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The Prevalence of Mental Health Issues among the Tertiary Level Students of Bangladesh: A Qualitative Study on Public Universities of Bangladesh

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Abstract: A comprehensive examination of mental health issues among Bangladeshi college students is essential given the increasing rates of incidence. The purpose of this qualitative study

was to examine the mental health concerns experienced by Bangladeshi public university students, identify the causes, and evaluate their support networks. To get insight from the students at five major public institutions in Bangladesh, the study used phenomenological research methods such as semi-structured interviews and focus group discussions (FGDs). To guarantee gender, academic, and socioeconomic diversity, participants were purposively sampled and their size was 360. Thematic analysis identified mental health-related patterns and themes in the data. Academic pressure, financial restrictions, and family expectations were the main causes of anxiety, sadness, and stress in tertiary students. Furthermore, mental health stigma, ignorance, and poor university mental health services worsened these concerns. The survey also showed that most students used informal networks like friends and family for emotional support, highlighting a shortfall in mental health assistance. The research emphasises the importance of public universities implementing robust mental health policies and support services. Regular mental health screenings, counselling, and awareness programs can enhance student well-being. These findings shed light on the current state of student mental health in Bangladesh and offer valuable insights for policymakers, university leaders, and mental health experts to create tailored initiatives to address the mental health challenges faced by college students. By addressing these challenges, the project hopes to create a friendly and inclusive academic atmosphere that improves students' mental health and academic performance.

Keywords: Anxiety, Bangladesh, depression, distress, health, mental stress, tertiary education, psychological.

Introduction

Mental health issues among students in higher education have become a significant global public health concern, as awareness of the specific challenges they face continues to grow. The situation in Bangladesh is especially concerning because of the country's fast growth in higher education and the accompanying increase in the number of students. An increased risk of mental health issues including anxiety, depression, and stress is associated with the adjustment to university life, as well as with the demands of coursework, financial strains, and social obstacles (Khan & Haque, 2021; Rahman et al., 2022). Studies reveal that mental health problems are widespread among college students worldwide, affecting their learning outcomes, interpersonal connections, and general well-being (Auerbach et al., 2016). Nonetheless, there aren't many thorough studies that address this problem in Bangladesh, especially when it comes to public colleges. This gap in the literature reveals a need for research to investigate the prevalence and root causes of mental health struggles within the Bangladeshi tertiary student population (Hossain et al., 2019).

According to Patwary et al. (2020), the problem is exacerbated by the negative perceptions of society, limited understanding of mental health, and inadequate mental health support offered by educational institutions. These obstacles make it harder for students to ask for assistance and support, which exacerbates their mental health issues. Moreover, these problems have been made

worse by the COVID-19 epidemic, which has left students feeling even more stressed and unsure (Ahmed et al., 2020).

By using a qualitative method in order to examine the mental health issues experienced by students in Bangladeshi public universities, this study sought to close this gap. This study aimed to assess the current support systems in place at universities and pinpoint important elements that contribute to the mental health problems of these students by learning about their lived experiences. The findings are likely to guide the development of effective treatments and policies to enhance mental well-being among tertiary level students in Bangladesh.

Research Problem

Tertiary students' mental health concerns are a major public health issue, impacting their academic performance, social interactions, and well-being. University students in Bangladesh are disproportionately affected by mental health issues such as anxiety, depression, and stress, however, there is a lack of research and inadequate treatment for these challenges. Over 50% of university students globally have mental health issues, with comparable levels in Bangladesh (Mamun et al., 2022). Despite this, the literature on these topics at Bangladeshi public universities is scarce. Students' mental health issues worsen with university life, academic pressure, financial restraints, and family expectations (Khan & Haque, 2021). Mental health stigma, lack of information, and limited university mental health resources prevent students from seeking treatment, worsening their symptoms (Patwary et al., 2020). Research indicates that the COVID-19 pandemic has intensified these worries, leading to increased levels of anxiety and stress among students (Ahmed et al., 2020).

This qualitative study examines Bangladeshi public university students' mental health issues to address this research vacuum. This research attempts to inform effective mental health interventions and policy for tertiary students by researching their lived experiences and identifying relevant variables.

Research Focus

The aim of this study was to determine how common mental health problems are among Bangladeshi university students at the undergraduate level and what were the root causes. By the use of a qualitative methodology, the study seeks to comprehend the real-life experiences of these students, pinpoint important stresses like financial limitations, social expectations, and academic pressure; and assess the current mental health support systems at universities. Based on recent research by Faisal et al. (2020), a significant proportion of university students worldwide are grappling with severe mental health challenges. This trend is mirrored in Bangladesh as well (Khan & Haque, 2021; Mamun et al., 2022).

Research Aim and Questions

This research sought to investigate the causes and consequences of mental health issues among university students in Bangladesh.

- a. To explore the precise causes behind the mental distress of public university students in Bangladesh.
- b. To determine the nature and patterns of mental health problems among various public university students in Bangladesh.

Literature Review

The literature review is crucial for contextualising the prevalence of mental health issues among tertiary level students in Bangladesh, identifying gaps in existing research, and emphasising the distinctive socio-economic and cultural factors that influence these students (Khan & Haque, 2021; Mamun et al., 2022). Effective interventions and policies can be guided by an understanding of these aspects.

Approximately 50-60% of university students in Bangladesh are experiencing the effects of a disadvantaged education system, intense fear of session jams, and severe psychological distress. The COVID-19 pandemic has further exacerbated these issues, causing delays in graduation for many students in public and national universities, with graduation now taking an average of 5 to 6 years to complete. This extended period of study has left students without income or job opportunities, leading to heightened levels of anxiety and depression. Research has shown that students who are separated from their families are particularly vulnerable to mental health issues, with individual family income also playing a role in exacerbating these challenges (Sifat et al., 2023).

Mamun et al. (2022) performed an offline survey at Jahangirnagar University using a sample of 590 undergraduates in order to determine the prevalence and risk factors for depression, anxiety, and stress among Bangladeshi university students. He said that the risk factors for depression included being from a poorer socioeconomic background, smoking cigarettes, and doing less exercise, whereas the risk factors for anxiety and stress included being in a committed relationship. Students are admitted to a new university platform after passing their higher secondary exams. In that setting, they began to encounter various academic, social, and financial issues. Many of the students struggled to adapt to their new surroundings and got mentally distressed.

Another research conducted at Jahangirnagar University found that mental health is associated with the student's background characteristics. In Bangladesh, it's a serious issue, but most of the public universities ignore this (Akhter et al., 2019). According to the authors, most public university students are from rural areas and nuclear families, and sometimes students have less opportunity to study their desired subjects or disciplines. Families put pressure on them to change their minds to study another discipline. The author also identified gender and age-based depression, anxiety, and stress levels and recognised the possible risk factors (Kabir et al., 2019).

Faisal et al. (2020) with his research fellow, identified that students from countries with lower per income growth are more prone to have mental health issues including anxiety and depression.

The types and even the causes are mostly unknown. They concentrated on various models of depression in SUST students during their research. She demonstrated the high tendency of suicide, involvement in illegal activities, and inability to achieve academic goals, focusing primarily on academic and familial concerns, which are the root causes of university students' mental distress (Chowdhury & Tanim, 2016).

