



## A study of the mental health crisis among Indian college students during & post Covid Era

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### Abstract

This research, conducted in the demographical area of a city in Karnataka, India, taking college and universities students focusing on the areas of mental health, stress, anxiety, depression, as well as social anxiety, specifically in the post covid era. Mental wellbeing issues extending from mental trouble to medically diagnosable mental ailments have been archived sometime recently the episode of the COVID widespread. The negative psychological effects of the pandemic were exacerbated by social isolation, excessive screen time, and the challenges of remote learning, with over 90% of students reporting negative mental health outcomes. This research aims to identify those negative psychological effects in the students post covid-19 era.

**Keywords:** Mental health, Psychology, College and Universities, Covid-19, Covid aid, MHA, Well-being, Academics, Stress, Pressure, MH services, Online classes

### Introduction

#### 1. Mental Health

Mental health conditions vary in degree and impact on each individual. Financial problems, suicide attempts, and social isolation are all risk factors for various mental health illnesses. Anxiety is defined as fear, apprehension, or uneasiness ("Anxiety"). The three most frequent mental health issues among students in college are depressive disorders, anxiety, and stress. In 2023, over one third of students in college (76%) reported moderate to severe psychological anguish. Anxiety was identified in 36% of students, while depression affected 28%.

Depression, anxiety, and suicidal thoughts and behaviour are the most common mental health issues reported among young people (E, E.C, Stiles, Wafford, & Graham, 2019). It is worth noting that college students' mental health levels *before the epidemic* differed significantly from those after the outbreak. A pre-pandemic research of 1,236 college students indicated that the prevalence of anxiety was 20.1% for women and 8.9% for males (Lee, 2016). Furthermore, statistics according to the WHO World Mental Wellness Survey, 1.9% of college students had suicidal thoughts and behaviours within the previous 12 months.

#### 2. Coronavirus & Mental Stress among Students

The Coronavirus pandemic forced changes world-wide, which prompted disruptions to learning across all levels, and transformed overall postsecondary academic experience. Working with recommendations from the, institutions — including colleges and universities across India— enacted a variety of strategies to mitigate COVID-19-caused disruptions to institutional operations as well alleviate impacts on student learning. Previous studies indicate that moving to e-learning has seriously negatively impacted students' academic performance. A research showed that, while 90 percentage of the learners in the face-to-face learning method, more than half of the students were challenged by their homework and were satisfied with it, whereas in the e-learning form, just 28% were satisfied.

#### 3. Objectives of the research

The objectives of this research is to identify and conduct a statistical analysis on the primary data, to be collected from survey and interviews. Identify the psychological and emotional consequences of Coronavirus among Indian college students.

1. To analyse the challenges the students are facing because of online classes conducted and how it affected their psychology and well-being.
2. To promote help-seeking and emotional well-being, and reduce stigma associated with mental illness.
3. Identify strategies used by college authorities to support learners who have mental health difficulties.

Identify the influence of Covid-19 on students' mental health, daily living, and social relationships.

### Literature Review

#### 1. Introduction

Mental well-being is a basic component of the well-being of understudies and people. Mental wellbeing issues extending from mental trouble to clinically identified mental disorders ailments which were archived some time ago, recently to the episode of Coronavirus widespread (W.Y & S.K, 2017) (Kumaraswamy, 2013). A few common mental well-being issues among institutes understudies which has push, relations troubles, decreased self-image and confidence, concerns around sexuality and gender identity, substance use, traumatic events (like a physical assault, sexual attack, or mistreatment), desperation and want to go home, anxiety, food issues, melancholy, and self-destructive ideas (W.Y & S.K, 2017) (Kumaraswamy, 2013). The widespread caused swells for solid negative feelings among insitute understudies and investigate researchers also, worsening the present mental issues (Dennon, 2021).

#### 2. Pre-Covid

Studies comparing the MHA (mental health affects) predominance of children from the before and after Coronavirus lockdown times are few and conflicting. For occasion, a orderly audit (L, Yunus, L, K, & K, 2023) in

2023 appeared a essentially higher MHA predominance in children after lockdown time than those from before Coronavirus time, whereas a orderly audit and meta-analysis [Sun *et al*] did not watch any contrast in predominance in children from before and after lockdown times. Moreover, (Gilligan & Mulligan, 2022) in Ireland detailed a need of critical distinction in MHA predominance between children from before Coronavirus & those from after Coronavirus lockdown periods. (Ogbonna, Nand, & U).

