Higher Education Students' Mental State: Before and After the Post-COVID-19 Era

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ABSTRACT

Background

The most significant hurdle to academic achievement is mental health issues. Students with mental illness may struggle academically and socially, which may have a detrimental effect on their prospects of success in both their professional and personal lives.

Objectives

This paper aims to explore the COVID-19 pandemic's effects on the educational system, notably on the mental health of university students. It assesses the effects of isolation, social exclusion, social isolation, and quarantine on university students' psychological and mental health before and after COVID-19.

Methodology

The present exploration took 330 male and female responses from 9 universities in Bangladesh psychically and online from March 2020 to February 2022 by using a structured questionnaire, when education institutions started their operations in full swing. The 7-item Generalized Anxiety Disorders Scale (GAD-7) (Spitzer et al., 2006) was employed to assess participants' general stress levels.

Findings

Findings from the research demonstrated that in contrast to the students who spent the majority of their time in the village both throughout and after the COVID-19 outbreak, the students who spent the majority of their time in the town experienced isolation from society, sleep problems, depression-related feelings of insecurity and uncertainty, and distraction from social media. On the other hand, people who spent the most time in the village throughout and following the COVID-19 outbreak, many had irregular eating habits and social media distractions.

Practical uses

The outcomes of this inquiry offer ideas and suggestions to reach desirable mental well-being for students in higher education both throughout and following the COVID-19 outbreak. The study's shortcomings are the small sample size and respondents' lack of interest.

Keywords: Mental State, Stress, Depression, Higher Education, COVID-19, Bangladesh

INTRODUCTION

In November 2019 China initially reported a strange respiratory infection COVID-19, which quickly spread to practically every country. As COVID-19's effects spread beyond people's psychiatric problems over time, international nations saw its far-reaching repercussions (Nandy & Biswas, 2022). The World Health Organization (WHO, 2020) reported that there has been a total of 10, 81,686 COVID-19 fatalities (Nandy & Biswas, 2022). One of the most crucial tactics used by several nations is to stop a mix of contagious and infected people by spotting cases quickly or cutting back on contact through lockdowns, quarantine, and social segregation (Lewnard & Lo, 2020). Reduced physical, unhealthy diets (Ammar et. al, 2020) and lockdowns cause social distance that has an impact on people's psychological and physical health worldwide (Mattioli, Pinti, Farinetti, & Nasi, 2020; Ammar et.al, 2020). University students' lifestyles are greatly altered by social exclusion and restrictions. Bangladesh's government forced a nationwide lockdown to stop the COVID-19 virus from spreading widely among the populace from 26 March 2020 like other countries of the world. From March 17, 2020, all educational institutions in Bangladesh were shuttered and continuously closed for one and a half years. As university students were asked to leave the campus, adapt to a new living situation, and become accustomed to online settings, their lives underwent significant change. The assessment of students is clearly at a disadvantage for courses that aim to integrate a substantial amount of interaction and practical experiences, such as internships, labs, and/or creative work (Sahu, 2019). The ability to access computers and online resources at home may present issues for some students (Sahu, 2019; Lederman, 2020). Worries about their health, the well-being of those in their family, and money worries are among the additional difficulties faced by university students, especially those who rely on employment in sectors that have been negatively affected by protracted closures of the manufacturing or service sectors. The biggest barrier to academic performance is mental health issues. Students' motivation, attentiveness, and social relations can be affected by mental illnesses, which are obstacles to their success in higher education. Center for Collegiate Mental Health (2019) reported that anxiety remains the most prevalent disorder among American students who consult university counseling centers (62.7% of 82,685 respondents). A significant number of university students are experiencing psychological pain, raising concerns about the mental well-being of university students (American College Health Association, 2020). Mental illnesses can considerably harm students' academic achievement and interactions with others, which can negatively impact their future professional and personal chances to succeed.