Both in Bangladesh and worldwide, mental health issues have emerged as a major public health challenge. These forms of mental disease tend to be relatively common among students, especially freshers in university. In light of the results, it is clear that there is a need for intervention programs, together with sufficient and suitable supporting services. In Bangladesh, first-year university students often have to reside in cramped dormitories, sharing a single large room with up to 100 other students for a minimum of six months. Typically, students who live on campus face ragging and other problems, which make them more susceptible to mental illness (Hossain et al., 2019).

Research Gap

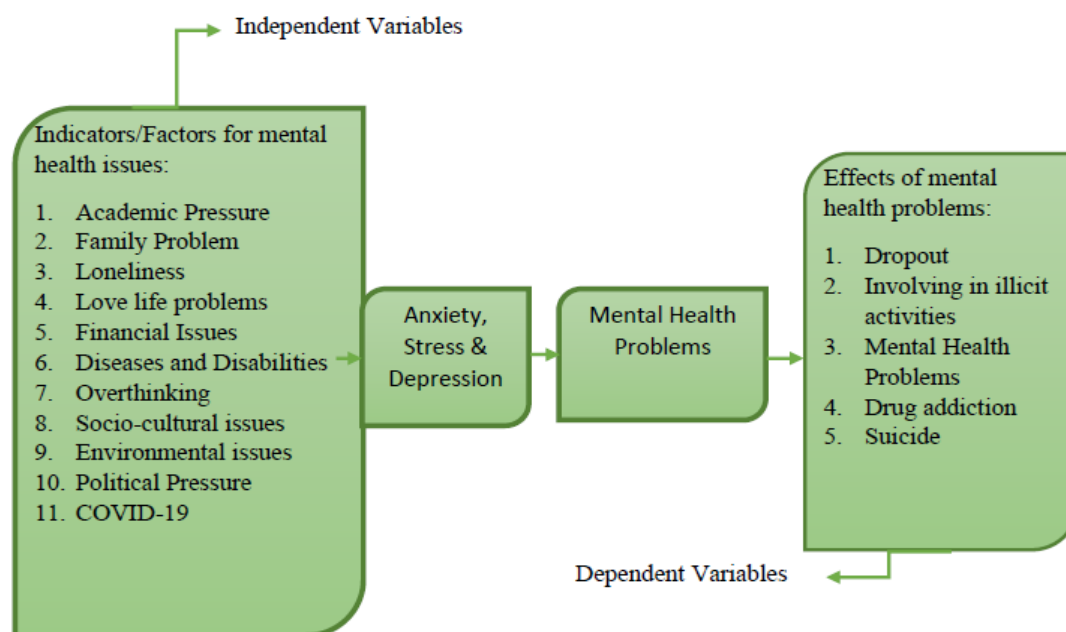
Despite the prevalence of mental health concerns among tertiary-level students worldwide, there is a significant lack of comprehensive research on mental health issues among public university students in Bangladesh (Mamun et al., 2022). Existing studies focus on mental health in general populations or private institutions, ignoring the special issues that students experience at public universities. Furthermore, the impact of socioeconomic issues, academic demands, and the efficiency of institutional support systems has not been fully investigated (Sifat et al., 2023). This study sought to fill this vacuum by giving qualitative insights into the mental health difficulties faced by this cohort.

Conceptual Framework

Through a review of relevant literature, a conceptual framework was established in accordance with the research title, research objectives, and research questions. This conceptual model illustrates the relationship between the independent and dependent variables using a cause-and-effect framework. An independent variable is one whose values are simply assumed to exist and are not troublesome in analysis. Independent variables are those that do not depend on other variables and whose effect upon the dependent variables should be understood and defined by Huang et al. (2020). In this research, the independent variable is the 'causes and indicators of mental health issues (Depression, anxiety, stress) among graduate students'. The dependent variables are the effects of these mental health issues on the lives of students.

Figure 1

Conceptual Framework



Source: Authors' own development.

Hypothesis

A research hypothesis is a statement of expectation or prediction that will be tested by research. In this research the independent variables are the possible risk factors (academic pressure, family problem, financial issue etc.) of mental health problems of students and dependent variables are the consequences of mental health issues (dropout, drug addiction, suicide) which has a deep connection among the independent and dependent variables.

Research Methodology

General Background

This study used a qualitative research technique to investigate the prevalence and underlying causes of mental health concerns among tertiary-level students in Bangladeshi public universities. The study's goal was to get in-depth insights into the students' experiences through a semi-structured interviews and focus group discussions, as well as to identify important stressors impacting their mental health.

Research Design

To achieve the research's aims and objectives, a quantitative research strategy was utilised. In addition, the technique for questionnaire design, sampling, and data gathering is described.

Research Method

The research process utilised a quantitative approach to effectively reach the research objectives. This study delves into various risk factors associated with mental distress among university students, exploring the interconnectedness of stress, anxiety, and depression with outcomes such as drug abuse, university dropout, engagement in illegal activities, suicidal thoughts, and more. Qualitative data gathered was subjected to thematic analysis, a technique used to identify the key themes emerging from the data.

Source of Data

This article drew on both primary and secondary sources for its information and statistics. Researchers mostly relied on in-depth interviews and questionnaires to compile their study's primary data. Conducting interviews is an excellent method to gather insightful information directly from individuals knowledgeable about the topic. In-person in-depth interviews were carried out to get insight into a respondent's perspective and collect information. We gathered our secondary data from a wide variety of publications, including journals, articles, and publications. The internet is also used to collect secondary data and modernize the research data.

Study Area

The selected area of this study was the 9 major tertiary educational institutions of Bangladesh including: Islamic University Bangladesh, Khulna University of Engineering & Technology, Khulna University, Patuakhali Science & Technology University, Mawlana Bhasani Science & Technology University, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur, Sher- E- Bangla Agricultural University, Mymensingh Medical College and National Universities.

Sample Selection

Samples for this study were purposively chosen from different students from the university's numerous departments. A sample size of 360 students (180 male students and 180 female students) was purposively chosen from the nine educational institutions students (population). A purposive sample is a non-probability sample selected based on the characteristics of a community and the study's purpose. This implies that the researcher selects persons and venues for study based on their ability to contribute to an understanding of the research topic and the core phenomena under investigation.

Data Collection Tools and Techniques

Multiple data collection tools have been used to collect data from the respondents. Both a questionnaire and in-depth interviews as tools to gather data from specifically chosen respondents were used. In-depth, face-to-face interviews were performed to get insight into respondents' perspectives and gather information. Multiple case studies were gathered from respondents in order to provide detailed data, and interviews were conducted according to a case study program.

Data Analysis

A quantitative method was utilised to evaluate each mental health indicator or variable. Quantitative analysis is a method that employs mathematical and statistical modelling, measurement, and empirical investigation to comprehend behaviours. Quantitative data has explained through graphs and columns. For analysing the qualitative data, the thematic analysis has been applied in the research process as it helped identifying the patterns and theme of the qualitative data. The chi-square tests were performed to find out the bivariate relationship and their level of significance.

Data Presentation

The data collection process involved obtaining responses from participants through a combination of structured and unstructured questions. This segment of the study presented key research findings using numerical figures, graphical representations, and in-depth case study analyses. The data were analysed and presented as mean values along with standard error (SE). Statistical analysis using a one-way analysis of variance (ANOVA) indicated a significant difference among the groups ($F_{10, 88} = 2.6, p < 0.01$). Post-hoc testing using the Tukey honestly significant difference (HSD) method revealed that means with the same letter(s) within a column are not significantly different at a confidence level of $p \leq 0.05$.

