

Assessing the Psychosocial Determinants of Mental Health Decline Among Bangladeshi University Students During the COVID-19 Pandemic: A Rapid Systematic Review

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Table-1: PICO Search tool

P=Population	The university students of Bangladesh
I=Intervention	Mental health
C=Comparison	Dreadful consequences of COVID-19 crisis
O=Outcome	Uplifting psychological wellbeing of the students.

Table-2: Some examples of search phrases

University students of Bangladesh	Mental health	Impacts of COVID-19	Psychological stigma
Undergraduate students	Mental condition	COVID-19	Mental stigma
College students	Mental well-being	COVID-19 pandemic	Psychological burden
Graduate students	Mental health	Impacts of COVID-19	Mental burden
Public and private university students of Bangladesh	Emotional stability	Spread of Coronavirus	Suicidal tendency

Table-3: Comprehensive data analysis

SL NO	Database	Related articles found
1	Medline	35
2	PubMed	210
3	Google Scholar	255
4	Psych INFO	40
5	EMBASE	50
6	Cochrane database	30
7	ARU-E-Library	137
8	CINAHL Plus	12
9	BioMed Central	55
10	Reference Harvesting	2

Table-4: Inclusion and Exclusion criteria

Traits	Inclusion	Exclusion
Population (P)	University students	School going students
Intervention (I)	University based intervention to alleviate mental stigma among the university students	Community based mass-intervention
Comparison (C)	Peer-reviewed Studies published from 2020 to 2021	Studies prior to COVID pandemic
Outcome (O)	To boost up the mental state and overcome the psychological stigma among the students	Other than the mental boost up and alleviation of psychological stigma

Table-5: Using the Critical Appraisal Skills Program (CASP) tool for critical appraisal of qualitative research studies

Systematic review (CASP Tool)	Section-A: Are the results valid/authentic?							Section-B: What are the results?							
	References	Did the review address a clearly focused question?	Is the methodology appropriate?	Were all the important relevant studies included?	Was the research design worthy for addressing the aim of the research?	Was the recruited data obtained in a way that addressed the aim of the research?	Was the research enough to assess quality of the included studies?	Was the review reasonable after the results have been combined?	Have the ethical issues been taken under consideration?	Was the data analysis vigorous and appropriate?	Were the results precise?	Is there a clear statement of the findings?	Can the results be applied to the local population?	Were all important outcomes considered?	Are the results valuable and worthy to the costs?
Md Akhtarul Islam et al,2020	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Md. Saiful Islam et al,2020	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Md. Jamal Hossain et al,2021	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ridwan Islam Sifat,2021	+	+	+	+	+	-	+	+	-	+	+	+	+	+	+
Md. Abdul Wadod et al,2020	+	-	-	-	+	+	-	-	+	-	-	+	-	+	
Taufiq-E-Ahmed Shovo et al,2021	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

al, 2021															
Taufiq-E-Ahmed Shovo et al,2021	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Rafia Tasnim et al,2020	+	+	+	+	+	+	+	+	+	-	+	-	+	+	+
Muhammad Mainuddin Patwary et al,2020	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Md Mostafizur Rahman et al,2021	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Irin Hossain et al,2020	+	-	-	+	-	-	-	-	-	+	+	-	-	+	-
Jeenat Mehreen et al,2021	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Humayun Kabir et al,2021	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Md. Najmol Hoque et al,2021	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+
Md. Tanvir Hossain et al,2021	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+

Abu Hasanat Mohammad Kishwar Hossain et al, 2020	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Mohammed A. Mamun et al, 2020	+	+	+	-	+	+	+	+	+	+	-	+	+	+	+

(+) = item appropriately addressed, (-) = item inadequately addressed

Table-7: Phases of Thematic analysis

Step/Phase-1	Acquaintance with data
Step/ Phase -2	Synthesizing preliminary codes
Step/ Phase -3	Identifying and developing relevant traits
Step/Phase -4	Analysing the key points
Step/Phase-5	Characterizing and categorising themes
Step/ Phase -6	Meticulously composing

Table-8: Data Extraction Table:

Serial	Author	Title	Method	Sample Size	Result Findings
1	Md Akhtarul Islam et al,2020	Depression and anxiety among the university students during the COVID-19 pandemic in Bangladesh: A Web-based cross-sectional study	Web based Cross sectional study, e-questionnaire, Snowball sample technique	476	<p>According to a poll of medical students, more than half of those enrolled in medical colleges suffer from anxiety (64.8%) and depression (54.3%). Another research of university students denoted that depression and anxiety were prevalent in 52.2 percent and 58.1 percent of students respectively.</p> <p>The most prominent factors culminating into escalating prevalence of depression and anxiety among university students in Bangladesh are long term unemployment and financial uncertainty.</p>
2	Md. Saiful Islam et al,2020	Psychological responses during the COVID-19 outbreak among university students in Bangladesh	Cross-sectional design	3122	<p>Lower socioeconomic background, lack of exercise, having disenchantment with sleeping, frustration with their pursuit of academic studies, smoking and rigorous internet usage are all characteristics that attribute to university students' mental decline throughout COVID.</p>
3	Md. Jamal Hossain et al, 2021	Impact of online education on fear of academic delay and psychological distress among university students following one year of COVID-19 outbreak in Bangladesh	Cross-sectional web-based survey	1299	<p>Studies suggest that female students of 21-24 years from private universities coming from urban area are more susceptible to mental stigma due to COVID.</p> <p>Fear of the academic break is undoubtedly the primary cause of ongoing mental health issues. Moreover, financial crisis and professional uncertainty made them more exasperated.</p>
4	Ridwan Islam Sifat,2021	COVID-19 pandemic: Mental stress, depression, anxiety among the university students in Bangladesh	Descriptive statistics	476	<p>Because of the closure of educational institutions, more than 3.15 million tertiary students are experiencing uncertainty in their academic achievement. About 55% of students are now unable to pursue online education due to a lack of adequate internet connectivity.</p> <p>Approximately 43% of students are mentally agitated, apprehensive, and unable to participate in online classes.</p> <p>Moreover 15% of the students were said to be suffering from moderate to severe depression, while 18.1 percent were suffering from serious anxiety. Additionally, pupils who live with their families (96.93%) and in metropolitan regions (65.05%) experience more depression symptoms.</p>
5	Taufiq-E-Ahmed Shovo et al,2021	Determinants of Generalized Anxiety, Depression, and Subjective Sleep Quality among University Students during COVID-19 Pandemic in Bangladesh	Cross-sectional study	1317	<p>Female students were more likely than male pupils to be despondent. Public university students, on the other hand, had a greater prevalence of depressed symptoms than private university students.</p> <p>According to the findings, anxiety and depression symptoms are on the rise among university students (51% and 45.9%, respectively), whilst sleep quality is declining, with over 27.1 percent of students reporting poor subjective sleep quality. Anxiety, despair, and poor subjective sleep quality were found to be prevalent in Bangladesh in 6.7 percent, 4.5 percent, and 0.9 percent, respectively.</p>