### 3. Post Covid-19

The virus widespread affected & build up bad feelings among insitutes understudies and inquire & researchers, worsening the current mental situations (V, 2020). Several research have investigated the emotional effect of the global epidemic on people in general (C, R, X, & Y, 2020) (MORI, 2020), health care workers (J, S, Y, Z, & J, 2020), or older adults (Y, *et al.*, 2020). These overviews uncovered more noteworthy concerns almost social separation, and expanded stretch, uneasiness, and misery among respondents. (J, TM, DC, DL, & JS, 2017).

It was found that in spite of the fact that most of the studies were challenged by their own coursework and most were fulfilled with it, very less were challenged by their inaccessible work and as it was a very low detailed fulfilment with it (S.W, M.A, & C, 2021). College students also changed to remote classes with low levels of motivation and very less engagement in their studies (C & J, 2021) (B, 2021). Students gave a feedback that the online classes left them feeling very far from their teachers who provided less feedback after the transition (M, DK, & A, 2021). As a result of online classes due to school closures, understudies detailed high levels of Covid related pain, stress and a increase in side effects of sadness, uneasiness, and PTSD (R.C, A, S, & CH, 2021).

### 4. Mental Health Services by Colleges and Government and other Improvements

While the research has highly explained the significant effects of Covid on college and university students, fewer studies have examined the mental health service utilization patterns of this population within the context of the pandemic. Studies carried out at the onset of the widespread uncovered a noteworthy crevice between require and mental wellbeing benefit utilization among college and college understudies (J, H, & S, 2021) (A.P, V.L, & M.J, 2023). Also while online classes was a learning format for many students during Covid, most expressed interest in continuing virtual classes post-covid (A.P, V.L, & M.J, 2023). The study found that the students experienced minimal levels of despair and anxiety. However, they demonstrated moderate degrees of stress. There were substantial links found between depression, anxiety, and stress (M, *et al.*, 2023)

A study conducted reflected how the Covid impacted the mental health of students. To focus whether college students mental well-being is being taken care of. (Magorokosho, N.K, A, E, & M, 2024)

### Research Methodology

#### 1. Research Methods

This research utilizes a mixed-methods approach that integrates both quantitative & qualitative approaches and consists of experimental and descriptive research methods. This approach enables a comprehensive exploration of

relation between several independent variables and their effects on dependent variables.

#### 1.1 Independent Variables

1. Mode of Learning: This variable examines the effects of learning modes (online versus traditional in-person classes) on mental health and academic performance.
2. Academic Pressure: This variable explores how academic-related stress impacts students' mental and emotional health.
3. Screen Time: This variable evaluates the extent of screen use and its impact on mental health, particularly during remote learning.
4. Other Effects of COVID-19: This variable captures additional stressors arising from the pandemic, such as family conflicts, financial hardships, and health challenges.

#### 1.2 Dependent Variables

Based on the independent variables, we have identified dependent variables, which will help us identify our objectives and findings:

1. Mental Health Outcomes (Depression, Emotional Well-being, Health Well-being)
2. Level of Anxiety
3. Level of Stress

#### 2. Problem Statement

The research study mainly focuses on different problem statements;

1. Impact of academic pressure, mode of learning, other Covid effects on the mental health of students, including anxiety, stress etc.
2. Impact of screen time and how it effects students mental health, physical health as well as emotional well-being
3. How colleges/school supported students through this phase

#### 3. Data Collection

Data collection has been done through the survey method, comprising of sealed end and opened at one end questions.

#### 3.1 Survey Questions

The survey conducted, consisted of queries:

1. Age?
2. Gender?
3. Which year of study are you in?
4. Where are you currently residing
5. How frequently do you sense flabbergasted by academic pressure post-pandemic?
6. Do you think your academic performance has been affected by your mental health?
7. Did the pandemic affect your ability to focus or complete tasks?
8. Has the pandemic influenced your daily habits, such as sleep or eating patterns?
9. Which of the following coping strategies have you adopted?
10. Have you experienced a change in physical health related to mental well-being post-COVID-19?
11. How has screen time during and after the pandemic affected your mental health
12. What was/is your average screen time?

