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Anxiety, mental pressure and stress frequency among Bangladeshi university students: A questionnaire study

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Abstract

Background: One of the growing public health issues in many low- and middle-income nations is anxiety disorder. A rising number of student in Bangladesh are showing these signs, despite the paucity of research supporting our claims. The goal of this study was to find out how common anxiety is among public university students and what factors are linked to it.

Methods: An organized set of questions was used to collect the data, one of which was dedicated to demographics. The generalized anxiety disorder scale was utilized to assess anxiety, and the Physical Activity Questionnaire scale was used to test different levels of physical activity. Based on its careful validity and applicability, we juxtaposed the different variables to ascertain the association of various factor related to it.

Results: The reading time per day was quite low and it was 6.8 hours for JU students, 7.1 hours for DU students. From the study we can conclude that most the participants are engaged low physical activity. In case of Jahangirnagar university among 97 respondents, 38 respondents were in relationships and 59 students were not in relationships. Whereas 61 respondents were mentally satisfied but 36 were mentally dissatisfied. In case of Dhaka university among 25 respondents, 8 were in relationships and 17 were not in relationships, where 12 respondents were mentally satisfied but 12 respondents were mentally dissatisfied and most the respondents (47.54%) follow ideal sleep duration according to dataset.

Conclusion: In Bangladesh's public universities, anxiety is a common occurrence among students. Evidence-based health programs—such as healthy school trials—and policies should be implemented in light of the study's findings in order to reduce the incidence of anxiety among Bangladeshi adults and the students.

Keywords: Mental Stress; University; Post Graduate Students; Family Income; Sleeping Time

1. Introduction

Globally, one in four persons are afflicted with neurological or mental illnesses [1]. When depression is severe, it might lead to suicide because a person with it frequently performs badly at job, school, or in the home setting. Suicide is the second most common cause of mortality for those aged 15 to 29 due to depression [2]. Mental health problems are becoming a challenge to low- and middle-income nations like Bangladesh, while not being generally acknowledged [3, 4]. In Bangladesh, an estimated 7 million individuals suffer from anxiety and depression, respectively [5]. 10,167 people are estimated to have died by suicide in 2012, and among youngsters aged 13 to 17, 4% of males and 6% of girls thought about trying suicide [5]. According to reports, the rates of stress, anxiety, and depression in Bangladesh are as high as 54.3%, 64.8%, and 59.0%, respectively [6–10].

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Severe depression, alcohol and other drinking problems, and problems with personality are also associated with anxiety disorders [11]. As per the World Health Organization, anxiety disorders account for a significant share of mental health problems among teenagers and are recognized as the most prevalent mental health conditions within this age group [12]. There is a connection between students' mental health and the stress of exams. Exam stress and anxiety have a detrimental effect on students' academic performance, physical health and development, and standard of living, claim Bayram and Bilgel (2008). Exam anxiety can have several causes, including social stigma, which makes rural students feel less competent than their metropolitan counterparts. It can also stem from students' fear of not having competitive English language skills, which demotivates them before and during exams and increases their risk of anxiety, stress, and frustration [13]. Higher education in recent times involves considerable financial burden [14]. According to a cross-sectional survey showed that students are especially susceptible to depression when they are struggling financially. When pre-entry anxiety and depression were controlled, financial hardship was the only unfavorable experience evaluated to exhibit an independent link with depression, suggesting a stronger causal relationship [15].

Among young people in Bangladesh, anxiety is very common. The national mental health survey of 2018–19 found that 4.5% of children in Bangladesh aged 7–17 had anxiety disorders [16]. Many factors have been linked according to research to increased levels of stress, anxiety, and depression in students. These factors include relationships that are strained, sex, family and peer pressure, high parental expectations, financial hardships, lack of support, loneliness, prolonged screen time, toxic psychological environments, academic pressure, workload, the size of the academic curriculum, and demanding test schedules [17 – 19]. Exams, time constraints, rivalry, and the classroom atmosphere are some of the main academic stresses for students, but romantic relationships, money problems, and parental disputes have been the most frequent personal stresses. Using a survey carried out in public university, Bangladesh, the study sought to determine the prevalence and factors—particularly sociodemographic and psychological factors—that have an impact on students' mental health as a result of assessments.

2. Methodology

Undergraduate and graduate students from two Bangladeshi higher education institutions namely Jahangirnagar University (JU) and University of Dhaka (DU) participated in an online survey. The authors were limited to gathering quantitative data and were forced to choose the online alternative. 122 young people, ages 24 to 31, took part in the ask utilizing the Google online survey platform after Jahangirnagar University in Bangladesh gave its ethical approval. The investigation and data collection was place between December 11 and December 28, 2023. The survey questionnaire included sociodemographic information as well as possible coping mechanisms. Demographic information included gender, residence of permanent, current living status, relationship status, daily study time, physical activity level and sleeping time. All data were analyzed using Microsoft excel software and ethical approval was taken from Institutional Review Board, Jahangirnagar University with Ref. No: {JU/ S/ 2024 (2)}. Besides, all participants read, understood and gave full consent at the time of survey data collection.