Ethical Consideration

Before the interview, all respondents were informed about the study and its objectives to ensure understanding. Verbal consent was obtained from each respondent prior to data collection. Strict confidentiality measures were in place to protect respondents' privacy.

Challenges and Limitations

Mental health problems pose significant challenges and are a delicate subject. As a result, throughout the course of this research, the researchers faced obstacles including:

- a. The selection of students having mental health issues from the whole university campus was really challenging. This was due to the fact that the goal of this study required the selection of both male and female students from each and every department.
- b. The first time we tried, the students we asked were unwilling to tell us anything about their personal lives and experiences. However, when they realised the ethical concerns connected with this research, they consented to serve as respondents.
- c. Time limitation is a big factor to consider.
- d. There was no specific budget for the research.

Research Findings and Results

Several Mental Health Issues Among the Students of Islamic University

The frequency of mental health issues among students of public universities in Bangladesh are quite high, and the students experience a wide range of mental distresses. They are suffering from stress, anxiety, and depression, and their levels of distress associated with these conditions differ. Eleven parameters were identified in order to gather data from students in various departments, and when the data was collected, it was evaluated systematically using statistical methods. The ratio of male to female students with mental health issues varied in this analysis. Numerous risk factors, including academic environment and activities, socio-cultural issues pertaining to the university, financial issues, love and relationships, family problems, loneliness and overthinking, university political issues, and a variety of diseases and disabilities are causing mental health distress among students at the universities. COVID-19 is still a concerning issue for the vast majority of students, since it consumes nearly two years of their lives, and some students face financial difficulties and a decline in intimate relationships. Due to COVID-19, all universities and educational institutions were closed for about 1.5 to 2 years, resulting in significant session jams, sluggish academic procedures, and rushed exams due to inadequate class time. Due to the pandemic, many students have lost relatives, family members, loved ones, and close friends. Nevertheless, many students continue to suffer from post-COVID syndrome. Besides, the research reveals that students at different universities are experiencing academic discomfort due to indiscipline, inadequate facilities, and lack of regulation, among other factors. The majority of students at public universities, come from rural areas and nuclear families. Due of their low familial financial standing, they face financial problems. The majority of students stated that their families could not adequately cover their monthly expenditures. Love and relationships are a significant contributor to students' emotional discomfort. The study reveals that both married and unmarried students face a number of challenges relating to this factor. Numerous students suffered from loneliness and obsessive dilemma. As a result of its socio-cultural concerns, internal-external environmental issues, and politics, the university's environment was a source of stress for a great number of students. Students had mixed feelings about the university's sociocultural atmosphere due to various reasons. Additionally, the student body includes individuals with physical disabilities, chronic illnesses, and mental health conditions. Due to this form of sickness, they are also considered as mentally distressed students in this study report. Many students defined their mental health concerns in various ways, based on their exposure to various risk factors. According to the students' statements, they were admitted to new universities in order to complete their higher studies and compete in the best job markets; yet, when they get emotionally troubled as a result of these challenges, their pursuit of higher education is hampered or terminated. In addition, some students suffer from mental illness, and each year so many students from prestigious public universities commit suicide. The research findings indicate that each student's mental health issues cannot be boiled down to a single risk factor. Multiple factors can influence the distress level of an individual.

Table 1

Percentages of Students in Different Educational Institutes of Bangladesh Suffer from Various Mental Health Problems

Parameters	Total respondent	Respondent in percentage
Academic pressure	360	10.4 ± 2.5 ab
Family problem	360	9.4 ± 1.8 ab
Loneliness	360	11.0 ± 2.3 ab
Love and relationship affairs	360	9.6 ± 1.2 ab
Financial difficulties	360	9.4 ± 1.1 ab
Disability and disease	360	4.5 ± 0.6 b
Overthinking problem	360	14.5 ± 2.2 a
Socio-cultural issues	360	6.9 ± 1.5 ab
Environmental issues	360	5.5 ± 1.4 b
Political issues	360	7.2 ± 1.9 ab
Covid-19 issues	360	11.6 ± 1.9 ab

Note. Data were collected from nine educational institutes located in different regions of Bangladesh. Data expressed as mean ± SE. Means within a column followed by same letter(s) are not significantly different by Tukey HSD post-hoc test at $p \leq 0.05$. (ANOVA: $F_{10, 88} = 2.6$, $p < 0.01$).

The following Table 1 represents the proportion of students who exhibit various mental health risk factors. On the basis of the 360 selected respondents, these statistical data have been compiled. Eleven distinct parameters are developed in order to comprehend the patterns and types of problems of students. From the table we see the variations in proportion to different parameters. Analysing all the parameters, the parameter named overthinking problem has been recorded with the highest responses. Besides, disability and disease parameter hold the lowest percentage of responses. Responses in overthinking problem is about 14.5% where responses in disability and disease parameter is only 4.5%.

The other parameters include Academic pressure, Family problem, Loneliness, Love and relationship affairs, financial difficulties, socio-economic issues, environmental issues, political issues and COVID-19 have been recorded with the responses accordingly - 10.4%, 9.4%, 11%, 9.6%, 9.4%, 6.9%, 5.5%, 7.2%, 11.6%. In a study examining various stressors, it was found that the highest levels of psychological distress were observed in individuals reporting symptoms of overthinking. Other stressors such as academic pressure, family problems, loneliness, love and relationship affairs, financial difficulties, socio-cultural issues, political issues, and concerns related to the COVID-19 pandemic did not show significant statistical differences in reported responses. These parameters show relatively same result in almost all of the public universities and colleges in Bangladesh. Meanwhile, Following the parameter Environmental issue follows the parameter disability and disease which are marked as the lowest responses recorded parameters. These provide statistically same database.

Table 2

Comparison of the Percentages of Students among Nine Educational Institutes of Bangladesh Suffer from Various Mental Health Problems

Parameter	Educational institute									Chi statistic		
	IU	NU	MBSTU	PSTU	SAU	BSMRAU	KUET	KU	MMC	df	χ^2	p
Academic pressure	13.0	5.5	10.8	11.1	5.2	2.9	4.0	20.7	26.8	8	47.5	< 0.001
Family problem	8.8	5.1	9.0	10.7	9.5	6.4	26.2	15.2	9.2	8	28.9	< 0.001
Loneliness	11.3	5.2	5.1	10.4	14.6	8.2	26.1	3.3	15.7	8	37.5	< 0.001
Love and relationship affairs	10.8	12.0	8/8	9.0	20.5	6.3	8.6	15.0	9.0	8	14.0	< 0.05
Financial difficulties	9.9	11.2	14.9	9.2	17.1	15.9	8.7	7.6	5.5	8	10.6	0.22
Disability and disease	6.9	6.4	9.4	6.4	11.9	13.3	18.3	15.9	11.6	8	13.6	0.09
Overthinking problem	10.0	9.2	10.7	9.0	8.7	12.4	14.2	22.2	3.6	8	17.4	0.08
Socio-cultural issues	22.6	9.8	12.3	21.0	7.8	8.7	0.0	5.2	12.6	8	22.0	< 0.01
Environmental issues	17.1	24.5	10.3	21.1	3.3	11.0	0.0	0.0	12.7	8	22.8	< 0.01
Political issues	8.6	23.9	25.3	10.0	14.9	12.5	0.0	0.0	4.8	8	24.3	< 0.001
Covid-19 issues	7.2	16.6	9.7	10.0	7.8	23.4	7.1	6.2	12.0	8	22.4	< 0.01

Note. Total respondent for each of the educational institute is 40.

