus outbreak has been one of the most severe infectious diseases in the world, with impacts on millions in the population. Mental health college students who were at a heightened risk were psychologically affected by the disruption of their academic, social, and financial existence. Here, we present the implications of the study findings in light of previous research and give broader conclusions. It also considers the research implications and the topics for further investigation.

1. Rise in Level of Anxiety, Depression, and Stress

According to the literature, this study ascertained concerns affecting anxiety, stress, and depression among college students during the pandemic. The majority of students said that they suffered moderate to severe levels of anxiety and depression including suicidal thoughts, and the student's mental health issue was observed in other global studies (McLafferty, et al, 2021). The pandemic also brought uncertainty and fear to new heights, affecting not only the students' health but also their families' health. This introduced a new focus to what the college students already knew to be pressure, such as academic pressure, pressure to perform well, pressure to secure a job, and more.

Some other findings that could also be mentioned are the fact that females participating in this study showed increased levels of anxiety and depression as compared to males. This finding supports previous studies showing that the female participants were more vulnerable to mental health problems, especially throughout stressful situations. Specific interest was on whether women had experienced extra pressures during the pandemic, such as care giving, concerns for

the health of their families, and experiencing a greater emotional toll (Kathirvel, and N. 2020).

2. Social isolation and its consequence on the mental health of an individual

Social isolation and loneliness figured prominently in this study, especially in students' experiences of the pandemic. The social relationships of young adults that are vital for their well-being and psycho-social development got strained due to canceled social interactions, closed college campuses, and a shift to online learning. There was evidence that loneliness reared its head amid depression and anxiety, and that was affirmed in this study (Cullen, et al, 2020). Distance from peers, faculty, and friends left a space in learners' lives that could not be filled through virtual meetings.

Respondents in this study said that even though they used Zoom and social media applications to keep in touch, these social interactions hardly replaced face-to-face relationships. The physical distance from friends and peers placed the students in an awkward position of not being able to get the emotional satisfaction they get by being on campus.

Adding up to these challenges, the students experienced social stressors such as their visa status, financial instability, and the illness of their relatives in their home country. These factors probably aggravated the psychological loads in this subgroup (Clemente-Suárez, et al, 2021).

3. Academic Stress and Burnout

Since the shift to online learning, a new very elaborate gear of difficulty academically loomed on the students, which stretched a new level of stress and eventually burnt out. The logistics challenges highlighted by students included adjustment to virtual platforms, time management, and concentration during virtual lessons.

Replacing the structure of the traditional physical classroom not only deprived students of such key signals for learning as face-to-face meetings with professors, group discussions, and the presence of a timetable. Some students complained that online classes were virtually self-directed, and this, coupled with other activities that are carried out at home, proved cumbersome (Heinberg, et al, 2021).

Stress and demotivation experienced due to pandemic restrictions and an overall lack of enthusiasm for studying affected students and were prominent in the form of burnout (Vidal Bravalhieri, et al, 2022). Findings indicated that learners struggled with engagement specifically concerning motivation and that even when transitioning back to face-to-face learning, some learners continued to lack motivation. Another reason for academic stress was concern for future vocations. The uncertainty about future job opportunities also affected the student's concern for academics. Many students were worried about the impact of the pandemic on future education and employment. The hope for internships, work-study programs, and jobs was removed or shifted, so students were unsure about their career paths. This was more so with students in their last semester at college, especially those graduating at the onset of a global economic crisis.

4. Relationship Between Financial Stress and Its Effect on Psychological Health

Another key issue that started experiencing students' mental breakdown was financial pressure. Most students or their families had to go through loss of jobs or income or fear of losing their jobs due to the effects of the coronavirus on the economy. There is no doubt that financial strain is among the most confirmed risk factors for mental health problems, and, therefore, the present research contributes to the literature to support the finding that economic difficulties may worsen some of the common signs of anxiety, depression, and stress (Wang, et al, 2021).

Most of the students were affected but students who worked hard to pay their tuition fees and other charges using their part-time income suffered so much financially. With the business shutdowns and hence minimum job vacancies available, most students found themselves without stable incomes, and this made many of them develop a craving for studying. This financial pressure created yet another burden in an already difficult process, leading to people feeling helpless and frustrated (Jones, et al, 2021)

According to the income status of families, students from low-income families fare worse as they had to bear even more financial costs. This paper asserts that the two challenges often fed one another, such that the student's mental health declined in parallel to the

pressures that they faced academically as well as financially.