3. Results

(Table 1) demonstrates the sociodemographic characteristics of the study participants. More than half (65.57%) of the study participants were male and (34.43%) were female and a third (60.66%) of the study participants were aged between 28 and 31 years. Surprisingly most of the respondents (83.60%) were from rural area as their birth place.

Table 1 Demography and overview of population

Variable	Variable	Frequency (N=122)	Percentage
Age (years)	24 to 27	48	39.34%
	28 to 31	74	60.66%
Gender	Male	80	65.57%
	Female	42	34.43%
Residence	Rural	102	83.60%
	Urban	20	16.40%

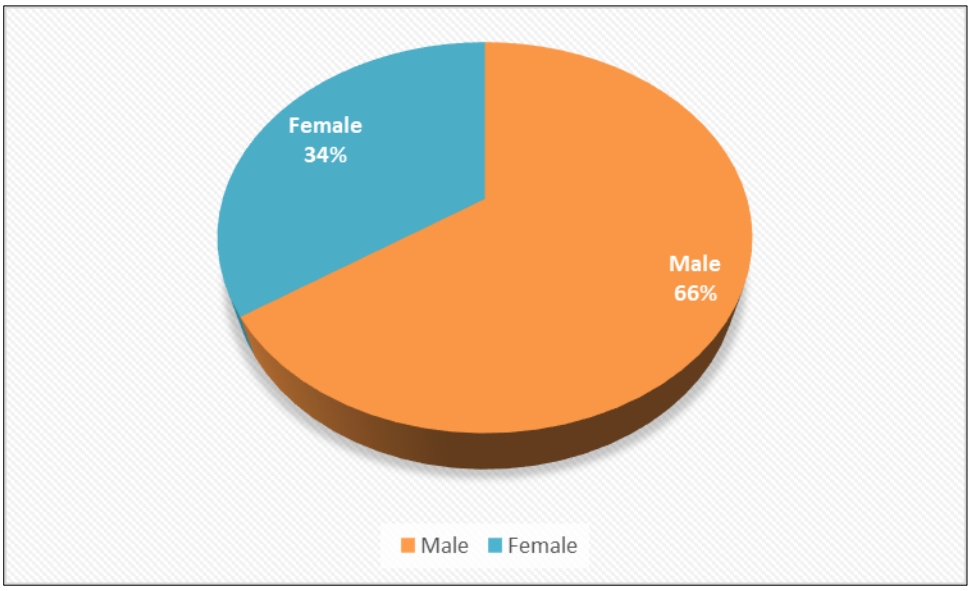

Figure 1 Approximate gender distribution among respondents

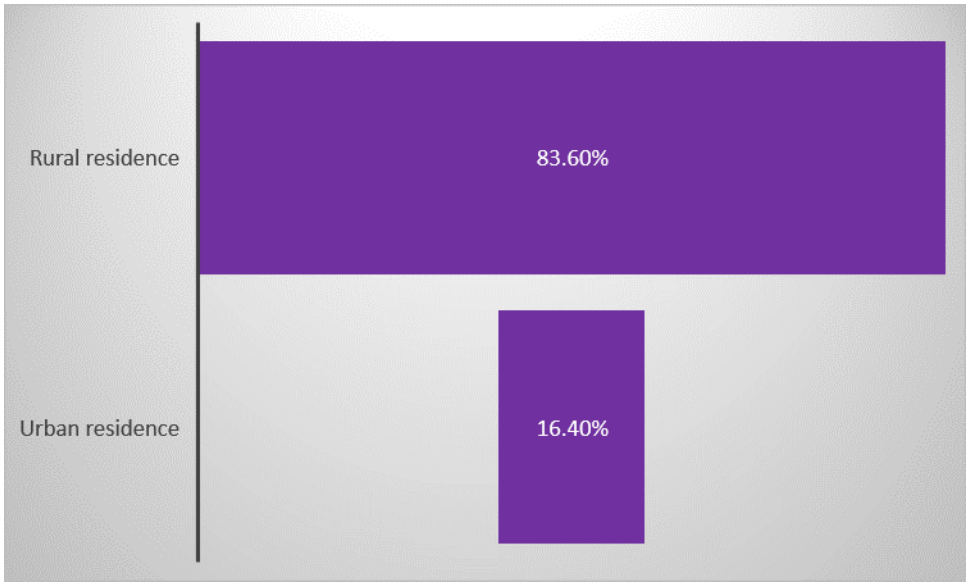

Figure 2 Permanent residence of respondents

Among all the respondents the reading time per day was quite low and it was 6.8 hours for JU students, 7.1 hours for DU students. Too much internet browsing, Facebooking, and watching videos on YouTube hamper many valuable time of students according to the opinion of respondents (Table 2).