6	Rajib Ahmed Faisal et al,2021	Mental Health Status, Anxiety, and Depression Levels of Bangladeshi University Students During the COVID-19 Pandemic	Snowball sampling technique	874	<p>According to the findings, university students had significant rates of anxiety and depression symptoms, as well as moderate to poor mental health scores based on the cut scores for their individual measures. These high perceived stress rates are comparable to university student samples in Bangladesh (Islam et al. 2020; Jamilah et al. 2020) and higher than adult samples in Bangladesh (Ahmed et al. 2020c; Mamun et al. 2020).</p> <p>Anxiety problems afflicted roughly 88 percent of students (Islam et al. 2020). Another survey revealed that roughly 47 percent of students had medium to severe depression, and 69.3 percent had mild to severe psychological effect owing to the pandemic (Khan et al. 2020a).</p>
7	Bablu Kumar Dhar et al,2020	Impact of COVID-19 on Psychology among the University Students	Descriptive statistics	15543	<p>According to the report, the present epidemic has caused worry in about 97 percent of university students. A moderate degree of anxiety affects 48.41% of the students who took part in the study, while a severe level of anxiety affects 44.59 percent of the students.</p> <p>The lack of masks and sanitizers was underlined by Ayittey et al, and the catastrophic, astounding, and false news headlines on social media had raised worry and panic. It was also linked to their place of residence, parental income, whether they were living with their parents, with no significant gender or geographic differences (Cao et al,2020).</p>
8	Sadman Shafiq et al,2020	Exploring the triggering factors for mental stress of university students amid COVID-19 in Bangladesh: A perception-based study	Both qualitative and quantitative approach	1000	<p>Hunt and Eisenberg (2010) discovered that university students are more vulnerable to mental health issues. According to a recent survey, 75.2 percent of Bangladeshi university students have lost their source of income, putting 63 percent of them in a financial crisis that is harming their mental and psychological well-being (Begum et al. 2020).</p> <p>Private university students tend to be slightly more impacted by it, at 80.6 percent, compared to public university students, who have been affected by mental stress at 77 percent.</p> <p>According to survey, 52.2 percent students suffered from severe depression. Correspondingly, anxiety and stress rate were 58.1 percent and 24.9 percent respectively (Mamun, Hossain, & Griffiths, 2019).</p> <p>36 percent of students at a private institution claimed that online classes were causing them mental stress. Financial crisis was cited by 35% of public university students, 25.5 percent cited university session jams, 21% cited loss of income source, and 18.4 percent cited online courses as sources of mental stress.</p>
9	Efta Khairul Haque Emonet al,2020	Impact of COVID-19 on the Institutional Education System and its Associated Students in Bangladesh	Descriptive survey with the interactive interview via online	2460	<p>Nearly 40 million pupils in Bangladesh have been forced to drop out of college until the pandemic subsides. Since April 2020, all universities, medical and dental institutions have been shuttered due to the epidemic.</p> <p>According to the Learning Lab Bangladesh COVID-19 Multi-sector Impact Report, about 60% of students have not started hearing from their institutions about how their educational activities would continue.</p> <p>According to BioTED, just 23% of all students attended the online course. Engineering and medical students face significant challenge as they are unable to complete their lab and practical lessons.</p>
10	Farhana Begum et al,2020	Combating the impact of COVID- 19 on Public University Students through Subsidized Online Class: Evidence from Bangladesh	Convenience sampling	1092	<p>The abrupt discontinuity of study caused by COVID-19 has had a bad impact on 557 (51%) of the respondents' lives and studies,</p> <p>while 372 (34.1%) of the respondents have had a severely unfavourable impact on their lives and studies because of the discontinuity</p>
11	Rafia Tasnim et al,2020	Suicidal ideation among Bangladeshi	Cross-sectional online survey	3331	<p>During the COVID-19 pandemic, there may be an upsurge in suicidal ideation and undertaking among university students due to isolation and quarantine (Mamun & Griffiths, 2020). Suicidal thoughts were estimated to be 12.8 percent of the time. Potentially addictive practices are also linked to suicide thoughts</p>