Patterns and Factors contributing to the Prevalence of Stress, Anxiety and Depression Among the University Students in Bangladesh

Academic Pressure. Table 2 illustrates that there are significant differences among the educational institutions in terms of parameter-1: academic pressure. Here, the mostly affected institution is Mymensingh Medical College (MMC). The students from this medical college provide the highest responses in terms of their academic pressure with a percentage of 26.8%, where the lowest responses have been recorded from Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur (BSMRAU) which is only 2.9%.

The other educational institutions have also notable percentage of academic pressures. Here, Khulna University shows the second highest percentages in terms of academic pressures with 20.7%, Islamic University, Bangladesh shows 13% of their students have academic pressures, Mawlana Bhasani Science & technology University has been recoded with 10.8%, Patuakhali Science & Technology University has been recoded with 11.1%, National Universities have only 5.5% followed by Sher- E- Bangla Agricultural University and Khulna University of Engineering & technology with accordingly 5.2% and 4%.

A significant portion of the sample population has reported symptoms of depression, anxiety, and stress in relation to their academic pursuits. Analysis of the statistical data depicted in figure-1 shows that approximately 10.4% of students are currently grappling with various forms of academic distress. Due to the COVID-19 pandemic, the majority of departments at different public universities are experiencing session backlogs for one to two years. However, neither the COVID-

19 issue nor the session jam issue is the problem, the majority of students struggle with their department's academic environments. They face mental health concerns as a result of a lack of facilities and poor lecture quality. In his Master's Session, a student from the Social Science Faculty remarked,

"We are completing graduations and most probably we will receive our certificates as soon as possible, but we haven't received any quality education from this department. There were no research-based studies and, as far as I know, it's happening in almost all the departments of this university. A university is a place for higher education, a place for research, a place to invent or to discover new things by doing research. But we are reading and writing to pass the semester. We received certificates but we failed to compete in our respected job markets. Besides there are less student friendly facilities like- we have inadequate classrooms, laboratories, seminar libraries etc."

Family Problems. Figure 1 suggests that 9.4% of the students from various educational institutes have been suffering from family pressures as their reason behind mental discomforts. The Figure -2 shows the variations in different universities in terms of family pressures. In terms of family pressures, Khulna University of Engineering & technology ranks first with 26.2% of responses. Then comes Khulna University with 15.2%. In the third position we have Patuakhali Science & Technology University with 10.2%. Sher- E- Bangla Agricultural University, Mymensingh Medical College and Mawlana Bhasani Science & technology University has a very close responses accordingly 9.5%, 9.2% and 9.0% which is followed by Islamic University Bangladesh with 8.8% of responses. Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur has a bit less of 6.4% responses. And surprisingly National Universities have encountered the least amount of family pressures with only 5.5% of issues.

The findings of this study reveal that family pressure plays a significant role in contributing to depression among individuals. Various forms of family pressure, such as the need to secure a financially stable job, high expectations for career advancement, and the burden of providing financial support for both immediate and extended family members, as well as one's own educational expenses, were identified as key factors influencing mental health. The lack of support from family members, which can stem from issues of education or conservatism, may also contribute to feelings of depression. Furthermore, the study indicates that familial dynamics, such as parent separation or remarriage, as well as the loss of loved ones, can exacerbate emotional distress among students. Additionally, issues related to poverty and illiteracy within the family can hinder effective communication and support, further contributing to feelings of isolation and sadness in students. The presence of heavy restrictions within the familial environment may lead individuals to withdraw from communication with their parents, inhibiting their ability to share their emotions and seek help for their mental health struggles. Overall, these findings underscore the complex interplay between family dynamics and mental illness among university students.

Loneliness. The Figure 1 depicts that 11% of the students in various public universities and colleges are experiencing loneliness problems which are leading them into mental dilemma. The

figure-2 shows that Khulna University of Engineering & technology has the largest number of victims with 26.1% and Khulna University has the lowest number of 3.3%. The students from other institutions like- Mymensingh Medical College, Sher- E- Bangla Agricultural University, Islamic University Bangladesh, Patuakhali Science & Technology University have been recorded with significant number of loneliness problem accordingly 15.7%, 14.6%, 11.3% and 10.4% of responses. Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur has 8.8% where the students from Mawlana Bhasani Science & technology University and National Universities are less mentally disturbed with amount of 5.1% and 5.2% of responses.

Due to several issues, university students are suffering from loneliness problems. Most of the students claimed that they were lonely because of family problems and a lack of quality friends. A student of PSTU said,

"We have so many formal friends who always show off, but we never find them when we need their support. Many introverts fail to express their thoughts, but we are not introverts. We can share thoughts and feelings, but our friends have less time to think about us. We have many friends. We gossip together, enjoy, hang out, study, but there are a minor number of friends who are interested in hearing about our deep emotional problems or thoughts."

Love & Relationship Affairs. The Figure 1 shows that 9.6 % of the students in various public universities and colleges are facing love and relationship problems. From the figure-2 we can visualise that there are major differences in various tertiary level educational institutions in Bangladesh. The study has found that the students from Sher- E- Bangla Agricultural University have shown the highest percentages of mental distress with 20.5%. Khulna University holds the second position with 15%. Under this parameter, National Universities have 12% of victims and Islamic University, Bangladesh has 10.8% of responses. With slightly less issues we have Patuakhali Science & Technology University, Mymensingh Medical College, Mawlana Bhasani Science & Technology University and Khulna University of Engineering & Technology with accordingly 9%, 9%, 8.8% and 8.6%. Here, Patuakhali Science & Technology University and Mymensingh Medical College have shown the similar result. Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur has the lowest number of victimized students with only 6.3% of responses.

University students in Bangladesh often engage in romantic relationships. However, this could be a source of discomfort for both male and female students. The problems might be related to family issues or personal issues. The study revealed that females were more vulnerable than males to this factor of mental health problems. Many of the students were confused about their relationship with their partners. A majority of the students claim that their relationship hasn't been sustained for a long time and got heartbroken, but the problem is they couldn't forget the old memories, which made them mentally weak, and a number of students argued that long distance in relationship was another reason for this type of breakup or heartbreak issues in many cases. This is an uncertain condition of a love affair in which many students accept the harsh truth of losing their partners and have been mentally distressed. And there is a large portion of students who have been cheated by their boyfriend or girlfriend. It has become a very common issue

nowadays. Students fall into fictitious love or relationships for the sake of temporary pleasure, and when the illusion fades, one person ends the relationship and the other suffers from mental illness. That's why students who are serious about relationships are always under pressure to think about the future of their relationship. A 3rd year female student claimed,

"We have had a very good relationship for about six months. We hang out, enjoy and have been physically intimate several times. After six months, he betrayed me and committed to another girl. I really loved him, but his betrayal attitude gives me pain all the time."