RESEARCH GAP

No significant study has been made to describe COVID-19 on Bangladeshi students' mental health at various universities. The findings of the study conducted by Ahammed et al. (2021) higher levels of anxiety, sadness, dread of COVID-19, and poor subjective sleep quality among university students nationwide indicate that university students in Bangladesh are experiencing mental distress due to the pandemic but the study didn't use any widely accepted (GAD-7) to gauge university students' COVID-19-related stress levels. But in this study, participants' total stress levels were measured using the PSS and GAD-7 scales, which are commonly used tools for this purpose (Cohen, et.al., 97).

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In his study, Faisal (2022) examined Bangladeshi university students' levels of stress, symptoms of depressive disorders, and mental health. However, COVID-19 continued to be a catastrophe until February 2022. On March 16, 2020, the Government of Bangladesh decided to close the educational institutions, including primary to tertiary levels, until March 31, 2020, in order to prevent the spread of the infection (Sakib, 2020; Uddin, 2020). Bangladeshi students returned to its campus in September 2021 after it was closed for 543 days because of the pandemic. But, with the recent surge in of the Omicron variant, authorities have ordered the schools to close once more from Mid of the January 2022 to February 2022 (The Daily Economic Times, 3rd February 2022). Therefore, from March 2020 to September 2021 and again in February 2022, educational institutions in Bangladesh were closed. The study by Islam et al. (2020) examined students at public, private, and national universities' psychological reactions to the COVID-19 outbreak in Bangladesh during the month of April 2020, and the responses were taken online via Google form survey. Likewise, Between April 9 and April 23, 2020. Besides, Khan et al. (2020) examined the mental health of Bangladeshi undergraduate and graduate students who had been placed in home quarantine due to COVID-19. Similar to this, Piya et al. (2022) did a study that focused on comprehending how COVID-19 affected their education, societal and everyday activities, decisions, and psychological well-being throughout a three-month online survey during the year 2021.

During the fifteenth of October 2021 and the fifteenth of January 2022, Nahar et al. (2022) conducted a study on female students at universities in Dhaka to assess the incidence and risk variables for mental health problems; however, the study excluded male students.

The investigation by Hosen et al. (2022) investigated the effects of COVID-19 on Bangladeshi tertiary institutions and students. found that 88% of those surveyed had problems with stress, anxiety, and sadness that were linked to their mental health. Financial crises, family conflicts, internet, and technology-related issues affected 79%, 83%, and 72% of people, respectively. But from May 20 to May 30, 2021, replies were collected via email, WhatsApp, Facebook, Telegram, In Twitter. In addition, Bakul and Heanoy (2022) looked into how loneliness and sleeping habits affected by COVID-19 anxiety affected Bangladeshi students and professionals. Regression analysis revealed that both lonely and low levels of sleep were substantially predicted by COVID-specific anxiety. The information was gathered online using Google Forms.

According to Ahmed et al.'s survey from 2022, 68.11% of students experience depression, 60. 1.98% mental disorders, and 63.23% deal with financial issues. However, the study was done online using a Google form, and participants were informed of a link to the inquiry form via numerous social media platforms, including WhatsApp, Twitter, and Facebook. More than three-quarters of learners as well as professionals reported clinically significant levels of anxiety during the early COVID-19 epidemic in Bangladesh, according to research by Patwary (2022). However, the study was conducted online from the beginning of the lockdown phase on April 17 through May 1, 2020. Furthermore, the influence of COVID-19 on students at universities who spent most of the duration throughout COVID-19 circumstances in the village, the town, or COVID-19 was not covered by many studies, include those mentioned above.

AIMS OF THE INVESTIGATION

1. To examine the stress levels of sample students at various Bangladeshi universities using the PSS scale.

2. To explore the variations among the sample students from various universities in the nation who spent most of their time in the town and in the village throughout COVID-19.

3. To assess the effect of COVID-19 on the mental health of the sample students at various universities in Bangladesh.

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LITERATURE REVIEW

According to Changwon et al.'s report from 2020, the COVID-19 pandemic has adverse effects on higher education because of the protracted pandemic condition and onerous measures like lockdowns and staycations. The study went on to say that a variety of stressors, such as worries about one's health and the health of one's loved ones, disruptions in sleep patterns, a decline in social interactions because of physical distance, and elevated worries about academic performance, all contributed to students' elevated degrees of anxiousness, stress, and depressive thoughts.