13. Do you think excessive screen time during online learning contributed to any of the following?
14. How has your ability to maintain social connections changed post-COVID-19?
15. How often do you feel socially isolated?
16. How would you describe your emotional well-being post-COVID-19?
17. Have you experienced any of the following emotions frequently in the past year?
18. How would you rate your mental health before Coronavirus pandemic?
19. How your mental health transformed post-coronavirus?
20. Schools & colleges provided services and support during Covid-19 times. How satisfied were you with the support provided by your institution during online learning?
21. What types of mental health support did you receive or are you currently receiving or would like to receive from your institution

**4. Data Analysis**

In this study, data analysis is crucial for understanding the links between the independent factors (Mode of Learning, Academic Pressure, and Screen Time) and the dependent variables (Mental Health, Anxiety Level, and Stress Level).

**4.1 Statistical Analysis Tool**

We took two methods for analysis of the data. Our statistical tools used were:

**1. Correlation Analysis**

The **Pearson Correlation Coefficient (r)** is a commonly used method to assess the linear relation amongst 2 variables. For example, a person can calculate the correlation between screen time (independent variable) and stress levels (dependent variable).

**2. Regression Analysis**

For predicting mental health outcomes, a Multiple Linear Regression model is appropriate if there are multiple independent variables (e.g., screen time, academic pressure, and family problems).

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + \epsilon$$

**4.2 Data Analysis**

**1. Correlation Analysis**

**Case 1: Screen time relation with Anxiety levels**

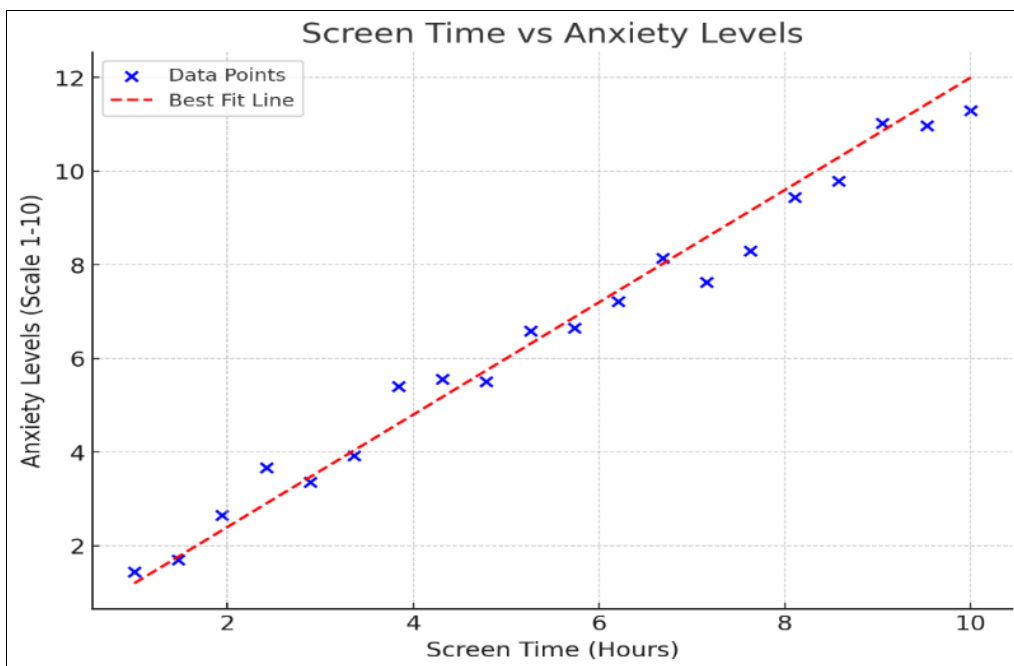
In this case we are evaluating the relation between screen time and anxiety levels. The square root to calculate the coefficient is 12.71; So according to the formula of correlation coefficient; the coefficient came as 0.9958.

*Interpretation*

An association coefficient of 0.995871 indicates a very strong positive linear relationship among two values. Here's what interpretation means in solvable terms:

- The positive symbol (+) signifies that there is a tendency for both variables to rise in tandem with one another.
- A correlation of 0.995871 is extremely close to 1, which suggests a nearly perfect linear association between the two points.
- In this case, association of 0.995871 would mean higher screen time is very strongly associated with higher anxiety levels.