		university students early during the COVID-19 pandemic: Prevalence estimates and correlates			in order to cope with exaggerated startle states and insights (Kaloyanides, McCabe, Cranford, & Teter, 2007) Suicide tendency is remarkably common, with estimates of 13.8 percent in Bangladeshis (Rahman, Islam, Mamun, et al., 2020).
12	Muhammad Khairul Alam et al,2021	Assessing the mental health condition of home-confined university level students of Bangladesh due to the COVID-19 pandemic	Online based questionnaire, convenient sampling	509	Evidence suggests that students under quarantine may experience psychological discomfort in the form of stress, anger, resentment, and post-traumatic stress symptoms (Brooks et al. 2020). Students were concerned about their schoolwork and future careers in proportions of 20 (37.7 percent) and 19 (20.30 percent) respectively. Students who spent more time on social media (22.60 percent), did not wake up from sleep earlier (50.9 percent), had more interaction with family (26.4 percent), participated in household chores (24.5 percent), and felt bored at home (30.20 percent) were more likely to be emotionally unstable, agitated, and stressed.
13	Md. Jamal Hossain et al,2021	Major Depressive and Generalized Anxiety Disorders Among University Students During the Second Wave of COVID-19 Outbreak in Bangladesh	Questionnaire-based online survey, Descriptive statistics	568	The second wave of COVID-19 epidemic in Bangladesh, which commenced in mid-November 2020, aggravated educational unpredictability, and added to students' emotional trauma. According to study, more than half of students have MDD or GAD as a result of public health challenges, and a lack of social and psychological support.
14	Muhammad Mainuddin Patwary et al,2020	The impact of COVID-19 pandemic on mental health of University Student: A cross-sectional study in Bangladesh	Cross sectional study	544	Sudden disruption of academic schedule, financial hardships in the family, a lack of personal space at home, an increased risk of contaminating other family members, and unstable future careers may result in a wide range of psychological effects for university students (Cao et al., 2020; Wang et al., 2020). Connection to online material and social networking is likely to raise mental stress since the media covers spectacular headlines and individuals share unpleasant and inaccurate news through social media, which spreads like a contagion (Khan et al., 2020).
15	Md Mostafizur Rahman et al,2021	Depression, anxiety, and stress among public university students in Bangladesh during the COVID-19 pandemic	Cross sectional study, Convenience, and snowball sampling techniques	1382	Moderate depression was highlighted by the majority of students (29.52%), followed by normal depression (25.47%), and really severe depression (17.73 percent). University students experienced a variety of challenges, including poor network connectivity, excessive internet access fees, insufficient classroom conditions at home, and a lack of comprehension aggravated by the loss of face-to-face interaction with lecturers. According to a report, students who pursued a career in science and engineering had fewer mental health issues. Because laboratory classes were not accessible during this time, these students may have been under less perceived stress, whereas students in other disciplines were under more strain.
16	Jeenat Mehareen et al,2021	Prevalence and socio-demographic correlates of	Cross sectional study	333	Unpredictability about degree completion and career path (Sundarasan et al., 2020), confronting rising rates of domestic violence due to stay-at-home lifestyle (Carlos et al.,2020) as well as emotional trauma due to the possibility of infection (Mamun et al., 2021) discovered that medical students have a greater rate of anxiety and sadness (Sartor et al., 2020).

		depression, anxiety, and co-morbidity during COVID-19: A cross-sectional study among public and private university students of Bangladesh			<p>Students who lived in nuclear households were also considerably more likely to have moderate to severe depression. Furthermore, it is evidenced that students who spent more time with their family members were less likely to suffer from depression, anxiety and co-morbidity, which ranged from mild to severe. Furthermore, students who smoke and have observed domestic violence in their homes are more likely to have sadness and anxiety symptoms.</p> <p>In terms of educational attainment, individuals in their second to fourth years of undergraduate studies were substantially more likely than those in their first year to have moderate or higher levels of depression (Tang et al., 2020) (Kecojevic et al., 2020).</p>
17	Humayun Kabir et al,2021	E-learning readiness and perceived stress among the university students of Bangladesh during COVID-19: a countrywide cross-sectional study	Cross-sectional study	1145	<p>B. Lazarevica et al discovered that students who participated in e-learning had more stress than those who participated in traditional campus-based learning.</p> <p>During e-learning, Jowsey et al. found that students who did not have access to technology exhibited stress-related symptoms. Similarly, Tubaishat et al. revealed that a sub-optimal level of preparedness, such as a lack of computer or technology abilities, can lead to learners undergoing a high degree of stress.</p>
18	Md. Najmol Hoque et al,2021	Anxiety and Its Determinants among Undergraduate Students during E-learning in Bangladesh Amid Covid-19	Cross-sectional survey	206	<p>Bangladesh has stated that all educational institutions would close in March 2020, and the epidemic has already touched about 40 million pupils (The Business Standard, 2020). These educational institutions, including all universities, have been shuttered for 17 months.</p> <p>Results reveal that 87.7% students suffer from anxiety, whereas 64.8% medical students suffer from different anxiety levels. Female students as well as students of last year or near graduation are more prone to psychological distress.</p> <p>During pandemic, due to constraints of recreational elements in cities, the urban residing students suffer more. Moreover, urban students suffer from more anxiety disorders as they are affected more due to COVID according to Islam et al., 2020.</p>
19	Md. Tanvir Hossain et al,2021	Challenges of online education /distance learning for university students during the COVID-19 pandemic: An observation from Bangladesh	Web bases cross sectional study	419	<p>Anxiety, despair, emotional exhaustion, fear, sleeplessness, and suicide behaviour have all increased throughout the globe, notably among students (Ahmed et al., 2020) (Islam et al., 2020) (Kaparounaki et al., 2020) (Shovo et al., 2021) (Zou et al., 2020)</p> <p>Only 5.7 percent of Bangladeshi families had access to a computer, while only 4.8 percent utilised the internet (Bangladesh Bureau of Statistics, 2015). Bangladesh is ranked 113 in the worldwide networked readiness index (NRI) and 150 in the e-government development index (EGDI) by the Access to Information Programme et al. (2013)</p> <p>Moreover, in Bangladesh the internet connection is quite poor (ranked 4th). According to a poll of university students in Bangladesh, frequent power shedding and an unreliable internet connection were the two most serious issues for e-learning during the COVID-19 epidemic (Al-Amin et al., 2021).</p>
20	Avijit Saha et al,2021	The mental impact of digital divide due to COVID-19 pandemic induced emergency online learning at	Descriptive study, simple purposive sampling	180	<p>Based on the Kessler K-10 distress scale, the study found that the prevalence of no psychological distress (16.67%) followed by mild (40%), moderate (30.56%), and severe psychological distress (12.78%). 72.6 percent of Bangladeshis students suffer from sleeplessness (Ahmed and Sifat, 2021; Ahmed and Sifat, 2020).</p> <p>Due to the closure of various types of educational institutions, 99 percent of the student population in poorer and lower-middle-income nations is deprived of their education (United Nations, 2020).</p> <p>According to a survey of students at private institutions, 24 percent of them had both anxiety and depression, 60 percent had periods of anxiety, sadness, and panic, and 12 percent had episodes of anxiety, despair, and panic.</p>