Many female university students get married because of family pressures. Many of those female students claim that they are being dominated by their partners. They are subjected to sexual domination and physical abuse by their partners, leading to many students feeling unable to pursue their education due to these oppressive relationships. A female student from Patuakhali Science & Technology University claimed,

"I had very good results in previous semesters, but after getting married, my partner forced me to have a baby, which resulted in my bad CGPAs in the semesters as I had to take care of my baby and do household work as well as satisfy my husband and family members."

Financial Difficulties. The Figure 1 shows that 9.4 % of the students in various public universities and colleges are facing financial difficulties. As per figure-2, the students of Sher- E-Bangla Agricultural University are experiencing the most financial difficulties with 17.1%, followed by Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur with 15.7%. With 14.9%, Mawlana Bhasani Science & Technology University ranks third in terms of financial difficulties faced by students. National Universities have 11.2% and Islamic University, Bangladesh covers 9.9% of victims. While Patuakhali Science & Technology University, Khulna University of Engineering & Technology and Khulna University have found 9.2%, 7.6%, 5.5% accordingly. Mymensingh Medical College has the least number of victims with only 5.5% of responses.

The financial problem is the leading indication of distress among public university campus students. The male as well as female students might get depressed when they consider their own lives and families. They believe they need to depend on their families and significant others if they are not financially stable. The majority of students at public universities come from rural areas and many are from lower middle-class households. So, all the students are not getting full financial support from their families. Due to their families' poor financial situation, they were unable to meet their monthly expenses on a consistent basis. Some of the students claim that in the early days of university life they would receive financial support from their families, but now the situation has changed and they are not getting any kind of support from their families.

The students who are not getting financial support from their families and who support their families by working part-time or full-time jobs or freelancing in addition to their studies are the most challenging students in universities. Working hard to earn money for both themselves and their families put immense stress on them, resulting in them distancing themselves from their

academic performance. With low academic performance, they often feel hopeless and low about their careers. A student stated,

"I take classes in coaching and do tuition, which costs almost 8 to 10 hours of my daily life. I don't get enough time to focus on my academic career. Now I have a very bad CGPA and I am depressed thinking about what I will do with such a result and certificate. I am not going to get a good job."

Diseases and Disabilities. The Figure 1 shows that 4.5 % of the students in various educational institutions are facing diverse diseases and disabilities. The study revealed that the students from Khulna University of Engineering & Technology and Khulna University have shown the highest number of diseases and disabilities with accordingly 18.3% and 15.9% of responses. About 13.3% of students are facing such problems in Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur. Besides, Sher- E- Bangla Agricultural University and Mymensingh Medical College have 11.9% and 11.6% of victims followed by Mawlana Bhasani Science & Technology University with 9.4% of responses. Patuakhali Science & Technology University and National Universities have the identical and lowest number of issues in terms of diseases and disabilities with the 6.4% of responses.

This study has revealed that a proportion of the university students who suffered from mental illness were disabled students or students with various diseases or symptoms. Various types of diseases and various forms of disabilities have been found in this analysis. Chronic diseases such as type 2 diabetes mellitus (T2DM), cardiovascular disease (CVD), asthma, hypertension, epilepsy, irritable bowel syndrome (IBS), OCD (obsessive compulsive disorder) and chronic bronchitis are common. This study shows that chronic illnesses have both direct (impacts on education) and indirect (impacts on social and mental health) effects on education. One of the students of final year mentioned,

"Because of my chronic asthma and IBS problems, I face so many problems in my university life and also in my personal life. Sometimes asthma becomes a curse on my life and makes me have tough breath. And then there's the IBS issue, which is yet another curse in my life. I never feel free to eat my desired foods. I can't travel anywhere if I fail to maintain a healthy lifestyle. I get diarrhoea problems or vomiting. There is no cure for such problems. I stay in a university hall, and it's quite impossible to maintain hygiene while staying at the hall. I often feel depressed and sick and failed to attend all the classes on time."

This study has also identified a correlation between physical disabilities and mental health disorders in students. These disabilities can include vision impairments, hearing impairments, cognitive or learning challenges, psychological disorders, brain injuries, mobility limitations, and more. A student with a physical disability explained,

"I have a physical disability; I cannot walk because of my leg disability. It hurts me so much, both physically and mentally. My department is on the second floor of the faculty. Every day I have to walk down the stairs to reach the second floor, which is

very critical for me. Sometimes my friends help me, and sometimes I need to wait for someone who can help me reach the second floor. Besides these, there are also many social issues regarding my disability that have become very common for me."

So many students have insomnia, OCD, BDD (Body Dysmorphic Disorder), and epilepsy problems. Because of such syndromes, they always suffer from anxiety and mental illness. A student having BDD and OCD problems explains,

"I have body dysmorphic disorder, and when I stand in front of my mirror, I feel ashamed of myself. I don't know why I don't like myself and because of my OCD problem, I always over think every issue and that makes it more difficult. Students like me always suffer due to these problems, and there is no cure for such problems except social change. We have such issues because of society's negative influences. People do body shaming, which is the main reason for us to act like this. We are all human and we all have equal rights to live in society. Because of their negative complements, our problem is increasing day by day, and we are getting depressed and mentally sick."

Overthinking Problems. Figure 1 states that about 14.5% of the students from different institutions are getting mentally distressed due to their overthinking issues. Figure-2 shows the highest number of overthinking students belong to Khulna University with 22.2% where Mymensingh Medical College has the least number of 3.6%. Other institutions hold 14.2% in Khulna University of Engineering & Technology, 12.4% in Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur, 10.7% in Mawlana Bhasani Science & Technology University, 10.0% in Islamic University Bangladesh, 9.2% in national universities, 9.0% in Patuakhali Science & Technology University and 8.7% in Sher- E- Bangla Agricultural University.

Every student harbour both personal and professional dreams, but personal struggles can often impede their path to success. Beginning in their academic journey, students envision a prosperous career, but when obstacles arise, they can feel overwhelmed and lose hope. This leads many university students to experience mental health issues, specifically excessive stress and anxiety about their future careers. Research shows a significant number of students grappling with overthinking and indecision regarding their career paths. Another reason student is suffering from over-thinking problems is the conflict between their career and personal life. Students always dream of achieving their desired occupation by achieving good academic performance. But not all the students can achieve better academic performance because of various issues, including family problems. Sometimes families put pressure on them to change their minds and become something they never wanted to be in life. But to make parents happy, they really do it by sacrificing their own interests.

Some undergraduates are suffering from inferiority complexes, losing inspiration to do something, becoming hopeless, thinking of themselves as valueless, and feelings of self-destruction tendencies such as suicidal attempts.

Socio-Cultural Issues. Figure-1 states that about 6.9% of the students from different institutions are getting mentally distressed due to various socio-cultural issues. From the figure-2 we can find, about 22.6 % of the students from Islamic University Bangladesh are facing the most socio-cultural issues which is followed by the students of Patuakhali Science & Technology University at 21%. But in Khulna University of Engineering & Technology, surprisingly, the number is zero in case of socio-economic issues. Mymensingh Medical College has 12.6%, 12.3% in Mawlana Bhasani Science & Technology University, 9.8% in National Universities, 8.7% in Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur, 7.8 in Sher- E- Bangla Agricultural University and 5.2% in Khulna University.