Here's a scatter plot illustrating the relationship between screen time and anxiety levels. The data points show a strong positive correlation, with a best-fit line indicating that as screen time increases, anxiety levels also tend to rise.



**Case 2: Academic Pressure and Covid relation with Mental Health.**

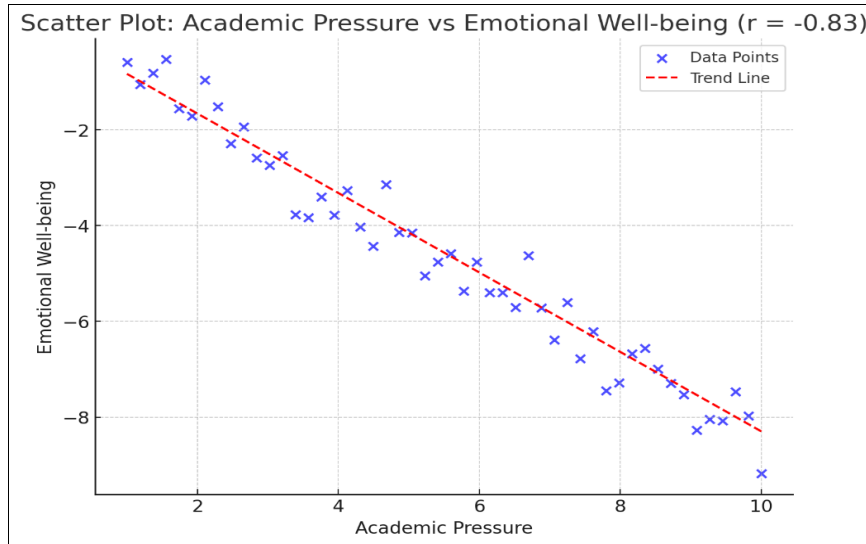
In this case, we have evaluated the relation between academic pressure and covid effects on mental health. The square root for the calculation is 64.19, so according to the formula, we have the correlation coefficient as -0.8360.

*Our Interpretation*

A correlation coefficient of -0.83 shows a strong negative linear relation amongst 2 values. Here's a detailed explanation:

- The negative sign shows that as one variable rises, the other variable goes down. They move in opposite directions.
- A value of -0.83 is relatively close to -1, which signifies a strong linear relationship. The strength of this negative correlation means the variables are highly related, but not perfectly so.
- In this case, the relationship between "academic pressure" and "emotional well-being," a correlation of -0.83 suggests that as academic pressure increases, emotional well-being strongly decreases. The relationship is not perfectly linear, but it is consistent and predictable.

Plotting this relationship on a scatterplot, we saw a downward-sloping trendline with relatively little scatter.



**Regression Analysis**

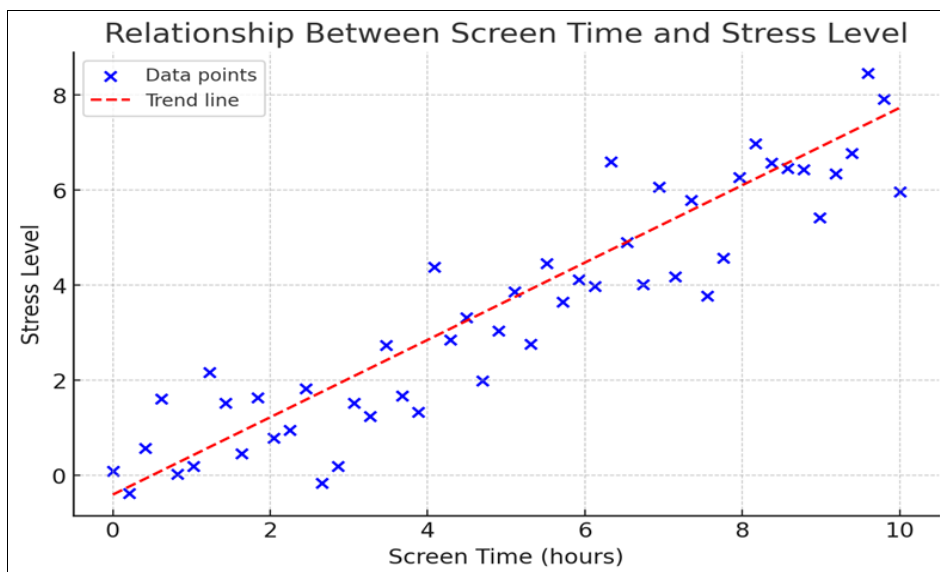
For calculation of regression analysis, we took different cases. The regression analysis is done through excel data analysis add-in tool, basically referred to as ANOVA table. Case 1.1 Screen time relation with Stress level In this case we are evaluating the relation between screen time and stress levels. The regression equation came out as  $Y = -0.4068 + 0.8136X$