The Sumitra et al. (2021) investigation on the effects of the COVID-19 outbreak affecting educational institutions found that many developing nations had expensive data packages and relatively low internet speed with fewer access points. The paper revealed that innovative and engaging creative online teaching using user-friendly tools can help prepare the educational system for such future uncertainty. The study went on to say that the lesson via the COVID-19 pandemic that teachers and students ought to be urged to keep employing internet-based resources for improving their education, including tools for genuine evaluations and prompt feedback of students, following the COVID-19 pandemic while regular classes resume or COVID-19 usage of various online educational resources should be explained to teachers, students, and learners.

Eman et al.'s (2020) study sought to understand the psychological effects of the COVID-19 pandemic's effects on Egyptian learners at universities, depression, anxiety, and stress affected 70.5, 53.6, and 47.8 percent of Egyptian students, respectively. The likelihood of anxiety, stress, and depression among Egyptian students is increased by being a female, having a family member or friend with COVID-19 infection, experiencing a pre-existing serious medical condition, and missing mental healthcare from families, communities, and universities. Different degrees of psychological distress are experienced by Egyptian students both before and following the COVID-19 pandemic. According to this study, to lessen the crisis' emotional toll on the students, colleges should offCOVID-19-oriented services that are tailored to the situation and closely monitored during the crisis. According to the research done by Aleksandar et al. (2020), students who experienced a variety of academic and daily challenges, a significant amount of mental health suffering, and a great deal of anxiousness were more inclined to be observed by learners besides beginners as well as those who spent over an hour per day looking up information on COVID-19, whereas high levels of despair were linked to difficulties concentrating on intellectual work and job losses.

To ascertain the shifts in health habits among learners at a French university prior to, during, and following the COVID-19 lockdown, Marie et al. (2021) studied socio-demographics, the academic COVID-19 worries, tobacco use, excessive drinking, consumption of cannabis, and exercise, The use of cannabis (5.6% versus 3.2%), excessive drinking (35.9% versus 9.3%), and tobacco use (18.5% versus 14.8%) all showed significant improvements between the time frame preceding and following COVID-19, while moderate physical activity (79.4% compared to 67.9%) as well as intense exercise (62.5% versus 59.1%) showed significant declines. After that, as binge drinking decreased during the COVID-19 lockout, precautions must be taken to stop university students from picking up where they left off. University students should establish health-promotion techniques that promote or preserve excellent psychological wellness to encourage physical exercise in order to better manage upcoming lockdown situations.

Alejandro et al.'s systematic review from 2021 sought to determine how the COVID-19university affected university students' levels of physical activity, finding that there was a decline in PA levels from before to over the COVID-19 outbreak in students from universities in the nation of Australia, Italy, England, Croatia, Hungary, Spain, Mexico, and the USA. Arora and Grey, 2020; Jiao et al., 2020; Savage et al., 2020) and young people (Guo et al., 2020; van Tilburg et al., 2020; Holingue et al., 2020) have reported an

increase in mental health issues as a result of the confinements caused by the lockdown designed to combat COVID-19.

The findings of El-Sayed et al. (2021) demonstrated that COVID-19 had detrimental effects on educational systems, including greater stress on students, parents, and universities, restricted access to labs, an increase in student debt, and an absence of learning passions among students. These findings also demonstrated that barriers to enrolling in online education due to the pandemCOVID-19 onal abilities, insufficient electricity, accessibility, network problems, and inadequate facilities prevent students from enrolling.

Many undergraduates in Bangladesh worried about their academic performance and psychological well-being as a result of the COVID-19 pandemic, according to a research paper by Mostafizur et al. (2021). This finding is in line with the current study's findings that COVID-19 has an effect on both students and the general public (Rzymski & Nowicki, 2020; Mamun & Griffiths, 2020; Nguyen et al., 2020). Compared to other institutions outside of Dhaka, Bangladesh's capital city's universities are often well-equipped to help their students. According to the report, most private colleges offered online courses to help them finish their semesters on schedule (UGC, 2020). However, public universities demonstrated and gave their students more emotional and financial support during this pandemic.