		undergraduate level: Evidence from undergraduate students from Dhaka City			Bangladesh was placed 135th on the Speed test Global Index for December 2020, with mobile phone users obtaining an internet speed of only 10.64Mbps. Broadband customers, on the other hand, the average internet speed was of 33 Mbps (Hasan, 2020). A large majority of respondents (93.89 percent) use cell phones to take online programmes. Users using laptops (51.67 percent) and desktops (39.45 percent) to take online classes lag considerably behind.
21	Nusrat Jahan et al, 2021	Impact of Covid-19 Pandemic on Study: Assessing Reading Habits of University Students in Bangladesh	Quantitative method, Online Questionnaire using Google Form	700	<p>The COVID 19 epidemic has brought life to a virtual halt, according to research undertaken by UNESCO (2020) and educational consequences.</p> <p>The findings suggest that it has negative impact on the worldwide education system, particularly since commencing school (Hoang et al.2020). Reading habits have suffered because of the epidemic, with 44.6 percent of pupils reading books for only 1-2 hours and 57.4 percent spending 5-6 hours on electronic devices for a variety of purposes, predominantly not reading.</p>
22	Abu Hasanat Mohammad Kishowar Hossain et al, 2020	Anxiety and Depression among Tertiary Level Students in Bangladesh during COVID-19 Outbreak	Cross-sectional study (online survey design)	384	<p>Students from general universities or related institutions made up 67.1 percent of the total, while medical and engineering students made up 16.2 percent and 13.0 percent of the total. In comparison to villages, more than 90% of the respondents were unmarried, and more than half of the respondents lived in district towns. Approximately 92 percent of those polled identified as Muslims (BBS, 2015).</p> <p>About 76.8% of the respondents used social media for at least two hours and more. Among them, 175 (43.6%) respondents got the updates and information about COVID-19 from Facebook while only 19 (4.7%) respondents used to read newspaper.</p> <p>When utilising the PHQ-9 to assess depression, it was shown that 26.9% of respondents had mild depression and 19.7% had fairly severe depression. As per the GAD-7 scale, about 16.5 percent, 32.2 percent, 31.2 percent, and 20.2 percent of respondents, respectively, exhibited minimum, mild, moderate, and severe anxiety</p>
23	Mohammed A. Mamun et al, 2020	Prevalence and Predisposing Factors of Suicidal Ideation Among the University Students in Bangladesh: A Single-Site Survey	Cross sectional study (Convenience sampling method)	665	<p>Problematic technology use (i.e., internet addiction, Facebook addiction, smartphone addiction) can play direct and indirect roles in suicide and suicidal behaviours (Guo et al. 2018) (Jasso-Medrano, Lopez-Rosales 2018) (Kim et al. 2019).</p> <p>Most of the victimised students (67.5%) were men, 65.0% were not in a relationship, 71.7% were from rural areas, and 82.6% were non-smokers. Approximately four-fifths of the students (78.8%) said they were at danger of smartphone addiction, 37.9% said they were at risk of Facebook addiction, 49.5 percent said they were frustrated with their academic prospects, 57.0 percent said they were nervous, and 46.3 percent said they were stressed.</p> <p>Stress has been linked to suicidal ideas and attempts, according to recent review publications. More than 90% of suicides are thought to be caused by mental distress (Dsouza et al. 2020) (Islam et al. 2020) (Mamun and Griffiths 2020). According to a recent systematic evaluation of 11,557 college students, 14 research (out of a total of 29) found a substantial and robust link between suicide risk and depression (Li et al. 2019) (Mamun and Ullah 2020) (Kabir et al., 2024).</p>
24	Sajuti Rahman Siza, 2021	Negative Impact of the COVID-19 Pandemic on the Life of University Students in Bangladesh	Online google drive questionnaire	265	<p>Bangladesh's lockdown began on March 17, 2020, and has been in effect since then (Foyez, 2020). Due to the conditions, all pupils, including tertiary students, have been remaining at home since mid-March and will continue to do so until December 2020.</p> <p>Thomas and Rogers (2020) predicted that, due to infrastructure (Müller and Goldenberg.,2020) and other resources, not all students would be provided with a similar platform for their education during a pandemic.</p> <p>Continuous lockdowns, infrastructural and socio-economic inadequacies render pupils mentally susceptible, according to Dutta and Smita (2020), Islam et al. (2020), and Khan et al. (2020).</p> <p>The average age of female and male responders was 22.1 and 23.1 years old, respectively. Coronavirus infections were found in 5.7 percent of the participants, and 14.3 percent of the respondents' family members were also affected.</p> <p>Other research (Clemens et al., 2020; Thakur et al., 2020; Chandir et al., 2020) found that anticipating the pandemic's negative influence on psychological well-being was strongly linked to the pandemic's negative impact. This study not only confirmed earlier findings, but it also discovered the strongest link between the pandemic's negative impact and academic studies (Agarwal & Kaushik, 2020; Ferrel & Ryan, 2020; Sierpina, 2020; Sun et al. 2020).</p>

Table-9: Themes for Analysis

Preliminary Codes	Broader Themes
<ol style="list-style-type: none"> 1. Drastic transmission of coronavirus 2. Fear of COVID-19 infection 3. Declining health status of the family members 	Overall disease burden
<ol style="list-style-type: none"> 1. Age-sex variation 2. Residential factors 3. Family size and living patterns 	Socio-demographic factors
<ol style="list-style-type: none"> 1. Education level 2. Online education system and poor internet connection 3. Career and professional insecurity 	Academic interruption and Career concern
<ol style="list-style-type: none"> 1. Family income 2. Unemployability 3. Losing part time job 	Financial instability
<ol style="list-style-type: none"> 1. Lack of social gathering 2. Social isolation and communication gap among the students leading to extensive social media use 3. Smartphone addiction 4. Smoking 	Addiction to social media and other recreational agents

