



# **iJRASET**

International Journal For Research in  
Applied Science and Engineering Technology



---

# **INTERNATIONAL JOURNAL FOR RESEARCH**

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

---

**Volume:** 10    **Issue:** IX    **Month of publication:** September 2022

**DOI:** <https://doi.org/10.22214/ijraset.2022.46916>

**[www.ijraset.com](http://www.ijraset.com)**

**Call:** ☎ 08813907089

**E-mail ID:** [ijraset@gmail.com](mailto:ijraset@gmail.com)

# The Impact of Covid-19 Pandemic on the Mental Health Among University Going Students in Aligarh City

Dr. Iram Aslam

Assistant Professor (Contractual) Department of Home Science, A.M.U., Aligarh, U.P., India.

**Abstract:** *The stresses and restrictions associated with the pandemic COVID-19 have increased the risk of university students developing mental health issues, which may have a significant impact on their academic success, social interactions, and future career and personal opportunities. The aim of this study was to analyse the impact of COVID-19 pandemic on the mental health of university going students aged 18 to 24 in Aligarh City. The data was collected from 100 domestic Aligarh University student's (18-24) years of age through self - prepared questionnaire created by using Google Form and shared on social media sites, the data was analysed statistically. The results indicate that students faced anxiety (60.8%), (54.1%) feel loneliness, and depression (59.8%). About (20%) of them reported worries for the health of loved ones most impacted their mental health status. Almost (46.7%) of students engage themselves in physical activities to take care of their mental health. While (36.5%) did not have strained familial relationships, (60.9%) found it harder to complete the semester at home and (70%) spent time during the pandemic watching television. Due to the long-lasting pandemic situation and onerous measures such as lockdown and stay-at-home orders, the COVID-19 pandemic brings negative impacts on higher education.*

**Keywords:** *COVID-19, pandemic, university student, mental health, anxiety.*

## I. INTRODUCTION

The December 2019 outbreak of the SARS-CoV-2 virus, (Severe Acute Respiratory Syndrome Coronavirus 2) originated in Wuhan, China, triggered a global public health crisis addressing the spread of the novel Coronavirus disease (COVID-19). The SARS-CoV-2 virus attacks the respiratory system directly in humans, causing coughing, fever, sore throat, shortness of breath, and fatigue [1]. The virus can be transmitted through airborne particles, droplets, contacts, respiratory aspirates, and faeces, according to the National Health Commission of China, with both animals (e.g., bats, pangolins) and humans being sustainable modes of transmission [2]. Furthermore, the resulting 'lockdowns' and social restrictions have had an unknown impact on society's physical and mental health, particularly among university students. To combat the spread of the pandemic coronavirus disease 2019 (COVID-19) in India, the government declared a nationwide lockdown beginning on March 24, 2020. A week before this, all schools and colleges in the country were ordered to remain closed to students [3]. For higher education students, the pandemic presented a number of unique challenges, such as the transition of more learning and support services online, which many students found difficult to engage in effectively [4], leading to increased anxiety and concerns about their academic performance and long-term employment [5, 6]. Other consequences include the closure of student residences, the cancellation of exchange programmes and graduation ceremonies, the loss of part-time jobs, and increased uncertainty about career options. The lockdown and social isolation measures also resulted in fewer opportunities for socialising and forming relationships, a greater dependence on social media, and the possibility of chronic loneliness brought on by social isolation [7].

A number of studies have looked into the impact of the pandemic on university students' mental health and the factors that contribute to higher levels of distress. For example, in the United States, an interview survey of 195 undergraduate students from one university reported negative consequences of the COVID-19 pandemic and the urgent need for intervention and prevention strategies [8]. Another US survey of 162 undergraduates discovered high levels of mental health anxiety, with depression associated with difficulties focusing on academic work and loss of employment, and higher levels of anxiety more likely in students who spent more than an hour per day searching for information on COVID-19 [9]. A web based cross-sectional study of 324 college students in India between November and December 2020 [11] found that 68.8% had high fear of COVID-19, 28.7% had moderate to severe depression, and 51.5% had mild to severe anxiety, besides having a COVID-19 infected family member being significantly associated with anxiety and depression [10].