According to the research done by Ahammed et al in 2021, students at universities in Bangladesh are experiencing mental distress as a result of the pandemic due to increased levels of anxiety, depression, and fear of COVID-19 as well as poor subjective sleep quality. Similar to many lower-middle-income nations, Bangladesh's universities have minimal funding for mental health services.

This study also looked into the disparities in mental health issues between students at public and private universities. The findings indicate that students attending private universities had higher mean scores for anxiety, depreincludingand dread of COVID-19, but students attending public universities were more likely to have poor subjective sleep quality. However, it was shown that the median score for depressive disorders was not even statistically noteworthy, indicating that students at public institutions got more distressed throughout COVID-19 private colleges. People with a history of depression and anxiety had poorer-quality sleep, according to an investigation on the Japanese populace (Doi et al., 2000). The findings of this study thus show that low ratings of sleep may be caused by mental health issues among Bangladeshi students.

The current study, carried out by Constantinos et al. (2021), examined the relationship between university students' SWL (satisfaction with life) and perceived a mental disorder, academic, and economic impacts of COVID-19 during and after the pandemic, subject to students' GMH (General Mental Health). Overall, the results showed there were substantial direct and Indirect impact of COVID-19 perceptions on SWL via GMH.

According to Nahar et al.'s study from 2022, female undergraduates in Bangladesh had prevalence rates of isolation, anxiety, and symptoms of depression of 55.88%, 69.18%, as well as 45.23%, accordingly. Additionally, we found that, respectively, the percentages of people with mild, moderate, and severe symptoms of loneliness, generalized anxiety disorder, and depressive disorders were 36.90%, 40.48%, and 22.62%; 48.08%, 22.44%, and 29.48%; and 37.31%, 26.87%, and 35.52%.

The investigation by Hosen et al. (2022) investigated the effects of COVID-19 on Bangladeshi tertiary institutions and students. discovered that 88% of those surveyed had problems with stress, anxiety, and sadness that were linked to their mental health. 79%, 83%, 72%, respectively, of those people experienced financial crisis, family disturbances, internet, and technology-related issues.

The purpose of Bakul (2022)'s study was to look at how isolation and quality of sleep are affected by COVID-related worry amongst Bangladeshi students and professionals. Whether a student or a

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professional, regression analysis revealed that both isolation and inadequate sleep were substantially predicted by COVID-specific anxiety. Nearly 50% of the study participants (48.3%) reported experiencing extreme loneliness, and 70.01% had trouble sleeping. In addition, Ahmed et al.'s study from 2022 revealed that 68.11% of learners suffer from sadness, 60.86% anxiety, 98% mental disorders, and 63.23% deal with financial issues. Similarly, Patwary's study from 2022 concluded that over one in four learners, as well as professionals, had significant clinical anxiety levels in the beginning of the study.

RESEARCH METHODS

Research design

Between March 2020 and February 2022, a sample of male and female students from private and public universities in Bangladesh were surveyed psychically and online, when education institutions started their operations in full swing. To determine the level of mental health among university learners in Chattogram City, a systematic interview survey was created. Additionally, the study emphasized the methods students have been using to manage their stress amid the pandemic conditions. In the beginning, we collect stressors associated with the pandemic and their signs and symptoms from 12 educational, fitness, and lifestyle-related outcome categories, such as effects on one's own or a loved one's health, sleeping and eating patterns, financial circumstances, alterations to living conditions, educational workload, and social relationships. Second, the effect of COVID-19 on depressed and thoughts of suicide was also discussed with the class. To gauge students' worry and anxiety symptoms, the authors employed the 7-item Generalized Anxiety Disorders Scale (GAD-7; Spitzer, Kroenke, Williams, Löwe, 2006). Finally, we used the PSS, or Perceived Stress Scale, to measure participants' overall stress levels. A common tool for assessing general stress in the previous month is the PSS (Cohen et al., 97). Numerous studies have shown the PSS to be highly reliable (Lee, 2012), and validity was proven by demonstrating that PSS scores accurately predict a wide range of outcomes that are known to be influenced by stress, including mental health, psychosomatic symptoms, and use of health services (Cohen & Williamson, 1998; Baik et al., 2019). The variables for the COVID-19 stressors were taken from current literature that highlights significant aspects affecting the mental health of university students. On a 4-point scale, responses to the COVID-19-related questionnaire were scored as 0 (none), 1 (mild), 2 (moderate), and 3 (severe).