B. Figures/ Graphs:

Fig-1: PRISMA Flow chart of the systematic review

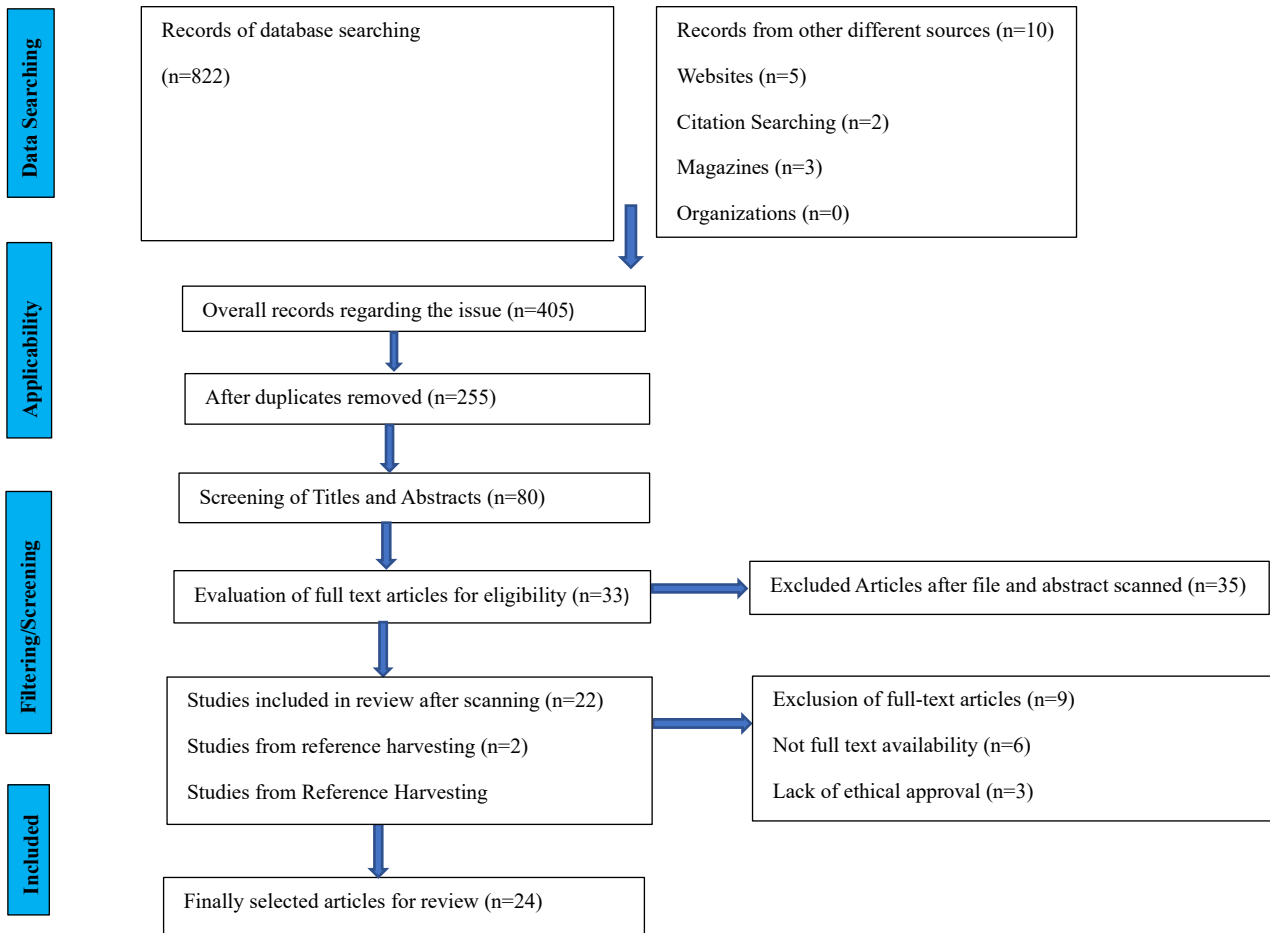


Fig-2: Anxiety levels among university students during Pandemic (GAD-7 scale)

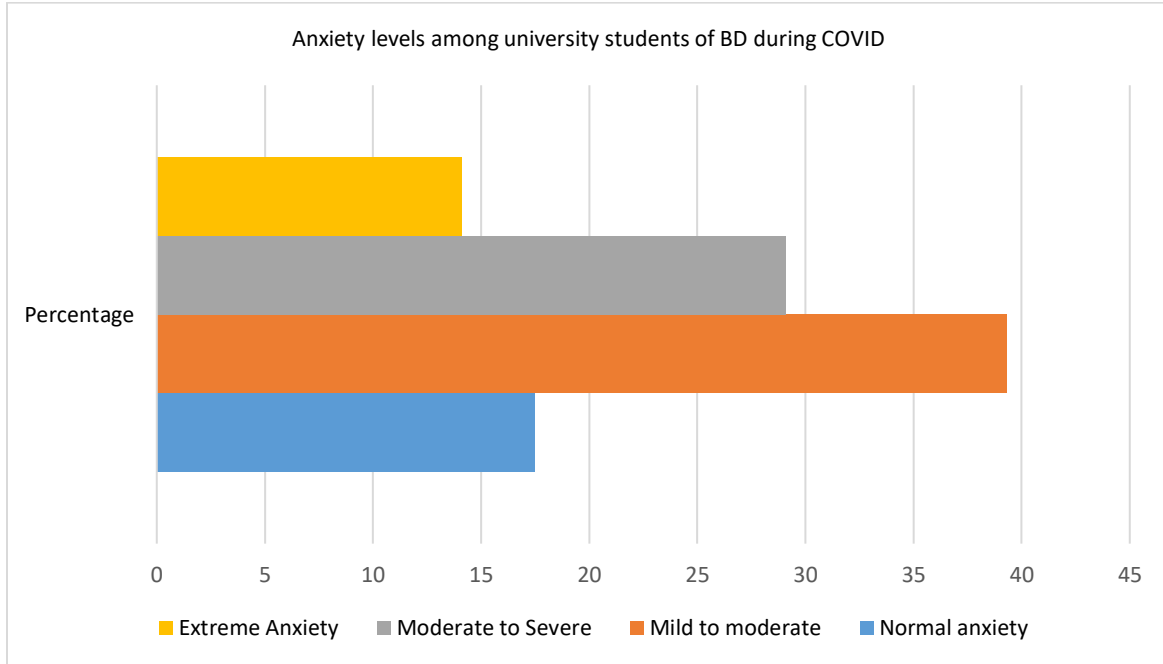


Fig-3: Contrast between anxiety and depressive disorders of the university going students of Bangladesh (Hossain, Abu Hasanat Mohammad Kishowar et al., 2020)