Another Indian study of college students discovered that both anxiety and depression were prevalent in their age group, with women being more affected. They also observed a disrupted sleeping pattern, which is associated with both anxiety and depression [11]. A survey of 1000 Greek University students' mental health discovered a dramatic increase in anxiety (42.5%), depression (74.3%), and total suicidal thoughts (63.3%). The quantity of sleep increased in 66.3% of cases, but the quality of sleep decreased in 43.0%. In 57.0% of cases, the quality of life deteriorated (in 27.9% of cases, it improved) [12]. In a two-year longitudinal study of US students that ended in Easter 2020, researchers discovered that individuals in the latter stages of the study (when COVID-19 was considered a global pandemic) were more sedentary and reported increased anxiety and depression symptoms compared to previous academic terms. They discovered that increased COVID-19-related news was strongly associated with increased phone usage, number of locations visited, depression, and anxiety [13]. A longitudinal survey of 66 students at a Chinese college found that sleep quality was a key factor in the emotional impact on students, and that daily physical activity and good sleep may help to alleviate mental health problems [14]. Interestingly, they discovered decreases in people's aggressiveness, which they attributed to people realising the fragility and value of life. We know that college students face a variety of additional risk factors, including academic, financial, and social pressures [15]. These pressures can have an impact on a student's academic progression through higher education, as well as lead to mental health issues, most notably depression and anxiety [16].

The objective of this paper is to study the impact of the SARS-CoV-2 lockdown on the day-to-day living, activities, learning styles, and mental health of young students enrolled in Aligarh Muslim University in undergraduate and postgraduate courses. This paper focuses on various aspects of a student's life and the changes that have occurred as a result of the pandemic.

## II. METHODOLOGY

### A. Population, Sample and Sampling Technique

This study was based on a self - developed questionnaire sent out via the Internet on social media during the second wave of the COVID-19 pandemic. The set of data for this study was obtained through an anonymous self-designed on google form for online survey. The survey questionnaire contained 20 questions divided into five major categories: basic information about the responding students, information about their pre-covid and post-covid lives, the impact on their education, engagements, overall mood, and sleeping habits during the period of national lockdown due to COVID-19. MS excel was used to analyse the results further. The survey was conducted on 100 university students (Female) from Department of Home Science of Aligarh Muslim University selected through stratified random sampling technique as shown in Fig- 1. The survey began during the second wave of the covid pandemic. The survey was conducted in online mode a link of the questionnaire that was deployed in Google Forms was delivered to students via e-mail, WhatsApp, other social media began from July 2021 till September 2021. Students from various educational backgrounds were chosen and asked to respond to the survey questions.

Participation in the survey was completely optional, and respondents were given the option to opt out at any time. Before taking the survey. All of the respondents were female residing in Aligarh city and between 18-24 years of age mainly graduates and post graduates of Department of Home Science A.M.U., Aligarh.

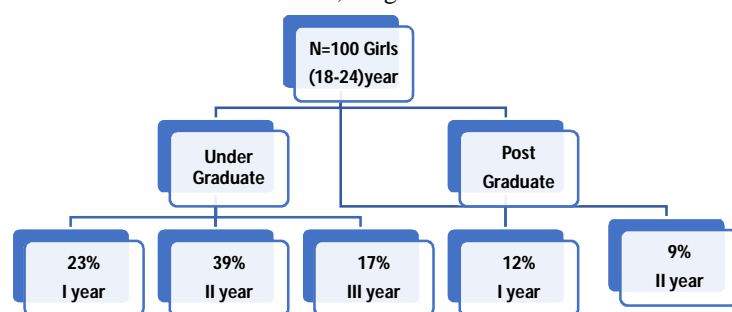


Fig-1 Distribution of sample size

### B. Statistical Analysis

Only questionnaires that were completely filled out were considered. MS-Excel was used to analyse the results. Comparisons were made between students' pre-covid and post-covid experiences. In addition, the responses were examined for various mental health issues, eating habits, sleeping habits, and fears and concerns. For a comprehensive summary, various graphs and pie charts were used to depict the results in percentage. The results were analysed in percentages and conclusions were drawn as a result.