The students, particularly the female students, assert that discrimination is prevalent in multiple areas of this university. They state that local residents exert control and discriminate against women in every aspect of life within and near the university. They experience systemic mistreatment by both the system and society, with limited autonomy in social, economic, political, and developmental matters. Many students express a lack of essential facilities for their everyday needs. A female student from Islamic University argues,

"Females have less freedom than male students in this university. This is a public university but acts like a kindergarten school. Female halls are closed after the Magrib Azan, which is a very low mentality or thinking as well as a backdated tradition. We are like chickens living in cages."

Among the responders, there were a few incidences of physical harassment associated to mental health distress. Some responders have experienced depression as a result of physical harassment. Students have primarily experienced harassment, which has resulted in feelings of depression. Eve-teasing, whistling in public, vulgar comments, stalking, and gestures are some of the kinds of sexual harassment that they confront. Due to the harassment caused by various forms of sexual assault, they are unable to go out freely, cannot pay the required attention to their studies, and fear unexpected situations.

Several respondents highlighted numerous causes of university dissatisfaction that contribute to mental distress, including inadequate hall room facility, ragging, session jams, a slow procedure of publishing results, and a time-oriented program or curriculum.

Environmental Issues. Figure 1 shows that about 5.5% of the students from different institutions are getting mentally distressed due to the environmental issues. According to the research data shown in figure 2, national universities in Bangladesh were found to have the poorest environmental conditions for students, with a staggering 24.5% of respondents ranking them at the top in terms of environmental issues. With 21.1% victims, Patuakhali Science & Technology University ranks in the second position. Islamic University, Bangladesh ranks third in this sense with 17.1% responses. Then comes Mymensingh Medical College with 12.7% responses. Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur is in the next with 11%, Mawlana Bhasani Science & Technology University holds 10.3% and 3.3% in Sher- E- Bangla Agricultural University. But there are no such cases in Khulna University of Engineering &

Technology and Khulna University. The students have no negative environmental concerns within their universities.

The natural environment of the university is quite important. Most of the students have said that their universities are a beautiful gift of nature. But the problem is with the academic and residential environment of the universities. Some of the students who are living outside of the campuses said that their universities are not fully residential; that's why they have to live outside of the campuses. Even though there are so many residential students who are not getting seats in halls because of minor concerns by hall provosts and administration, the food quality of hall dining's is also terrible. In some universities, the university administration provides substantial subsidies to dining managers, allowing them to provide quality foods at a reasonable price for each student. But in other universities, it's not seen. The food quality is exceptional, but the prices at the public university hall are quite high. Local individuals can easily access the university campuses, which can make students feel uneasy. The medical facility is subpar. A female student from Islamic University said,

"Some days ago, suddenly at midnight, I lost my senses and fell on the ground. My friends as well as the seniors were calling the hall provosts and ambulances of the IU medical. But they didn't respond well. When the students became violent, then the provost permitted the ambulance to enter the hall and take me to the medical centre for treatment."

Political Issue. Figure 1 shows that there were about 7.2% of the students from different institutions are getting mentally distressed due to various socio-cultural issues. As per figure-2, This study investigated that highest political issues are seen in Mawlana Bhasani Science & Technology University, then in National Universities with 23.9% issues, From Sher- E- Bangla Agricultural University we have got 14.9% responses followed by Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur with 12.5%. Patuakhali Science & Technology University has 10% and Islamic University Bangladesh has 8.6%. But in Khulna University of Engineering & Technology and Khulna University shows zero percentages in terms of political affiliations.

Student politics is very much seen on the public university campuses of Bangladesh. The dominating student political groups are Chatra League, Chatro Union, and Chatra Maitree. Student politics are needed for the university campuses to maintain the perfect environment for the university. But when student politics becomes evil politics, it might harm the environment of the university, and the students are the main victims of it. Numerous students on campus believe that the political atmosphere is tainted by local influences and student domination. Some students engage in politics solely to secure a spot in the student council. Residents in the halls express feeling pressured to participate in political events and programs, feeling obligated to attend all activities in order to avoid scrutiny or backlash. Sometimes it creates excessive pressure on students who have ongoing semesters. Some students said students have no freedom of speech here and the political leaders are dominating students for their personal benefits.

COVID-19 Pandemic. Figure 1 states that due to their Corona Virus Disease 2019, about 11.6% of students from different institutions are getting mentally distressed. Figure-2 shows the level of mental distress among the students in different tertiary level educational institutions. The highest number of distresses is seen in the Bangabandhu Sheikh Mujibur Rahman Agricultural University with 23.4%, followed by National Universities with 16.6%, where the lowest number is seen among the students of Khulna University with 6.2% only. 12% distress is found among the students of Mymensingh Medical College and 10% among the students of Patuakhali Science & Technology University which is followed by Mawlana Bhasani Science & Technology University with 9.7% responses. Sher- E- Bangla Agricultural University, Islamic University Bangladesh and Khulna University of Engineering & Technology has close result accordingly 7.8%, 7.2% and 7.1% responses.

Due to the impact of the pandemic, public universities and their respective departments are experiencing disruptions in academic schedules, resulting in potential delays of one to two years in the progression of student cohorts. Islamic university is not excluded from them. Almost all the departments are trying their best to work through the session jams and take semester finals as soon as possible. But it's harsh and true that students have to sacrifice one year of their academic life because of the pandemic. Many of the students said that they have lost their parents, fathers, mothers, or loved ones because of the pandemic, which makes them mentally distressed. Another portion of students talk about their financial losses during the pandemic, and many of them are experiencing low financial capability now due to the pandemic.

Discussion

Critical Evaluation of Related Scientific Papers

Mental health difficulties among university students are well recognised internationally. Billah et al. (2023) conducted a comprehensive review that highlighted the significant prevalence of depression and anxiety among university students globally, emphasising the need for effective mental health interventions. Similarly, Auerbach et al. (2016) found considerable mental health difficulties among college students in the World Health Organisation World Mental Health Surveys, emphasising the problem's worldwide scope. In the context of Bangladesh, Giuntella et al. (2021) gave insights into the determinants of mental health difficulties among university students, their study was limited to quantitative methodologies and did not include qualitative depth.

Comparison with Other Studies

This qualitative study supports the findings of Coulombe et al. (2020) and Giuntella et al. (2021) found high levels of anxiety, depression, and stress among Bangladeshi students due to academic pressures, financial constraints, and social stigma. However, these investigations were mostly conducted using quantitative approaches, which gave broad statistical patterns but lacked particular personal insights. The used qualitative method provided a more nuanced view of the students' lived experiences, highlighting the complex interaction of socioeconomic circumstances and institutional flaws. The findings confirmed the high prevalence rates reported in these studies

while also emphasising the crucial need for enhanced mental health services and support systems at public institutions.

Unexplored Aspects and Future Research Potential

This study offers useful qualitative insights; however, several aspects are yet untouched. Longitudinal studies are needed to monitor students' mental health trajectories throughout their university careers, providing a dynamic view on how mental health concerns emerge (Sayeed et al., 2020). Furthermore, comparison study across public and private institutions in Bangladesh might reveal institutional disparities in mental health management, offering a more comprehensive understanding of optimal practices (Dutta & Smita, 2020). The investigation of the impact of digital mental health therapies, such as smartphone applications and online counselling, may also be useful, particularly in light of the current COVID-19 pandemic (Khan et al., 2022). Finally, future research should examine the intersectionality of mental health concerns, including how gender, socioeconomic status, and academic discipline interact to impact mental health outcomes (Giuntella et al., 2021).