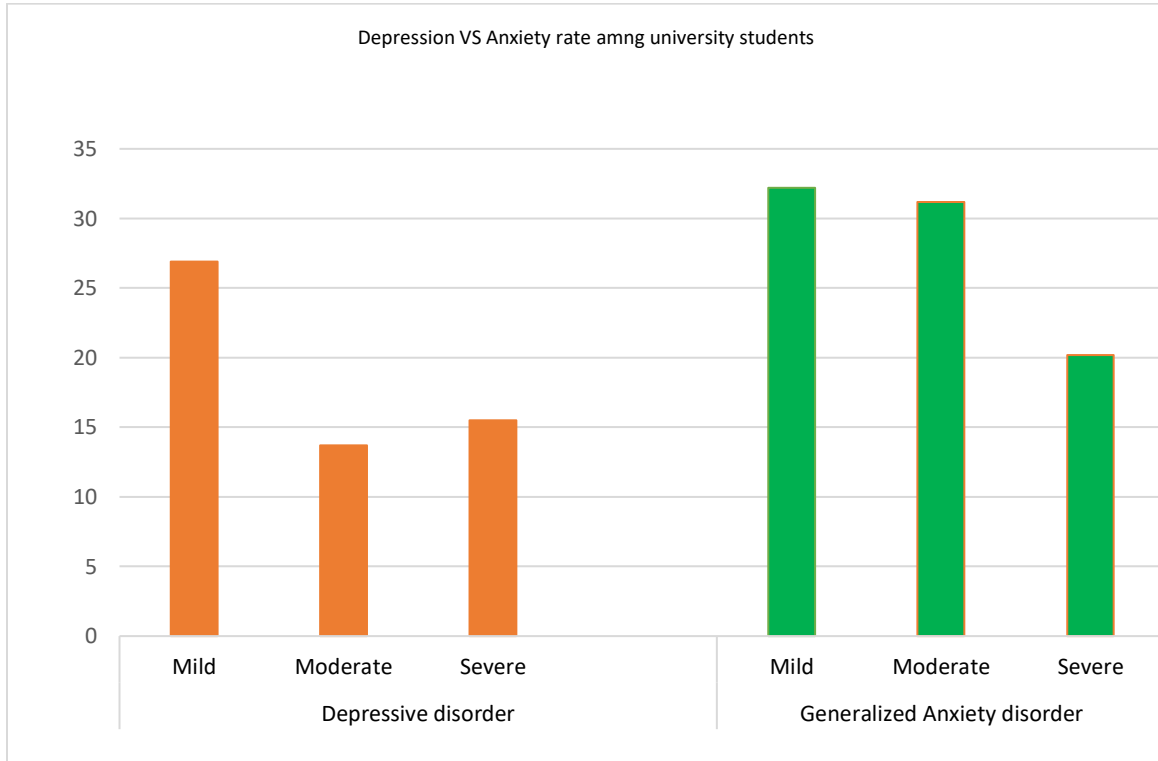


Fig-4: Suicidal ideation among university students: causative confounders (Mamun et al., 2020a)

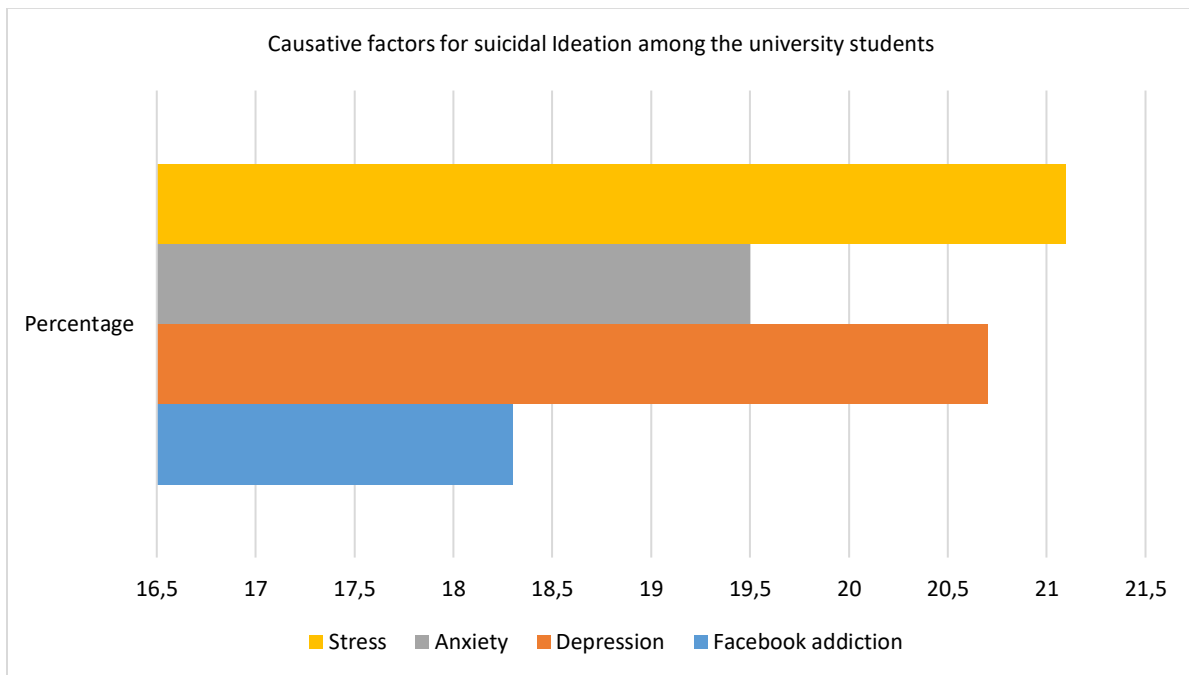


Fig-5: Prevalence of mental deterioration among different categories of students (%) (Jahan et al., 2021a)