### III. RESULTS

A total of 100 responded all of them were female, from which 23% were graduate first year students, 39% were second year students, 17% were third-year, while 12% were post graduate first year students, and 9% percent from second year as shown in Fig-2.

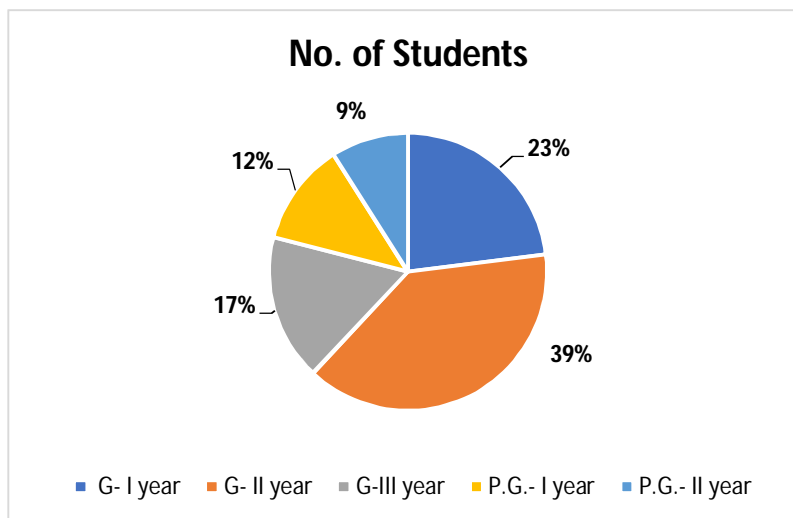


Fig-2 Distribution of respondent in Graduation and Post-Graduation

#### A. Impact of COVID-19 on Mental Health

For this question, multiple responses were allowed. Increased anxiety, depression, and feeling of loneliness were found in 60.8%, 54.1%, and 59.8% of the weighted population, respectively (Fig-3). Over than (83.8%) showed an increase in one or more of these three symptoms.

Decreased anxiety, depression, and feelings of loneliness, on the other hand, were found in only 9.1%, 5.3%, and 4.6% of the population, respectively.

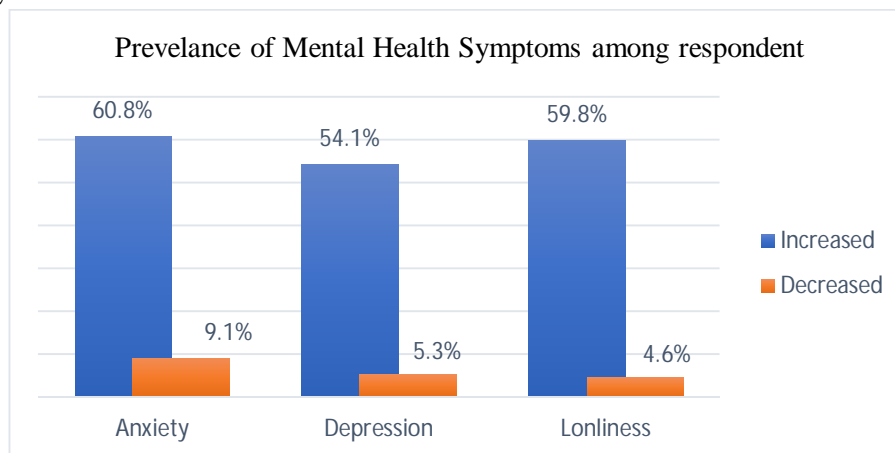


Fig-3 Prevalence of mental health symptoms among respondent.