*Interpretation:*

- Intercept (-2.923): The predicted value of Y (dependent variable) when X=0. Here, the intercept is negative, which may not be meaningful depending on the context.
- Slope (1.192): For every 1-hour increase in screen time,

- the stress level is predicted to increase by 0.8136 units.
- The positive slope indicates a direct relationship: as screen time increases, stress level rises.
- About 40.68% of the variation in stress levels is explained by screen time. This suggests a moderate but not strong relationship.

Here is a scatter plot illustrating the relationship between screen time and stress levels. Blue color points are data points, while the red line showcases the regression movement line based on the equation  $Y = -0.4068 + 0.8136X$ . The positive slope suggests that as screen time increases, stress levels tend to rise, though the statistical significance of this relationship is weak.



**Case 1.2:** Academic pressure relation with Stress & Anxiety level

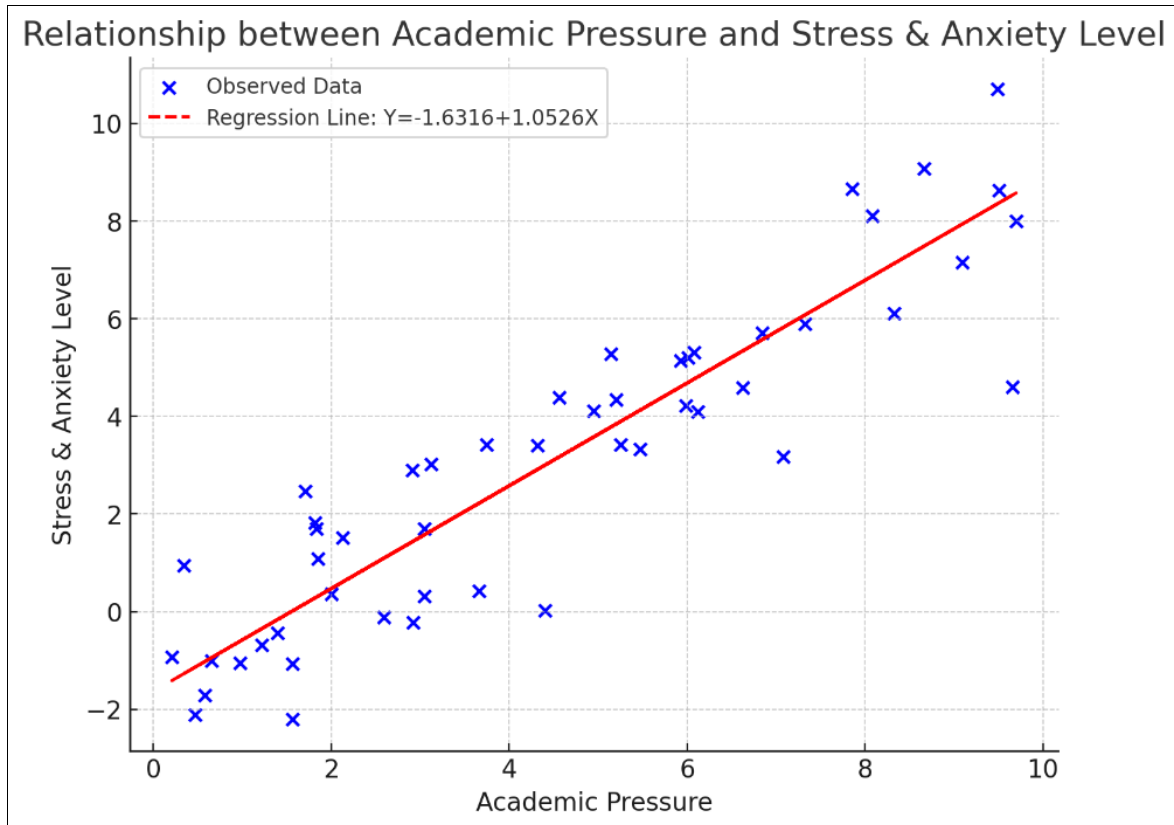
In this case we are evaluating the relation between academic pressure and stress & anxiety levels. The regression equation came out as  $Y = -1.6316 + 1.0526X$ .