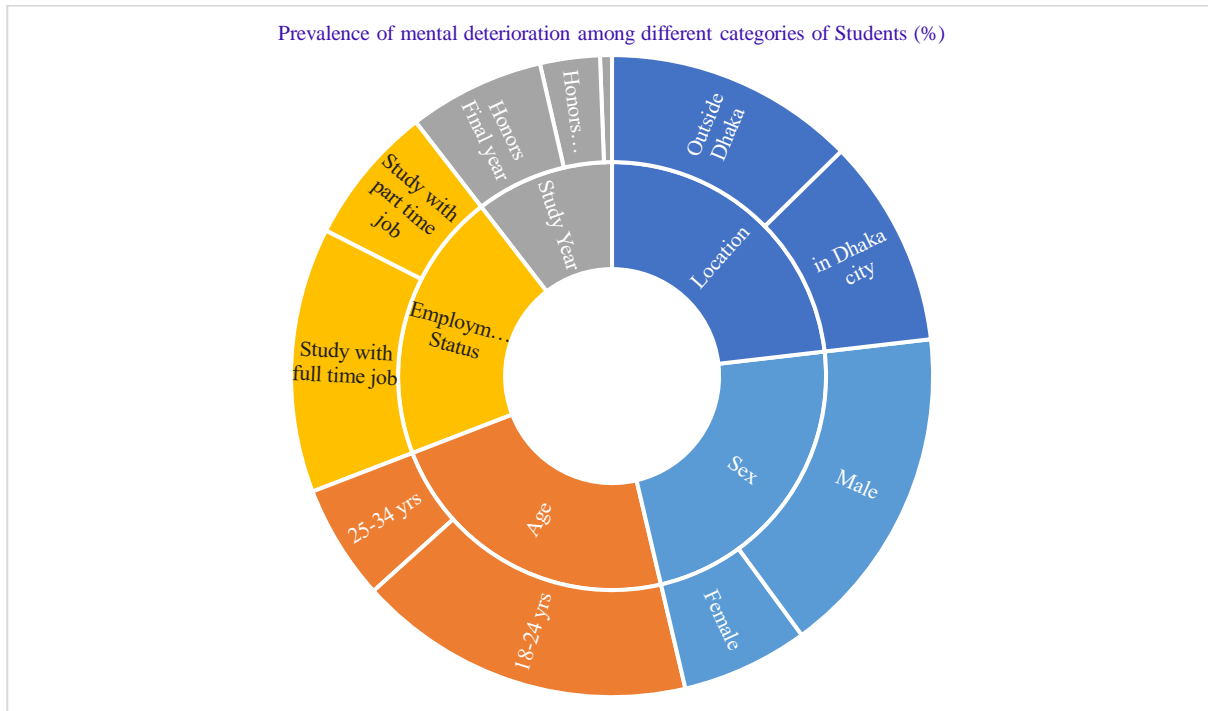


Fig-6: Level of Attitude among Boys and Girls regarding the Pandemic (Male-Female Ratio)

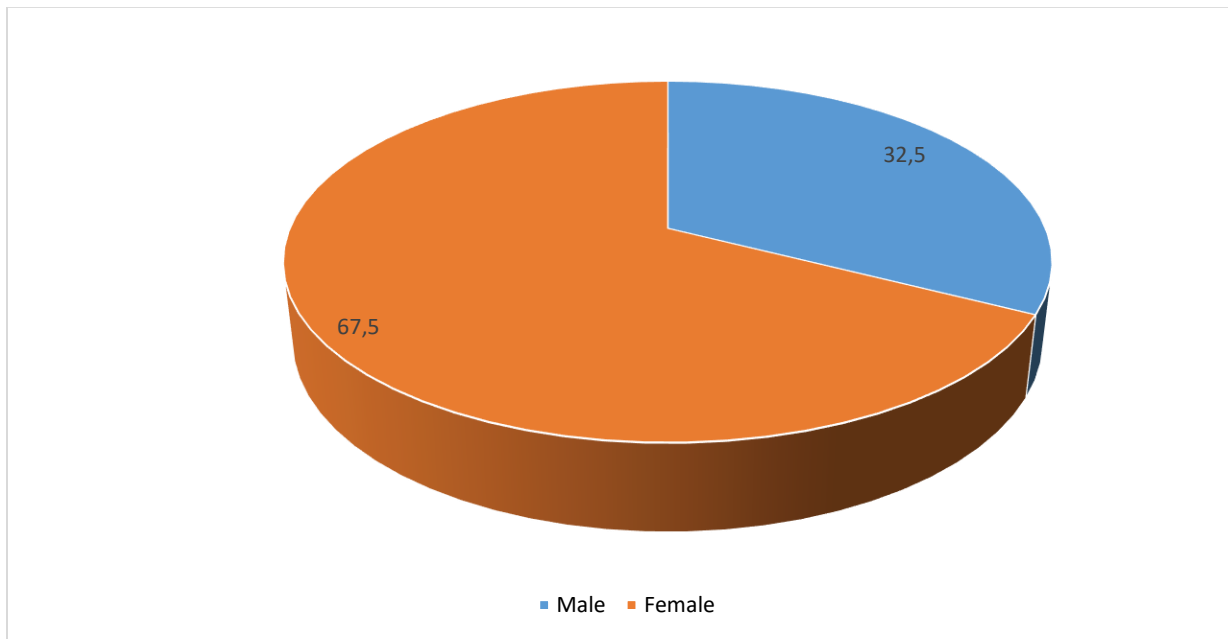


Fig-7: Vaccine Acceptability Rate among university students in Bangladesh (%)