Consequences of Depression and Anxiety

Dropping Out of University. Due to depression and other mental distress many university students are unable to continue living a regular life and so drop out. Due to their anxiety, they struggle to focus and perform well in a suitable study environment. Consequently, they often fail their exams or face consequences such as expulsion or suspension for misconduct during testing periods. Students get diverted from intellectual careers as a result of their hesitancy to interact with their friends, professors, and peers. One respondent said, "It would be better to stop studying for a year than to drop out of session for a year (Ahmed et al., 2023).

Taking Drugs and Involving in Illicit Activities. Many of the respondents' drug and smoking addictions may be traced back to emotional distress caused by factors such as poor academic performance, broken relationships, and the need for company, joblessness, dissatisfaction, social and political unrest, and the relief of pressure from others the students get unconsciously addicted to smoking or various drugs. Some of them are attempting to maintain their privacy by staying in their rooms. To gather money for their drugs, they engage in illicit activities such as drug trafficking, drug distribution, kidnapping, hijacking and murder. They cannot think properly about anything (Das et al., 2021). At times, they find themselves in conflicts with fellow students and faculty over trivial matters. Their sadness causes social and personal issues such as character loss, lack of motivation, stigmatization, negligence in academic activities, loss of morality, and criminal conduct.

Case Study-01, Mr. Faruk (Pseudonym)

He is a BSS 3rd year, 1st semester student at Islamic University under the faculty of Social Science. He explained the causes and consequences of his becoming depressed at this university. He provides his reasons as, "I had never

smoked or taken any type of drug." When my lover broke up with me and married another person, I didn't take it easily and it created too much mental distress for me. I tried to overcome such stress, but I failed. Then some of my friends suggested smoking cigarettes with them, but they mixed wed (ganja) with cigarettes and told me to smoke that. I feel relieved of stress after having it. They also took me to the kushtia lalan Akhra and helped me to take 'Siddhi' with the 'Sadhus', which makes me really retrieved from all types of pain, stress, and depression in life. I was feeling like I was in a dream. Then gradually I became dependent on those drugs to release my pressure, which made me addicted. " He also explains the consequences by saying, "When I become fully addicted to drugs, I cannot run my study. Everybody seems to be an enemy. After all, addiction to drugs makes one a thug from the street rather than a student. I wish to get rid of drugs with the proper suggestions of my best friends and respected teachers.

Committing Suicide. Depression and anxiety can theoretically result in suicidal behaviour. In an excessive number of Bangladeshi universities, students commit themselves, regardless of any past history of depression in their records. When depression manifests themselves, they sometimes commit suicide and leave a suicide note asserting that it was their destiny. Due to familial pressure and ignorance, a third-year female student in the Department of Law and Land Management at the Islamic University recently committed suicide (Haque et al., 2022).

Conclusions and Implications

People can experience various forms of mental distress as they are closely linked to both physical and behavioural issues and must navigate challenges in all aspects of their lives. As women are more depressed than men in Bangladesh, this number is greater among women here. This is the result of their challenging circumstances in every aspect of their life, from family to university. It is observed that these students suffer from high levels of depression, anxiety, and stress, which may have far-reaching consequences. In addition, students have been experiencing depression, anxiety, and stress as a result of personal, academic, and family difficulties that have a substantial impact on their academic and social life. It is essential for universities to prioritize the well-being of their students and create a supportive and understanding environment that promotes mental wellness. By proactively addressing mental health issues and providing resources and support, universities can help students cope with stress, anxiety, and other mental health challenges, ultimately improving their overall academic performance and well-being. It is important for universities to invest in mental health programs and services to ensure the mental health needs of students are met and to create a campus culture that values mental health and wellness. To lessen the high risk of depression, psychologists, mental health professionals, instructors, and the individual's peers are essentially required. Further study is necessary to explore the repercussions of the many types of depression that students confront throughout their academic careers, as well as solutions to reduce or eradicate these mental health difficulties. Depression hinders the psychological, familial, academic, and career development of the most of

students. It also encourages deterioration and suicidal tendencies. It is thus of the utmost importance to minimize mental health issues among university students (Ripon et al., 2022).

The results of this study have important ramifications for Bangladeshi policy makers, academic institutions, and mental health practitioners. Targeted mental health treatments and support systems may be developed with the use of knowledge on the prevalence and causes of mental health difficulties among students in higher education (Hasan et al., 2022). To enhance student well-being, educational institutions can conduct routine mental health screenings, offer easily available counselling services, and raise awareness of mental health issues (Mamun et al., 2022). These findings may be used by policymakers to create comprehensive mental health policies that cater to the unique requirements of college students, improving their quality of life and academic performance in the process (Haque et al., 2022).

Suggestions for Future Research

To gain a more comprehensive understanding of the evolution of mental health challenges during a student's university journey, future research should aim to conduct longitudinal studies to monitor the progression of mental health issues among college students over a period of time (Ziaei et al., 2016). The increase of the sample size and combining quantitative and qualitative methodologies might provide statistical support and a wider range of applicability for the results (Mamun et al., 2022). Future research should also look into the efficacy of certain mental health interventions and support networks that are put in place in public colleges. This can entail evaluating the effects on students' well-being of routine mental health screenings, counselling services, and mental health awareness campaigns (Wahid et al., 2023).

Revisiting the role of digital mental health interventions, such as online counselling and smartphone apps, could offer valuable insights, especially given the ongoing impact of the COVID-19 pandemic and its aftermath (Patwary et al., 2020). Studies comparing public and private institutions might reveal institutional variations in how they handle the mental health of their students and point out optimal practices that should be implemented by everyone.

In addition, studies on the intersections of mental health problems should look at how academic discipline, gender, and socioeconomic position affect university students' mental health outcomes (Tasnim et al., 2023). The comprehension of these subtle variations can aid in customising interventions to cater to the varied requirements of the student body, thus fostering a more welcoming and encouraging learning environment.