Table 2 Time of reading

Variable	Frequency	Avg. time per day (hour)	Percent per day
JU	97	6.8	28.33%
DU	25	7.1	29.58%

Family income of the respondents vary significantly, as some respondents were very less fortunate and lead unsatisfied life and some are from well family background. Most of the respondents are from JU and their family income range were between 7500 and 72000 Tk. This range for DU students were between 15000 and 65000 TK (Table 3).

Table 3 Family income of respondents

Variable	Frequency	Family income per month (TK)	
		Lowest	Highest
JU	97	7500	72000
DU	25	15000	65000

From the study it was found that only 10 respondents engaged in high physical activity, whereas respondents have low physical activity status is 75. Moderate physical activity is found in 18 respondents and 19 respondents do no physical activity. From the study we can conclude that most the participants are engaged low physical activity (Table 4).

Table 4 Physical activity status

Variable	Variable	Frequency (N=122)
Physical activity status	High physical activity	10
	Moderate physical activity	18
	Low physical activity	75
	No physical activity	19

The table 5 shows the relationship status of Jahangirnagar University students and Dhaka University students, and also show the level of mental satisfaction and dissatisfaction of both. From the table we can found that, in case of Jahangirnagar university among 97 respondents, 38 respondents were in relationships and 59 students were not in relationships. Whereas 61 respondents were mentally satisfied but 36 were mentally dissatisfied. In case of Dhaka university among 25 respondents, 8 were in relationships and 17 were not in relationships, where 12 respondents were mentally satisfied but 12 respondents were mentally dissatisfied.

Table 5 Relationship status (both married and pre-marriage)

Parameter	Yes (frequency)	No (frequency)	Mentally satisfied	Mentally dissatisfied	Total
JU	38	59	61	36	97
DU	8	17	12	13	25

The sleep duration of 122 respondents are presented in table 6. We could find that 46 participants had short sleep duration which was account for 37.70% of total respondents .On the other hand long sleep duration was reported by 18 respondents which was account for 14.75% of total. Ideal sleep duration was followed by 58 respondents which comprised 47.54%. From this table data we can conclude that most the respondents follow ideal sleep duration shown in (Table 6) (Figure 3).

Table 6 Sleeping time per day

Sleep habit	Frequency (N=122)	Percentage
Short sleep duration (<7 hours/day)	46	37.70%
Ideal sleep duration (7-8 hours/day)	58	47.54%
Long sleep duration (≥9 hours/day)	18	14.75%

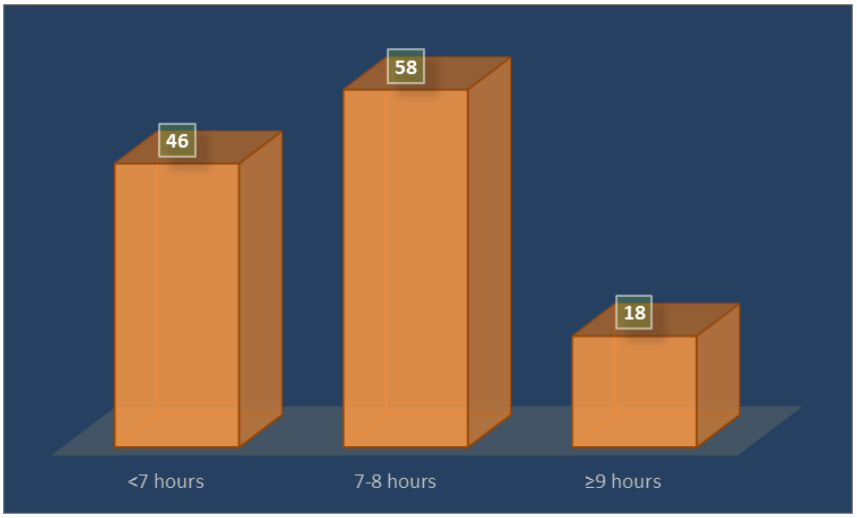

Figure 3 Sleeping time among respondents (X axis=time, Y axis=frequency)

4. Discussion

The results showed that, The average amount of time students spent reading each day was 6.8 hours for JU students and 7.1 hours for DU students. Based on the study, we can infer that the majority of participants engage in low levels of physical activity. Of the 97 respondents at Jahangirnagar University, 38 were in relationships and 59 students were not in relationships; 61 respondents were mentally satisfied and 36 were mentally dissatisfied. Of the 25 respondents at Dhaka University, 8 were in relationships and 17 were not in relationships; 12 respondents were mentally satisfied and 12 were mentally dissatisfied; most respondents adhered to the recommended sleep duration. There was a strong correlation found between mental health issues and relationship, spending time with parents, family income, sleeping habits, and physical activity. A balanced lifestyle combined with effective social communication might assist students manage stress, anxiety, and depression, since the present study only examined students who experienced mild to moderate levels of these conditions.