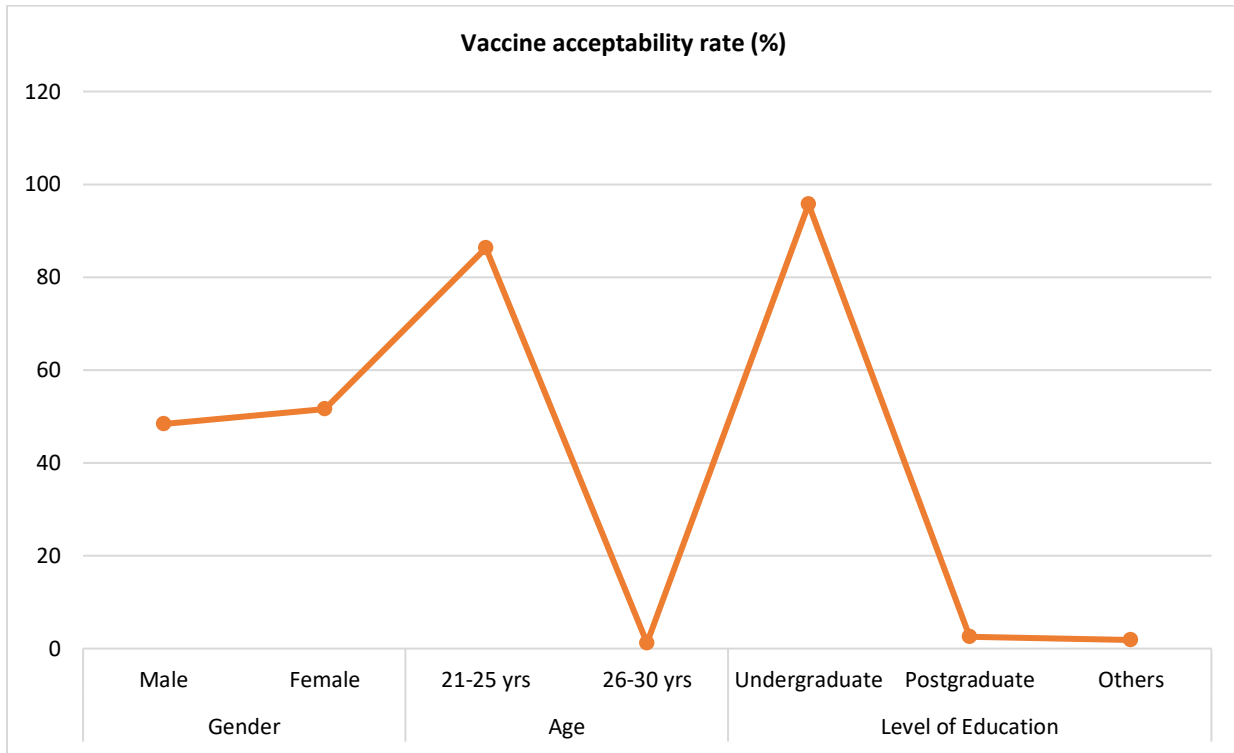


Fig-8: Several Constraints leading to mental deterioration of Bangladeshi Students (Hoque et al., 2021b)

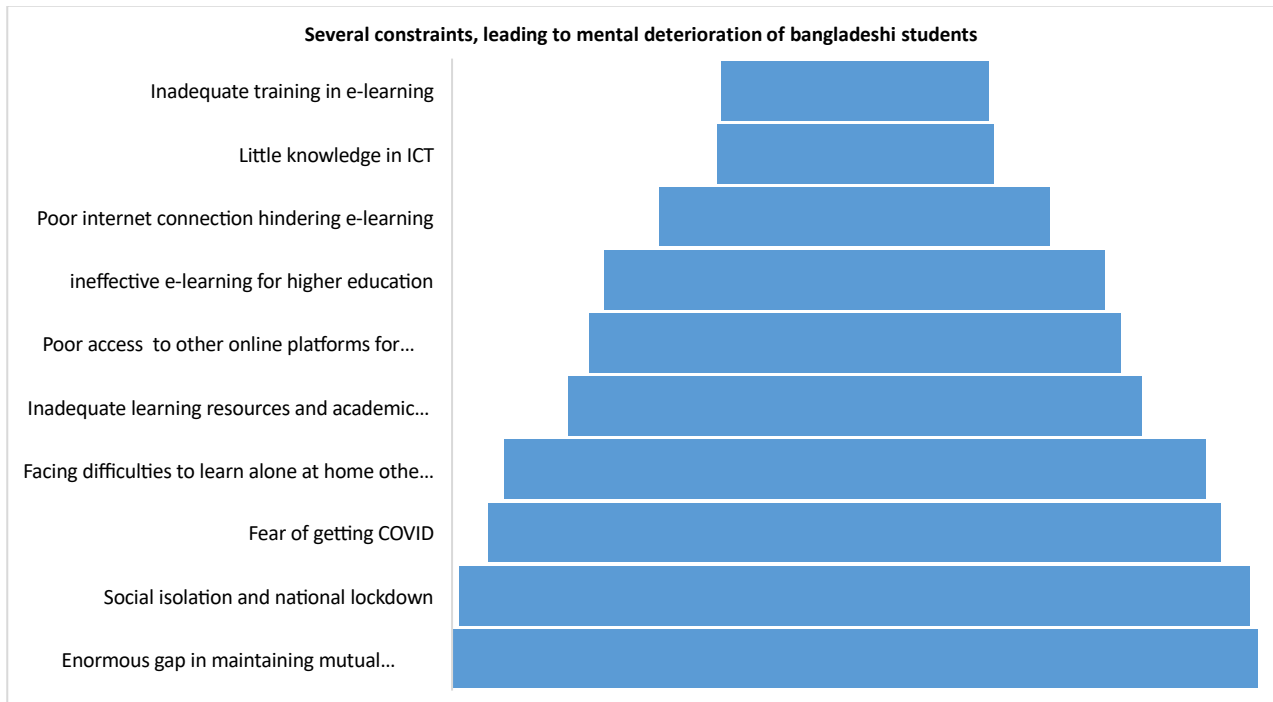


Fig-9: Percentage of different mental disorders among university students of Bangladesh (Rahman, Md Mostafizur et al., 2021)