#### B. Causes for Mental Health Issues

From the given (Fig- 4) about 20% of respondents were concerned about the health of family and friends, 19.2% were concerned about school/continuing education, 19.0% were concerned about a lack of self-motivation, 15.9% were concerned about funds, 10.8% were concerned about future job offers, and 8.3% were concerned about being infected. While, only 6.8% of people reported that they were comfortable. Furthermore, many respondents are concerned about their plans for continuing education, concerned about their lack of productivity at home, concerned about their finances and losing job and internship opportunities, and concerned about being infected.



### Causes for Mental Health Issues

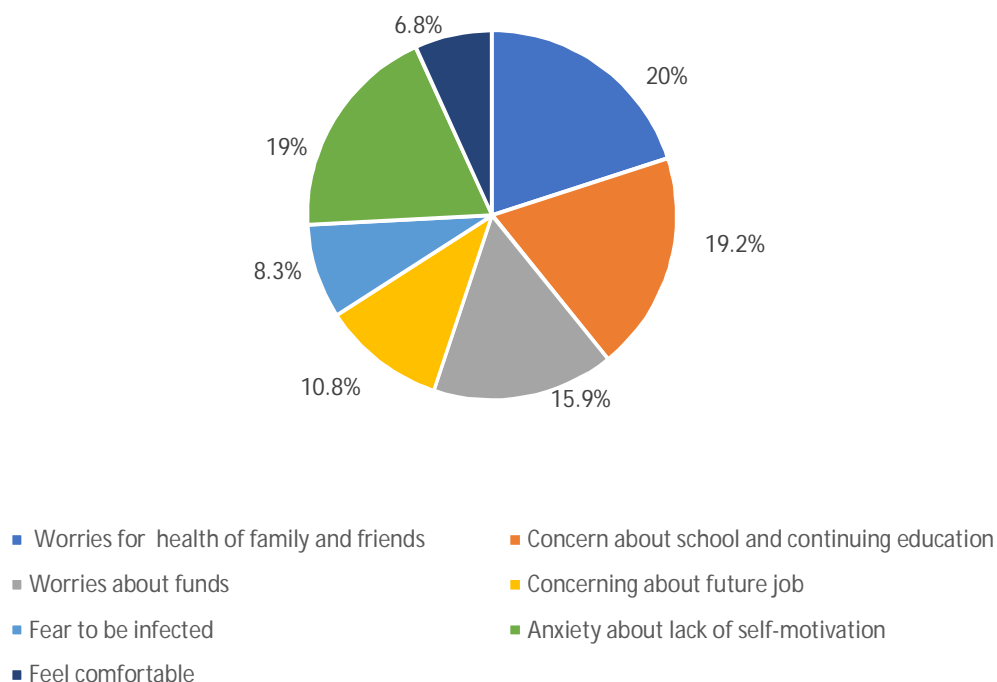


Fig 4- Causes for Mental Health Issues among Students

### C. Impact of COVID-19 on Physical Health

Fifty percent of respondents said they gained weight due to increased eating, 20.2% said they felt/looked better as a result of exercise or dieting, 13.3% said they lost weight due to a lack of appetite, and 16.6% replied they did not make changes as given in (Fig-5).