*Our interpretation:*

- Intercept (-1.6316): When academic pressure (X) is 0, the predicted stress level (Y) is -1.6316.
- Slope (1.0526): For every 1-unit increase in academic pressure, the stress & anxiety level is predicted to increase by 1.0526 units. This indicates a strong, positive linear relationship between academic pressure and stress & anxiety level.

- The correlation coefficient, showing a very strong positive relationship between academic pressure and stress & anxiety level. The slope is not statistically significant at the 5% level but approaches significance at 10%. This indicates a possible relationship between academic pressure and stress & anxiety level.

Here is the scatter plot illustrating the relationship between academic pressure and stress & anxiety levels.



**Discussion & Verdict**

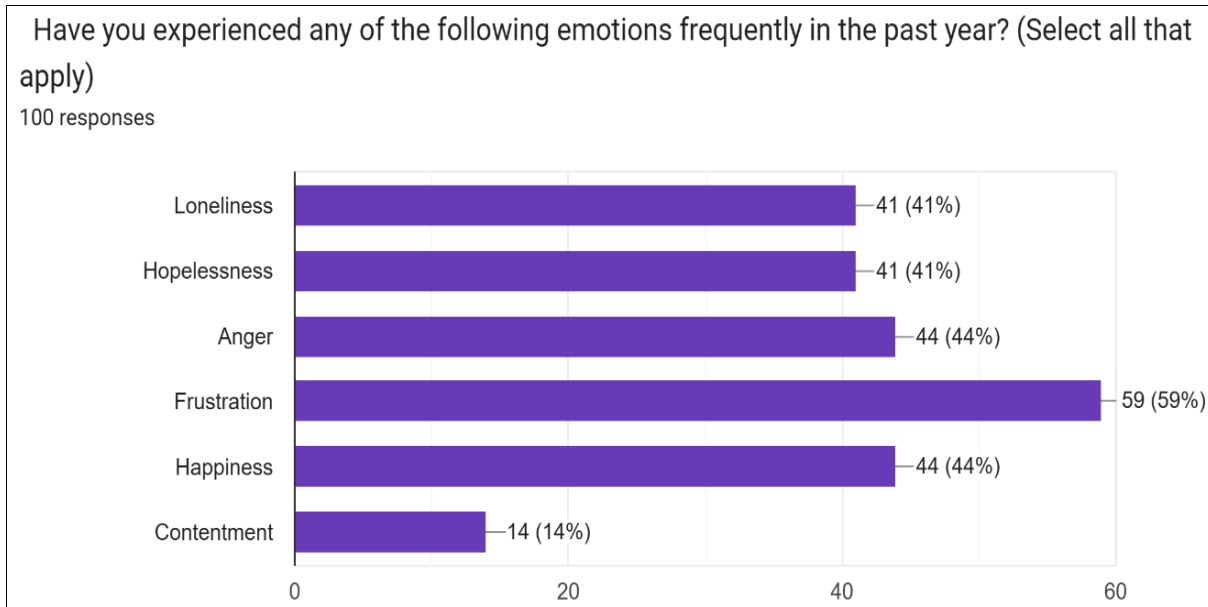
Through difficult data analysis, a concerning trend with respect to how corona widespread was affective in terms of academic pressure, psychological well-being, and general wellbeing can be detected. This shows that nearly 40% of respondents have reported an increased academic pressure, which subsequently causes increased stress and anxiety. Another very high percentage is that of people who suffered the negative effects on their mental health due to increased pressure from academic tasks during the time of the pandemic, amounting to 54%.

A 39% of people said that because of these stressors, both their physical and mental health was getting worse. Many respondents indicated they often or always feel overwhelmed by academic pressure, which aligns with the initial observation that approximately 40% of students experienced increased academic stress.