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References

- Ahmed, K. R., Horwood, S., & Khan, A. (2023). Effects of a school-based physical activity intervention on adolescents' mental health: A cluster randomized controlled trial. *Journal of Physical Activity & Health*, 20(12), 1102–1108. <https://doi.org/10.1123/jpah.2023-0062>
- Ahmed, O., Faisal, R. A., Sharker, T., Lee, S. A., & Jobe, M. C. (2020). Adaptation of the Bangla version of the COVID-19 anxiety scale. *International Journal of Mental Health and Addiction*, 20, 284–295 <https://doi.org/10.1007/s11469-020-00357-2>
- Akhter, S., Rutherford, S., & Chu, C. (2019). Sewing shirts with injured fingers and tears: Exploring the experience of female garment workers health problems in Bangladesh. *BMC International Health and Human Rights*, 19, Article 2. <https://doi.org/10.1186/s12914-019-0188-4>
- Auerbach, R. P., Alonso, J., Axinn, W. G., Cuijpers, P., Ebert, D. D., Green, J. G., ... Bruffaerts, R. (2016). Mental disorders among college students in the World Health Organization world mental health surveys. *Psychological Medicine*, 46(14), 2955–2970. <https://doi.org/10.1017/S0033291716001665>
- Billah, M., Rutherford, S., Akhter, S., & Tanjeela, M. (2023). Exploring mental health challenges and coping strategies in university students during the COVID-19 pandemic: A case study in Dhaka city, Bangladesh. *Frontiers in Public Health*, 11, Article 1152366. <https://doi.org/10.3389/fpubh.2023.1152366>
- Chowdhury, M. F., & Tanim, T. R. (2016). Industrial accidents in Bangladesh apparel manufacturing sector: An analysis of the two most deadliest accidents in history. *Asian Journal of Social Sciences and Management Studies*, 3(2), 115–126. <https://doi.org/10.20448/journal.500/2016.3.2/500.2.115.126>
- Coulombe, S., Pacheco, T., Cox, E., Khalil, C., Doucerain, M. M., Auger, E., & Meunier, S. (2020). Risk and resilience factors during the COVID-19 pandemic: A snapshot of the experiences of Canadian workers early on in the crisis. *Frontiers in Psychology*, 11, Article 580702. <https://doi.org/10.3389/fpsyg.2020.580702>
- Das, R., Hasan, M. R., Daria, S., & Islam, M. R. (2021). Impact of COVID-19 pandemic on mental health among general Bangladeshi population: A cross-sectional study. *British Medical Journal Open*, 11(4), Article e045727. <https://doi.org/10.1136/bmjopen-2020-045727>
- Dutta, S., & Smita, M. K. (2020). The impact of COVID-19 pandemic on tertiary education in Bangladesh: Students' perspectives. *Open Journal of Social Sciences*, 8(9), 53–68. <https://doi.org/10.4236/jss.2020.89004>
- Faisal, R. A., Jobe, M. C., Ahmed, O., & Sharker, T. (2022). Replication analysis of the COVID-19

- Giuntella, O., Hyde, K., Saccardo, S., & Sadoff, S. (2021). Lifestyle and mental health disruptions during COVID-19. *Proceedings of the National Academy of Sciences*, 118(9), Article e2016632118. <https://doi.org/10.1073/pnas.2016632118>
- Hasan, M., Sultana, S., Sohan, M., Parvin, S., Rahman, M. A., Hossain, M. J., ... Islam, M. R. (2022). Prevalence and associated risk factors for mental health problems among patients with polycystic ovary syndrome in Bangladesh: A nationwide cross-Sectional study. *PLoS ONE*, 17(6), Article e0270102. <https://doi.org/10.1371/journal.pone.0270102>
- Haque, M. R., Islam, T., Milton, A. H., & Abir, T. (2022). Mental health status of a population during COVID-19 pandemic in Bangladesh: A cross-sectional study. *Bangladesh Medical Research Council Bulletin*, 48(3), 195-202. <https://doi.org/10.3329/bmrcb.v48i3.63811>
- Hossain, M., Asadullah, M. N., & Kambhampati, U. (2019). Empowerment and life satisfaction: Evidence from Bangladesh. *World Development*, 122, 170-183. <https://doi.org/10.1016/j.worlddev.2019.05.013>
- Huang, L., Lei, W., Xu, F., Liu, H., & Yu, L. (2020). Emotional responses and coping strategies in nurses and nursing students during Covid-19 outbreak: A comparative study. *PloS ONE*, 15(8), Article e0237303. <https://doi.org/10.1371/journal.pone.0237303>
- Kabir, H., Maple, M., & Fatema, S. R. (2018). Vulnerabilities of women workers in the readymade garment sector of Bangladesh: A case study of Rana Plaza. *Journal of International Women's Studies*, 19(6), 224-235. <https://vc.bridgew.edu/jiws/vol19/iss6/14/>
- Khan, S., & Haque, S. (2021). Trauma, mental health, and everyday functioning among Rohingya refugee people living in short-and long-term resettlements. *Social Psychiatry and Psychiatric Epidemiology*, 56, 497-512. <https://doi.org/10.1007/s00127-020-01962-1>
- Khan, K. S., Mamun, M. A., Griffiths, M. D., & Ullah, I. (2022). The mental health impact of the COVID-19 pandemic across different cohorts. *International Journal of Mental Health and Addiction*, 20(1), 380-386. <https://doi.org/10.1007/s11469-020-00367-0>
- Mamun, M. A., Hossain, M. S., & Griffiths, M. D. (2022). Mental health problems and associated predictors among Bangladeshi students. *International Journal of Mental Health and Addiction*, 20(2), 657-671. <https://doi.org/10.1007/s11469-019-00144-8>
- Patwary, M. M., Bardhan, M., Disha, A. S., Kabir, M. P., Hossain, M. R., Alam, M. A., ... Billah, S. M. (2020). *The impact of COVID-19 pandemic on mental health of university student: A cross-sectional study in Bangladesh*. SSRN. <https://dx.doi.org/10.2139/ssrn.3682156>
- Rahman, M. M., Asikunnaby, Khan, S. J., Arony, A., Mamun, Z. A., Procheta, N. F., ... Islam, A. R. M. T. (2022). Mental health condition among university students of Bangladesh

during the critical COVID-19 period. *Journal of Clinical Medicine*, 11(15), Article 4617. <https://doi.org/10.3390/jcm11154617>

Ripon, R. K., Mim, S. S., Puente, A. E., Hossain, S., Babor, M. M. H., Sohan, S. A., & Islam, N. (2020). COVID-19: Psychological effects on a COVID-19 quarantined population in Bangladesh. *Heliyon*, 6(11), Article e05481. <https://doi.org/10.1016/j.heliyon.2020.e05481>

Sayeed, A., Kundu, S., Al Banna, M. H., Hasan, M. T., Begum, M. R., & Khan, M. S. I. (2020). Mental health outcomes during the COVID-19 and perceptions towards the pandemic: Findings from a cross sectional study among Bangladeshi students. *Children and Youth Services Review*, 119, Article 105658. <https://doi.org/10.1016/j.childyouth.2020.105658>

Sifat, M., Huq, M., Baig, M., Tasnim, N., & Green, K. M. (2023). An examination of barriers to accessing mental health care, and their association with depression, stress, suicidal ideation, and wellness in a Bangladeshi university student sample. *International Journal of Environmental Research and Public Health*, 20(2), Article 904. <https://doi.org/10.3390/ijerph20020904>

Tasnim, F., Abedin, S., & Rahman, M. M. (2023). Mediating role of perceived stress on the association between domestic violence and postpartum depression: Cross-sectional study in Bangladesh. *Bjpsych Open*, 9(1), Article e16. <https://doi.org/10.1192/bjo.2022.633>

Wahid, S. S., Raza, W. A., Mahmud, I., & Kohrt, B. A. (2023). Climate-related shocks and other stressors associated with depression and anxiety in Bangladesh: A nationally representative panel study. *The Lancet. Planetary Health*, 7(2), e137-e146. [https://doi.org/10.1016/S2542-5196\(22\)00315-1](https://doi.org/10.1016/S2542-5196(22)00315-1)

Ziaei, S., Frith, A. L., Ekstrom, E.-C., & Naved, R. T. (2016). Experiencing lifetime domestic violence: Associations with mental health and stress among pregnancy women in rural Bangladesh: The MINIMat randomized trial. *PLoS ONE*, 11(12), Article e0168103. <https://doi.org/10.1371/journal.pone.0168103>