### Impact of Covid-19 on Physical Health

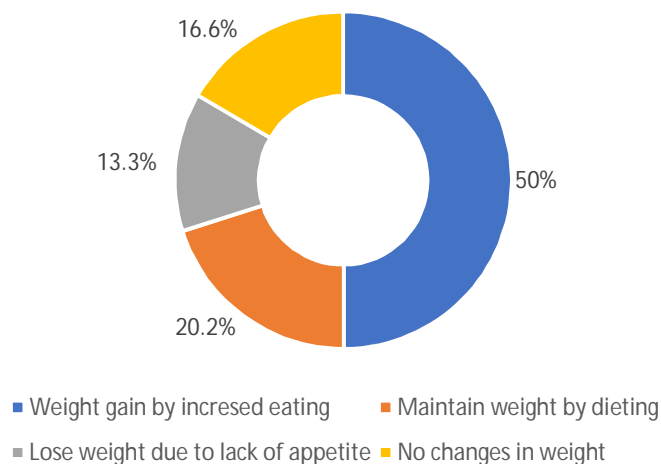


Fig 5- Impact of COVID-19 on Physical Health among Students

#### D. Impact of COVID-19 on Sleeping Habits

The covid-19 pandemic has resulted in significant changes in students' sleeping habits as shown in (Fig- 6). Students are suffering from sleep disorders due to a lack of a schedule. The large number of students approximately 31.7%, reported increased insomnia, 9.2% experienced obstructive sleep, and 38.5% experienced hypersomnia, while 20.6% of students reported they were having the normal sleeping pattern. Hence, majority of them reported that the sleep was inconsistent compared to before the pandemic.

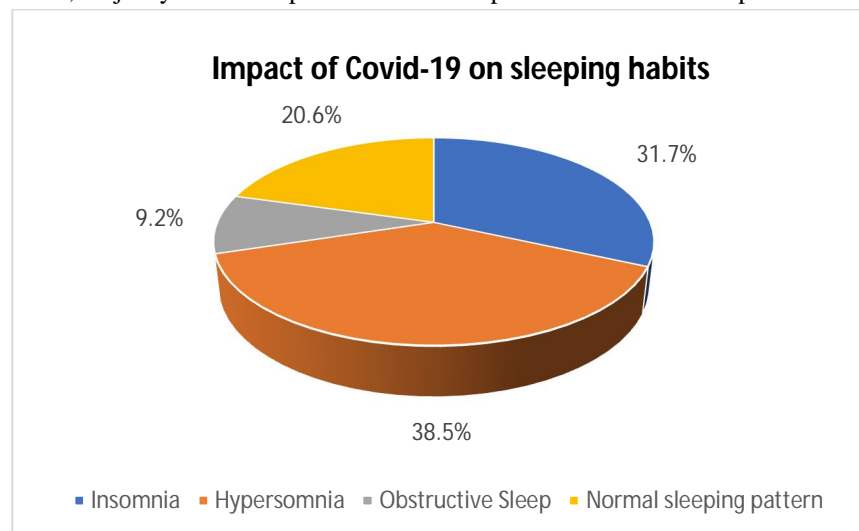


Fig-6 Impact of COVID-19 on Sleeping Habits in Respondents

#### E. Impact of COVID-19 on Relationship with Family and Friends

During the Covid-19 the relationship of students with their family and friends had been affected. About 29.4% of students reported better family relationships. while 34.1% had stressed relationships with their family, and 36.5% had no impact on family relationships. 27.8% of students reported improved relationships with their friends, 45.7% had strained relationships, while 26.5% had no impact on relationships with friends.

#### F. Activities Performed during COVID-19 to take care of Physical Health

About 24% of students participated in mindful activities (meditation, yoga, reading journals, etc.) during pandemic, 30% were exercising or increasing physical activity, 15% were using a fitness app for improving their health, 12% were receiving mental health care from experts, and 19% were not taking any specific actions to care for their mental health [Fig-7]