Talking to parents on a regular basis seems to be a young stress-reduction strategy. Exam results showed that students who spoke with their parents on the phone every day scored lower on stress and despair than those who spoke with them just once or twice a month [20]. In most cases, children who received a parent-child intervention aimed at strengthening their attachment link no longer met the criteria for separation anxiety disorder, according to a pilot study of kids with the condition. That would also apply to test stress, as students who express their worries to their parents are more likely to get encouragement and supportive actions [20]. Compared to students who never got enough sleep, those who routinely got enough sleep reported reduced levels of stress and despair associated to exams. According to recent epidemiological research, sleeplessness may not only be a common symptom of depression but also a long-term independent risk factor for the condition [21]. While inadequate sleep has been linked to a number of impairments in academic functioning, insomnia may not always be the cause of poor academic performance. An irregular sleep schedule, or none at all, during test season would indicate a greater chance of stress, which would impair academic performance [22 – 24].

Participants in a study who followed a healthy eating habit scored lowest on anxiety, stress, and sadness, respectively, whereas those who did not follow a healthy eating pattern scored highest. Students who don't have good family are also linked to poor eating habits since they frequently eat at the university canteen or in the cafés in their dorms. This may result in an intake of nutrients that is insufficient, especially considering the ongoing research that casts doubt on the nutritional value of Bangladeshi food sources [25]. Rapid physical changes associated with puberty as well as peer or public scrutiny are two physiological elements that might be quite important in this situation. Their perspective of their weight, form, and overall appearance changes as a result of these. Teenagers find it challenging to precisely define themselves in terms of weight, due to the social demand for thinness that is shown in the society. This impact is particularly powerful in forming the concept of "ideal body weight" and how adolescents view their bodies [26, 27]. The results of this study may be helpful in formulating future research projects and policies in this sector. Additionally, the field implementation processes were thoroughly ensured by this research.

4.1. How to reduce anxiety & mental stress

Reducing everyday chronic stress to the lowest feasible level can improve the state of our overall wellness. Long-term stress raises the risk of developing heart disease, anxiety disorders, and depression, among other illnesses. Exercise on a regular basis has been demonstrated to alleviate the symptoms of common mental health issues including sadness and anxiety. The possibility of deficiency in some minerals, including magnesium and B vitamins, which are vital for controlling stress and mood, might increase when individuals don't consume enough nutrient-dense better foods. By eating more naturally occurring foods and less overly processed meals and beverages, we may ensure that our bodies are receiving the nutrition they require.

Excessive screen usage is linked to higher stress levels and decreased psychological well-being in both adults and students. Therefore, it has to be managed to reduce stress. Consuming too much caffeine may worsen anxiety. Overconsumption may also harm sleep. In turn, this may increase stress and anxiety symptoms. However, it is crucial to take into account level of tolerance because those who are sensitive to caffeine may suffer greater anxiety and tension after eating less caffeine than this. A strong social support network is critical to the general mental well-being. Social support groups might be helpful for someone who doesn't have friends or family and is lonely. Joining a group, playing sports, or volunteering for a cause that promotes improved health are all worthwhile options.

Studies reveal that yoga is beneficial in lowering anxiety and tension. Furthermore, it may enhance psychological health. Gamma aminobutyric acid, a neurotransmitter which is deficient in individuals having mood disorders, is increased in yoga practitioners while cortisol, blood pressure, and heart rate are lowered. According to studies, being in nature and spending time in green areas like parks and forests are good strategies to reduce stress. According to some research, college-aged individuals may benefit from spending as little as ten minutes in a natural environment in terms of their psychological and physiological indicators of mental health, including their perceptions of stress and happiness. Effective strategies include getting outside more frequently, exercising, practicing mindfulness, spending time with pets, and reducing screen time.

4.2. Limitations

Given that this study's sample size was relatively small and it only included quantitative data, future research should take into account conducting in-depth interviews to examine relevant stress variables in greater detail. Since the information in the data is self-reported, memory bias is virtually always a possibility.

5. Conclusion

According to the study's findings, anxiety is common among Bangladeshi students, and a number of sociodemographic and lifestyle-related variables are significantly contributing to this susceptible population's high anxiety prevalence. Maintaining a balanced lifestyle and increasing social connections may improve one's ability to combat stress, anxiety, and depression. The incorporation of problem- and emotion-focused techniques at the policy level, the implementation of stress management seminars, and the improvisation of the academic environment should all be priorities.

Compliance with ethical standards

Disclosure of conflict of interest

Author declare that no conflict of interest.

Statement of informed consent

Informed consent were obtained from all the participants.

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