Participants

Students from nine Bangladeshi universities, both public and private, made up the group of participants was in aftermath of the COVID-19 pandemic, several universities closed their campuses in March 2021 and held all of their classes remotely. Most responses were taken from the students during 2021-2022 when the pandemic was at its peak stages, throughout the entire year of 2021 to February 2022.

Number of Participants

Name of Universities	No. of Respondents
1. University of Chittagong	135
2. Rangamati Science and Technology University	40
3. Chittagong University of Engineering and Technology	40
4. Premier University	25
5. BGC Trust University	30
6. Southern University	20
7. University of Science and Technology Chittagong	20
8. Chittagong Independent University	10

9. International Islamic University of Chittagong	10
Total	330

Sample Size

The formulae given by Taro Yamani in 1967 is

$n= N/1+N(e)^2$

Where,

n= The sample size

N= Total Population=27,000 students

e= Marginal error=5% or.05

The size of sample of different universities with an estimated population of 60,000 students. Here is how to go about it.

- $n= N/1+N(e)^2$ So, here we have the following:
- n= 27,000/1+27,000(0.05)
- Next step. n=27,000/1+27,000(0.0025)
- Next, n=27,000/1+67.5
- n= 27,000/68.5
- n= 395 students(app.)

Finally, by approximation, n (which is the sample size) is 395 students. The questionnaires must then be shared with 395 university students. A reliable questionnaire was used to gather information for the study, which looked at ten criteria that young clients' choices for wireless internet access are influenced by. Next, the measuring scale's validity and reliability (a five-point Likert rating scale) were assessed. Finally, Cronbach's Alpha was calculated using the formula shown below to assess the measuring scale's validity and reliability.

$$Cronbach's\ \alpha\ = \frac{K}{K-1}\left(1-\frac{\Sigma Vi}{Vt}\right)$$

Where,

K = Number of items

V_i = Variance of each of the item

V_t = Overall variance

The survey's Cronbach's alpha was 0.79, indicating both the survey questionnaire and measuring scale had some validity in the study. A million students attend the 159 universities in Bangladesh (UGC, 2022). Non-probability (convenience) sampling was employed in the study since it requires less money to swiftly reach a predetermined sample. (Biswas, 2018; Biswas & Rahman, 2017 2018; 2019; 2021a; 2021b; 2023; Biswas & Alam, 2022; Biswas, Alam, & Akhter, 2022). Studies by Rahman and Sultana (2022), Rahman and Chowdhury (2022), and Mokhlis et al. (2008) also used the non-probability sampling technique. The sample

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size needs to be large enough to reduce the possibility of errors and improve the accuracy of the data when applied to a large or unidentified population, such as younger undergraduates in Bangladesh. The right sample size was chosen using the following statistically accepted formula (Saunders, Lewis, & Thornhill, 2003; Malhotra & Dash, 2016, p. 279):

Size of sample $= \frac{Z^2 \times p \times (1-p)}{d^2}$

Where;

Z^2= 1.96 (95 percent level of confidence)

P = 50% (expected prevalence)

d^2= 5% or 0.05 (sampling error)

Sample Size = $\frac{1.96^2 \times 0.5 \times (1-0.5)}{0.05^2} = 384.16 \approx 385$

Therefore, 385 younger mobile data clients from the study's sample are sufficient.