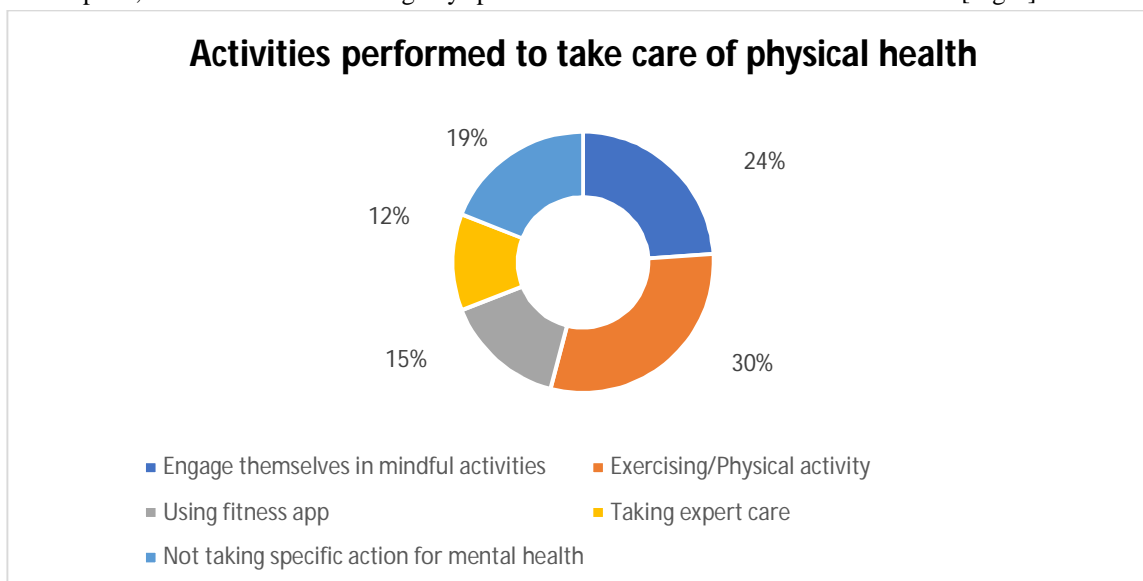


Fig-7 Activities Performed by the students to take care of Physical Health

### G. Activities performed during COVID-19 to overcome of Mental Health Issues

Various methods were used by students to overcome stress due to the Covid-19 pandemic.

About 70% of students were spending their time in watching T.V. and using mobile phones, about 22.6% engaging themselves in cooking or baking, 4.2% were spending their time in reading books and only 3.2% of students were learning new skills for engaging themselves to take care of their mental health at their homes as given in [Fig-8].