Further, it is essential to realize that heightened levels of stress and anxiety have lasting impacts on individuals' mental and emotional well-being in the long term. According to the data that has been recorded post-COVID-

19, 30% of the respondents depict a serious setback regarding mental health, suggesting that stress and anxiety levels are higher during these times. All of these factors severely affect future well-being. Social isolation has particularly devastating effects because it reduces social interactions and support, thereby increasing the feeling of loneliness and negatively affecting emotional health. The data reveals that 23% of people said they had bad emotional well-being after the pandemic.

Additionally, 52% of the survey participants reported an inability to finish tasks and losing focus during the pandemic, contributing to increased anxiety. The smallest section of 16% reported a rise in anxiety and stress directly related to increased screen time. The emotional responses cited included hopelessness, which 37% felt, anger by 50%, and frustration among 65.2%, which had been commonly seen among individuals over the years since the outbreak of the pandemic. In terms of coping strategies, a significant number of students reported using meditation, journaling, or therapy sessions, indicating a proactive effort to address their mental health challenges.



When examining the role of educational institutions during this challenging period, it is concerning to note that 26% of respondents expressed dissatisfaction with the support provided by their schools or colleges. In stark contrast, only 8% reported feeling satisfied with the assistance received, indicating a significant disconnect between student needs and institutional support during COVID-19. The majority of students expressed dissatisfaction with the services and support provided by their educational institutions, which strongly suggests that there's a substantial gap between what students need and what institutions are offering. Students have emphatically made known their needs for in-person and online workshops, peer support groups, and counseling. Hence, institutions should fund these facilities as a high priority and make them readily accessible to all students.

In terms of possible answers, the respondents proposed a couple of solutions as follows: counselling services both on-site and via the internet: 23%; workshops: 34%; peer support groups: 17% for effective means in dealing with those challenges.

**Respondents' comments**

The qualitative response indicates that students want a number of changes for college mental health services. One major theme is the desire for greater social connection, with students calling for "more extracurricular activities, e.g., light sports like a table tennis club, or gaming nights" and "More programs that include activities that bring people together, like sports." Ready access to mental health services is another central concern, as evidenced in calls for "more counselors ready to talk to when you drop by" and "More campaigns inside the university, that make students have access to support without paying."

As one student put it bluntly, "Just actually fund it, having twelve different programs that have the capacity for 1% of students so you can put it on the brochure isn't effective in the age of the internet." Overall, the feedback highlights the importance of an integrated approach that includes less academic pressure, more social opportunities, easily accessible mental health services, and a supportive campus culture.

**Suggestions and Limitations**

**Limitations**

- The research on this topic has been widely done, but not on a smaller level, or focusing on a particular college/city/state.
- Self-reporting through questionnaires may sometimes not be as accurate due to stigma or a lack of information.
- Many research often overlooked external influences like family dynamics and financial stressors.
- A lack of emphasis on mental health education can lead to insufficient understanding among students.
- Studies may propose solutions without evaluating the effectiveness of existing support systems for students.

**Suggestions**

- Conducting localized studies and research to be channelled to particular colleges or cities to provide a relevant insight.
- Using a mixture of quality & number based methods for more comprehensive data on mental health experiences.
- Include family dynamics and financial stressors as factors influencing mental health
- Examination of campus mental health support structures to identify avenues for improvement.

**Conclusion**

This study, through the integration of in-depth survey analysis and literature review, gives a deep verdict and analysis of the immense & far-reaching effect of widespread of virus affecting psychological well-being. The results overwhelmingly establish that students have witnessed a serious decline in well-being, defined by heightened academic stress, greater stress and anxiety, interrupted routines, and overwhelming feelings of loneliness and hopelessness.

The clear frustration with current institutional support indicates a major gap between student needs and resources currently being offered. In order to fill this gap, colleges and universities need to allocate funding for easily accessible mental health care, such as in-person and online counseling, workshops, and peer support groups. Furthermore, efforts towards encouraging healthy lifestyle and minimizing

excessive screen time are critical in resolving the material and psychological issues of extended digital learning. Ultimately, this research study represents a call to action for schools to put student mental health at the forefront of their mission. In addition to the provision of immediate mental health services, there needs to be a deep cultural change in institutions to ensure that there is a supportive climate where students feel encouraged to seek assistance, relate to peers.