FINDINGS AND DISCUSSIONS

Data Analysis

By first flipping the scores of the affirmative items (4, 5, 7, and 8), and then adding all ten scores, a participant's overall PSS score was determined. Through the use of SPSS, version 20.0, an average (standard deviation) PSS rating was established to measure the total stress and anxiety experienced by students at universities throughout the COVID-19 pandemic. Second, to gauge the varying effects of a pandemic on several facets of university students' mental health, responses to 12 questions about academics, health, and lifestyle were analyzed using SPSS, version 20.0.

Table-1. The Mean score for each PSS item among sample university students

PSS Items	Mean	SD
1. Due to the epidemic, I have had the uneasy feeling that something significant will occur suddenly.	2.78484	1.0485
2. Due to the pandemic, I've felt that I can't control the crucial aspects of my life.	2.6484	1.1685
3. Both prior to and after the outbreak, I experienced anxiety or worry.	2.857	1.0377
4. I have had faith in my capacity to manage the personal issues I have with the epidemic.	2.0363	1.0965
5. I've felt like I can handle the things I need to do to keep an eye out for an illness.	2.0181	1.2449
6. I've felt powerless to prevent the problems that the infection might bring into my life.	2.1818	1.1864
7. In regards to the epidemic, I've felt in control of everything.	2.1545	1.3012
8. I've felt relieved that I have some kind of control over the epidemic-related issues.	2.1121	1.2939

9. I've been disappointed that I have no control over epidemic-related issues.	2.4606	1.25233
10. I've noticed that the challenges are getting worse throughout and following the outbreak, and I feel powerless to deal with them.	2.2878	1.17684
Total	Total PSS = 23.542	Total SD = 11.807

Source: Authors' Contribution, 2023

In contrast to Son et al.'s study from 2020, which found that the average PSS value of the 195 respondents was 18.8 (SD=4.9), suggesting moderate felt stress, Table 1 shows that the mean PSS value for 330 individuals was 23.542 (SD=11.807). The Perceived Stress Scale score, which ranges from 0 to 40 and is calculated by adding the points assigned to the 10 items, is as follows: (0-13) indicates low perceived stress; (14-26) indicates moderate perceived stress; and (27-40) indicates high felt stress.

Table 2. Percentages of time spent during COVID-19 of sample students of different universities and students' daily activities during and after the pandemic

Time spent during COVID-19 (%)	Inconsi-stent Eating	Social-isolation Outdoor activity	Difficulty Going Staying asleep	Difficulty Sleep pattern	Difficulty Sleeping Hours	Difficulty Stay Wake	Concentrate Distraction Social media	Concentrate Accountability Motivation
61-80% village	2.2143	2.8214	2.6786	2.8214	3.1429	2.7857	2.9643	2.6429
Town: 61-80% (23)	1.1007	3.6087	3.6087	3.4348	3.1739	3.5652	2.3913	3.2609
81-100% Village	2.0568	2.9318	2.2841	2.8295	2.6705	2.7955	2.6364	2.8750
81-100% Town	1.0652	3.1824	3.1824	3.1757	3.0743	3.3108	3.1216	3.0743

[Source: Authors' calculation by using SPSS-20]

Table 3 (i). How students' daily activities affected during and after the pandemic

	Worry Families Interpersonal	Concentrate Accountability Motivation	Depressive Thoughts Insecurity uncertainty	Depressive Thoughts Powerlessness or hopelessness	Feeling Thoughts Control	Feeling Thoughts Nervous Stressed	Feeling Thoughts Confident	Worry different things
61-80% village	2.7500	2.6429	3.0357	2.8571	2.2857	2.7857	2.1071	2.3636

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Town:61-80%(23)	3.3478	3.2609	3.0000	3.2174	2.3913	2.9565	.99403	2.8667
81-100% Village	3.0455	2.8750	2.9545	2.8977	2.4886	2.7045	1.9432	2.6709
81-100% Town	3.2027	3.0743	3.2905	3.2230	2.8514	3.0000	1.20686	2.8425

[Source: Authors' calculation by using SPSS-20]

Table 3 (ii). GAD Scale Results: How Students' daily activities affected during and after the pandemic