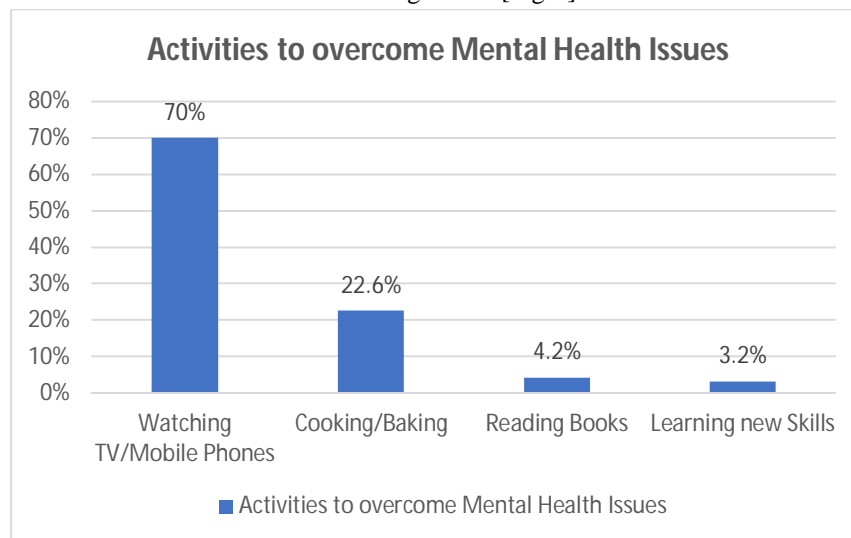


Fig- 8 Activities performed by the students to overcome Mental Health Issues

## IV. DISCUSSION

The COVID-19 pandemic has had serious educational and social consequences, including the closing of colleges and universities, as well as implementation of online learning, and social isolation at universities for the coming years. To return home mid-semester, college students were forced to completely avoid the social benefits of the so-called "college experience" (i.e., social gatherings, group studying, and in-person classes and meetings). According to this survey result, this has resulted in a decline in mental health as measured by self-reported increased anxiety, depression, and loneliness. According to these results, people who are students and between the ages of 18 and 24 are at a higher risk of anxiety and depression [17]. The stress associated with this sudden social change, the disruptive factors that may exist at one's home, and the fear of potentially contracting or spreading COVID- 19 are all likely factors in the development of trauma or stress-related disorders [18]. According to the results of this survey, respondents' mental health has been most impacted by their concerns about the health of their loved ones in the middle of the COVID-19 pandemic. Furthermore, many respondents are concerned about their plans for continuing education, concerned about their lack of productivity at home, concerned about their finances and losing job and internship opportunities, and concerned about being infected. Most respondents indicated that the COVID-19 pandemic strained relationships with their friends, probably due to increased stress factors at home and distance barriers. While communication with friends has decreased, most respondents report spending the majority of their free time watching television as a result of widespread state and local lockdown orders.

According to a 2012 health survey in England, watching TV for two hours or more per day is associated with mental health disorders, as measured by poor performance on the General Health Questionnaire and the Warwick-Edinburgh Mental Well-being Scale. On the other hand, nearly 30% of respondents stated that they exercised. Physical activity has been shown to reduce anxiety and depression while improving mood and cognitive function [19]. Most people reported that they gained weight, particularly those who reported increased loneliness.

Because of the loneliness and lack of interaction, affected students may have sought delicious meals or reduced their daily activity levels, whether it was training for a sports team or walking to classes and other responsibilities. Similar to our findings that the COVID-19 pandemic has resulted in a general decline in the mental health of A.M.U. going students a Chinese study found that approximately 40% of female adolescents suffer from depression. The finding reveals that online classes, pandemic anxiety, and a decrease in physical activity and sleep as independent factors contributing to this rise in depression [21]. Undoubtedly, the pandemic has left many people feeling lonely and isolated. Furthermore, it has impacted many people's pre-existing mental health conditions due to a lack of access to appropriate services [22].

## V. LIMITATIONS

Due to lack of time and pandemic lockdown the sample was restricted to female and a small group (only one department) has been taken it can be conducted in other departments of AMU also. Moreover, the existing questionnaire used simplified approach to provide general Conclusions, future research could be done in wider sample area other indicators of mental health and statistical techniques can be used to draw relations between anxiety and demographic variables.

## VI. CONCLUSION

The COVID-19 outbreak has had a widespread impact on almost every aspect of life.

As the number of cases increased rapidly, dense areas and indoor public spaces were closed, and physical separation, as well as other preventative measures, were implemented. These safety precautions resulted in the sudden and unexpected closure of schools and educational institutions, as well as a quick transition to virtual learning, many people reported that worrying about the health of loved ones had the greatest impact on their mental health. The respondent also concerned about their physical fitness and engaging themselves in many physical activities during COVID-19 like yoga, meditation, exercising, taking expert care. While, for coping up from mental health issues they were engaged themselves activities like watching T.V., using mobile phones, spending time in cooking / baking, reading books, learning new skills.