5. Coping Mechanisms and Resilience

Nevertheless, as observed from the responses of different students, the COVID-19 pandemic presented several stressors for students, although many proved to be hardworking and engaged in various methods that helped in maintaining a good mental state. Some of the identified measures for decreasing stress levels and anxiety were meditation and breathing exercises (Cullen, et al, 2020).

In addition, physical activities were also useful in assisting students in managing mental health disorders that resulted from the pandemic. Literature also suggests that exercise has some benefits on mental health, in the current study, student respondents also remarked that they were able to overcome stress and even boost their morale through jogging or home workout routines (Kajtna & Vučković, 2022).

Another type of coping is social support that is received through online or face-to-face communication. Self-care proved to be another factor, with students who cared for themselves having better mental health than students who felt lonely. Such a finding is in line with the studies that postulate that social support is one of the buffers against poor mental health, especially in emergencies (Zheng, et al, 2021).

More surprisingly, teletherapy and mental health apps became an option that students discovered during the COVID-19 pandemic. The advancing availability of mental health resources ensured that the students could seek help from the counselors even when there were no available face-to-face sessions. These changes in reliance on telehealth could signal a paradigm shift in how mental health services are particularly delivered to college students in the future (Miu, et al, 2023).

VIII. LIMITATIONS AND FUTURE RESEARCH

However, the current study has several limitations that should be considered when interpreting the results of college student's mental health problems during the COVID-19 pandemic. First, employing self-administered questionnaires may yield some bias since some students may overemphasize or underemphasize their symptoms (Jamshaid, et al, 2023).

Furthermore, because this study used a convenience sampling technique when developing the survey, the study findings cannot be generalized to the total population of college students.

Further studies should be conducted regarding college students' mental status after the pandemic, as mental issues are likely to be experienced even after the dangerous period is over. Smaller scale follow-up surveys could also offer a clearer picture of how students' mental health develops throughout their studies and what supports their well-being and successful coping mechanisms.

CONCLUSION

Given the foregoing analysis, the COVID-19 pandemic affected the mental health of college students in such a way that students experienced not only the extension of existing mental health issues but new stressors as well. As concluded in this research, students' anxiety, depression, stress, and social isolation have risen significantly, and the causes include academic pressures, financial costs, and an uncertain future, among others (Simoës-Perlant, et al, 2023). The new teaching environment and transition to online classes, the absence of the social support system, and interaction have influenced the students' psychological state. In addition, the students who are from the vulnerable categories, like the international students, and the students who face acute financial problems faced increased levels of mental health issues.

Nevertheless, the various difficulties have been met with different coping mechanisms by these students, which include practicing mindfulness, exercising, and seeking social support among others. According to Miu, et al of 2023, teletherapy and mental health apps have also offered other means through which students could access support during the pandemic. Still, the future psycho-social consequences of the pandemic on students are unknown, and therefore students may need continued assistance to heal.

RECOMMENDATIONS

Strengthen Mental Health Resources: Colleges should offer counseling and teletherapy to the students since

there is a need for professional assistance that the institutions should provide. It is also found that mental health awareness campaigns can play a role in decreasing the stigma and increasing the likelihood of students seeking assistance (Nails, et al, 2023).

Enhance Social Support Systems: In institutions, peer connections should be encouraged virtually and through organized and scheduled embodied interactions. Support groups that can be offered to the vulnerable population include international students.

Promote Academic Flexibility: Colleges should allow flexible learning and teaching options such as a blend of face-to-face and online wherever necessary due to burnout and stress among students.

Change in Grades: Another aspect that may positively impact the aspect of student health might be the changes being proposed in regard to the grading culture or in giving students more time to complete their coursework.

Address Financial Hardships: Colleges and universities are obligated to establish financial assistance schemes and disaster funds for students experiencing financial hurdles (Jones, et al, 2021). It is thus important to provide cheap technological needs like laptops and internet connections to enable every child or student to have equal chances of learning.

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