	GAD 4 Travel Relaxing	**GAD 6 Annoyed Irritable**	**GAD 9 Feelings Thoughts Irritation**
61-80% village	2.0909	2.4545	2.0357
Town:61-80% (23)	2.4000	2.6000	2.1304
81-100% village	1.9873	2.2278	2.1136
81-100% Town	2.3465	2.6772	2.4932

[Source: Authors' calculation by using SPSS-20]

1. The above table 2 shows that students who spent between 61 and 80 and between 81 and 100 percent of their time in town during the COVID-19 epidemic experienced social isolation while participating in outdoor activities, had trouble falling asleep, having trouble waking up, and had trouble being held accountable and motivated. They worry about interpersonal relationships, focus on accountability, motivation, depressive thoughts, powerlessness or hopelessness, feel nervous, stressed, worry, and worry about a variety of other things, as opposed to students who stayed in the village and spent between 61 and 80 and between 81 and 100 percent of their time the throughout the COVID-19 outbreak and its aftermath (Table 3 (i).
2. Both prior to and following the COVID outbreak those who spent 61–80% and 81–100% of their time in the village were affected by inconsistent eating. They felt, thought, and were more confident than sample students who stayed in town, who scored between 61 and 80 and 81 and 100 percent, respectively (Table 3 (i).
3. The distraction of social media has an impact on the students who (61–80%) remained in the village during and after the COVID-19 pandemic. Besides, social media distractions harm students who (81–100%) stay in their homes (Table 2).
4. Students who (61-80%) remained in the village and those who (61-80%) remained in the city both showed nearly the same results for depressive thoughts of insecurity and uncertainty during and after the COVID-19 pandemic, but those who (81-100%) remained in the city were much more affected

than the sample students who (61-80%) remained in the village (Table 3 (i). In addition, table 3 (ii) reveals that in comparison to the students who stayed in the village during and after the COVID-19 pandemic, those who spent (81-100%) of their time there appeared to be traveling more, being more irritated, and being more agitated.

IMPLICATIONS

The study makes significant advances, such as estimating the COVID-19 pandemic's influence on the system of education in general and university students' psychological health in particular. Therefore, our findings may be useful to someone who has potential risk factors associated with mental health problems. It also evaluates the impact of quarantine, shutdowns, social exclusion, and isolation on university students' psychological and mental health. The research backs up the university. The research supports the University Grant Commission (UGC) and Academic Council in their efforts to preserve a positive educational experience for students by identifying the emotional requirements of university students and offering them workable solutions. It makes recommendations for obtaining the best possible mental health for university students both now and in the years following COVID-19.

LIMITATIONS AND THE DIRECTION OF FUTURE RESEARCH

The study's primary limitation is the likely self-selection bias caused by the study's huge sample size. Furthermore, Even while it is difficult to prove a connection between the global epidemic atmosphere and mental health problems in a longitudinal study, our results are in line with those of prior research. Evidence-based preventative and therapeutic strategies ought to be developed utilizing more reliable data in order to decrease the detrimental psychological consequences caused by the COVID-19 pandemic. There is still room for investigation into the factors influencing the reduced prevalence of mental health symptoms among students. Teachers at universities should also receive specialized training to help them comprehend and manage the mental crises of their pupils. UGC should also take the required actions to encourage all medical professionals to enrol in these specialized training programs offered at universities in order to guarantee emergency psychiatric treatment and first aid prepared in accordance with WHO standards.

CONCLUSION

According to the study's findings, students who used the bulk of their precious time they had in the city performed far better than those who spent a great deal of their schedule in the village during and after the COVID-19 pandemic experienced social isolation, sleep issues, difficulty falling asleep, problems sleeping, feelings of insecurity and uncertainty related to depression, and social media distraction. However, those who stayed in the village the longest and after the COVID-19 outbreak experienced irregular eating habits and social media distractions. To sum up, it is urgent to determine how the COVID-19 era affected students' long-term mental well-being. The load on the global mental health care system has increased as a result of an increase in the prevalence of these disorders. Therefore, preventive measures like the early assessment and prevention of serious mental health issues are required to combat this type of impending disaster.

CONFLICT OF INTEREST STATEMENT

No author has disclosed any conflicts of interest.

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