## REFERENCES

- [1] Zhai P., Ding Y., Wu X.,(2020), The epidemiology, diagnosis, and treatment of COVID-19., *Int J Antimicrob Agents*;55:5.
- [2] Wang Y., Wang Y., Chen Y., (2020), Unique epidemiological and clinical features of the emerging 2019 novel coronavirus pneumonia (COVID-19) implicate special control measures. *J Med Virol.*;92(6):568–76.
- [3] Khattar A., Jain P.R., Quadri S.M., (2020), Effects of the disastrous pandemic COVID 19 on learning styles, activities and mental health of young Indian students- a machine learning approach. In: 2020 4<sup>th</sup> International Conference on Intelligent Computing and Control Systems (ICICCS),1190-5.
- [4] Rapanta C., Botturi L., Goodyear P., Guàrdia L., Koole M., (2020), Online university teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education*, 2(3):923–945.
- [5] Sundarasan S., Chinna K., Kamaludin K., Nurunnabi M., Baloch G.M., Khoshaim H.B., (2020), Psychological impact of COVID-19 and lockdown among university students in Malaysia: Implications and policy recommendations, *International Journal of Environmental Research and Public Health*,17(17).
- [6] Aristovnik A., Keržič D., Ravšelj D., Tomaževič N., Umek L., (2020), Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability*, 12(20).
- [7] Shah S.G.S., Noguera D., van Woerden H.C., Kiparoglou V., (2020), The COVID-19 pandemic: A pandemic of lockdown loneliness and the role of digital technology. *Journal of Medical Internet Research*, 22(11).
- [8] Son C., Hegde S., Smith A., Wang X., Sasangohar F., (2020), Effects of COVID-19 on college students' mental health in the United States: Interview survey study, *Journal of Medical Internet Research*, 22(9).
- [9] Kecojovic A., Basch C.H., Sullivan M., Davi N.K., (2020), The impact of the COVID-19 epidemic on mental health of undergraduate students in New Jersey, cross-sectional study, *PloS One*, 15(9).
- [10] Chaudhary A.P., Sonar N.S., Jamuna T., Banerjee M., Yadav S., (2021), Impact of the COVID-19 pandemic on the mental health of college students in India: cross-sectional web-based study, *JMIR Med*, 2(3):
- [11] Verma K., (2020), The mental health impact of the COVID-19 epidemic on college students in India, *Asian J Psychiatr*, 53.
- [12] Kaparounaki C.K., Patsali M.E., Mousa D.P.V., Papadopoulos E.V., Papadopolou K.K., Fountoulakis K.N., (2020), University students' mental health amidst the COVID-19 quarantine in Greece, *Psychiatry Res*, 290.
- [13] Huckins J.F., DaSilva A.W., Wang W., Hedlund E., Rogers C., Nepal S.K., Campbell A.T., (2020), Mental health and behavior of college students during the early phases of the COVID-19 pandemic: longitudinal smartphone and ecological momentary assessment study, *J Med Internet Res.*, 22(6).
- [14] Zhang Y., Zhang H., Ma X., Di Q., (2020), Mental health problems during the COVID-19 pandemics and the mitigation effects of exercise: a longitudinal study of college students in China, *International Journal of Environmental Research and Public Health*, 17(10)
- [15] Thawabieh A.M., Qaisi L.M., (2012), Assessing stress among university students, *Am Int J Contemp Res.*;2(2):
- [16] Thorley C., (2017), Not by degrees: improving student mental health in the UK's universities. London: IPPR.
- [17] Solomou I., Constantinidou F., (2020), Prevalence and predictors of anxiety and depression symptoms during the COVID-19 pandemic and compliance with precautionary measures: age and sex matter, *Int J Environ Res Public Health*, 17(14).
- [18] Esterwood E., Saeed S.A., (2020), Past epidemics, natural disasters, COVID19, and mental health: learning from history as we deal with the present and prepare for the future, *Psychiatr Q.*;1–13.
- [19] Shiue I., (2016), Modeling indoor TV/screen viewing and adult physical and mental health: Health Survey for England, 2012, *Environ Sci Pollut Res Int.*;23(12).
- [20] Sharma A., Madaan V., Petty F.D., (2006), Exercise for mental health, *Prim Care Companion J Clin Psychiatry*, 8(2).
- [21] Zhou J., Yuan X., Qi H.,(2020), Prevalence of depression and its correlative factors among female adolescents in China during the coronavirus disease 2019 outbreak, *Global Health*, 16(1).
- [22] Sheridan Rains L., Johnson S., Barnett P., (2020), Early impacts of the COVID-19 pandemic on mental health care and on people with mental health conditions: framework synthesis of international experiences and responses, *Soc Psychiatry Psychiatr Epidemiol*,1–12.





10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)