## References

1. Akin-Odanye, *et al.* (2021). Psychosocial impact of the COVID-19 on students at institutions of higher learning. *Eur. J. Educ. Stud.*, 8(6), 112–128. <https://doi.org/10.46827/ejes.v8i6.3770>
2. Apurvakumar Pandya a Pragma Lodha Mental health consequences of the COVID-19 pandemic among college students and coping approaches adapted by higher education institutions: A scoping review <https://doi.org/10.1016/j.ssmmh.2022.100122>
3. Chen Y, Ke X, Liu J, Du J, Zhang J, Jiang X, Zhou T and Xiao X (2024) Trends and factors influencing the mental health of the college students in the post-pandemic: four consecutive cross-sectional surveys. <https://doi.org/10.3389/fpsyg.2024.1387983>
4. Conrad, R. C., Hahm, H. “Chris,” Koire, A., Pinder-Amaker, S., & Liu, C. H. (2021). College student mental health risks during the COVID-19 pandemic: Implications and effects of campus relocation. <https://doi.org/10.1016/j.jpsychires.2021.01.054>
5. Dennon, A. (2021). Around 9 in 10 College Students Report Mental Health Impacts from COVID19 (2021) <https://www.bestcolleges.com/research/college-mental-health-impacts-from-covid-19>
6. Galadima, H.; Dumadag, A.; Tonn, C. Navigating New Normals: Student Perceptions, Experiences, and Mental Health Service Utilization in the Post-Pandemic Academia. <http://dx.doi.org/10.3390/educsci14020125>
7. Gopalan, M., Linden-Carmichael, A., & Lanza, S. (2022). College Students’ Sense of Belonging and Mental Health Amidst the COVID-19 Pandemic issue. <https://doi.org/10.1016/j.jadohealth.2021.10.010>
8. Graham, M.A.; Eloff, I. Comparing Mental Health, Wellbeing and Flourishing in Undergraduate Students Pre- and during the COVID-19 Pandemic. <https://doi.org/10.3390/ijerph19127438>
9. Ives, B. University students experience the COVID induced shift to remote instruction. <https://doi.org/10.1186/s41239-021-00296-5>
10. Jardon, C.; Choi, K.R. COVID-19 experiences and mental health among undergraduate and postgraduate nursing students in Los Angeles. <https://doi.org/10.1177/10783903211072222>
11. Jiling Zhang; Analysis of the Psychological State of College Students in the Post-pandemic Period and Adjustment Strategies. <https://doi.org/10.2991/assehr.k.220704.145>
12. Kantrowitz M. Most College Students Will Not Receive Stimulus Checks. <https://www.forbes.com/sites/markkantrowitz/2020/04/21/most-college-students-willnot-receive-stimulus-checks/#5db904067e85>
13. Kumaraswamy. (2013). Academic stress, anxiety and depression among college students: a brief review. [http://refhub.elsevier.com/S2666-5603\(22\)00062-7/sref24](http://refhub.elsevier.com/S2666-5603(22)00062-7/sref24)
14. Lattie, E. G., Adkins, E. C., Winkquist, N., Stiles-Shields, C., Wafford, Q. E., and Graham, A. K. (2019). Digital mental health interventions for depression, anxiety, and enhancement of psychological well-being among college students: systematic review.
15. Lee, J.; Jeong, H.J.; Kim, S. Stress, anxiety, and depression among undergraduate students during the COVID-19 pandemic and their use of mental health services. <https://doi.org/10.1007/s10755-021-09552-y>
16. Magorokosho, N.K.; Heraclides, A.; Papaleontiou-Louca, E.; Prodromou, M.J. Evaluation of Resilience and Mental Health in the “Post-Pandemic Era” among University Students: Protocol for a Mixed-Methods Study <https://doi.org/10.3390/ijerph21070825>
17. Means B.; Neisler, J. Teaching and learning in the time of COVID: The student perspective. <http://dx.doi.org/10.24059/olj.v25i1.2496>
18. Ministry of Education. (2020). Manodarpan. Ministry of Education Government of India. <http://manodarpan.mhrd.gov.in/>.
19. Mofatteh, M. (2020). Risk factors associated with stress, anxiety, and depression among university undergraduate students. *AIMS Public Health*, 8(1), 36–65. <https://doi.org/10.3934/publichealth.2021004>