

Beyond Deadlines: Academic Stress, Mental Health Risks, and Coping Inequities at Khulna University

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Abstract

Academic stress may be the single most dominant stress factor that affects the mental well-being of tertiary level students. The increasing prevalence of mental health issues among university students has become a global concern, particularly in the post-pandemic era. This study examined the prevalence of academic stress, its relationship with mental health symptoms, and coping strategies employed by students at Khulna University, Bangladesh. A cross-sectional survey was conducted among 366 university students across various schools and academic years. Data were collected using validated Likert-scale questionnaires measuring academic stress, mental health symptoms (depression, anxiety, and stress), and coping strategies. Statistical analyses included ANOVA and multiple regression models. Academic stress was highly prevalent, with 82.1% of students reporting excessive academic pressure from assignments. Mental health symptoms were common: 34.8% experienced depression, 28.6% reported anxiety, and 48.2% experienced stress over trivial matters. Social support (59.8%) was the most utilized coping strategy. Fourth-year students showed significantly higher stress levels ($F = 17.52, p < 0.001$). Extended academic stress positively impacts students' depression levels with a β of 0.293, consistent with our findings showing excessive academic pressure and unrealistic teacher expectations as significant predictors of both depression ($\beta = 0.3172, p < 0.001$) and anxiety ($\beta = 0.4031, p < 0.001$). Academic stress significantly impacts mental health among university students. Universities should implement comprehensive mental health support programs, establish realistic academic expectations, and promote effective coping strategies to address this growing concern.

Keyword: academic stress, mental health, university students, coping strategies, Bangladesh.



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1. INTRODUCTION

The current higher education environment experiences a sharp and rapid rise in academic challenges, which has placed a psychological burden on the university students' worldwide (Sharp & Theiler, 2018). As undergraduate students, academic stress, a very common occurrence on university campuses, was found to have a significant impact on their academic experiences. It involves a range of stressful life situations such as examination anxiety, deadlines, competing with others' grades, pressure to cope with academic demands (Bedewy & Gabriel, 2015; Reddy et al., 2018).

A significant relationship between stress, depression, and anxiety, and academic performance was reported; evidence potential bidirectional pathways between academic stressors and psychological symptoms. The relationship between academic stress and mental health has been of considerable interest to both researchers and educators; empirical evidence indicates a strong association between chronic exposure to academic stress and a range of mental health difficulties, such as anxiety disorders, depression, and chronic stress responses (Bantjes et al., 2019; Cleary et al., 2011; Dyrbye et al., 2006).

College students are at a higher risk for a number of reasons. The shift from secondary to higher education is not only marked by increased academic demands (Chew, 2009; Schigas and Schigas, 2015), it is also characterized by major life changes (Arnett, 2000; Kuh et al., 2006; Tinto, 2012). Moreover, students are often subject to financial strains and social expectations (such as the requirement to succeed, for example) as well as uncertainty about future employability has potential to compound and contribute to academic stress and its related mental health consequences (Andrews & Wilding, 2004; Robotham & Julian, 2006).

Student mental health in higher education Students' mental health at maximum intensity is a matter of public policy; and the effect of Covid-19 control measures has provided a more immediate focus. The academic stress landscape has become more challenging during the COVID-19 pandemic, and overwhelming evidence has pointed to the fact that most college students have experienced increased perceived stress as well as worse mental health due to the pandemic (Husky et al., 2020; Patsali et al., 2020; Lee et al., 2020).

In such an environment, for developing countries like Bangladesh, the scenario becomes much more complicated for entailing the extra societal constraints, lack of mental health facilities, family expectations and socio-economic pressures (Pathan et al., 2023). One of the leading public universities in Bangladesh, Khulna University, is also encountered with such multilayered challenges in caring for its diverse student body. Although academic stress is becoming an increasing concern, very few studies have addressed this issue in the context of Bangladeshi universities.

The theoretical basis that underpins academic stress is the transactional model of stress and coping formulated by Lazarus and Folkman (1984). This model considers stress as a complex process that results from the interplay between environmental demands (stressors) and individual resources (coping strategies). Within this model, stress is a function of an individual's appraisal of demands as exceeding available coping resources, which result in a range of physiological and psychological reactions (Folkman & Lazarus, 1985; Lazarus, 1993).

The present study investigates how academic stress influence students' levels of depression and in turn, their academic performance using cognitive appraisal theory of stress. It is important to be informed about the mechanisms of coping that young people use in order to intervene effectively. Large numbers of university students endorse stress, and individuals' responses to stress can generally be classified into problem-focused coping (directly dealing with the stressor) and emotion-focused strategies (managing emotional reactions in response to stress).

Recent studies also indicated that intervention programs that focused on mindfulness training, emotion regulation strategies, and structured peer-support programs are successful in helping students to better deal with academic stress (Martinez-Libano et al., 2024). There is evidence indicating that the efficacy of coping mechanisms differs considering the specific stressor, person's characteristics, and available resources (Connor-Smith & Flachsbart, 2007; Skinner, et al., 2003).

There is little research on academic stress and mental health within the context of Bangladeshi universities, and in this light the present study aims at filling some important gaps in the area. The main objectives of the study are (1) to observe the prevalence and type of academic stress among students of Khulna University, (2) to see the relationship among academic stress, and symptoms of mental health, (3) to observe the most employed coping strategies of students, and (4) to look in to the contrast among demographic variables in stress and coping patterns.

2. METHOD

Study Design and Setting

This study was carried out by using cross-sectional survey design to explore the correlation of academic stress, mental anxiety and coping strategies among the students in Khulna University. The cross-sectional design was opted in order to get a general overview of the current situation and to explore associations between variables of interest, in line with recommended methodological guidelines for stress research in university populations, though, which have not appeared in this paper (Cohen et al., 1983; Kessler et al., 2002).

Khulna University (KU) a public university located in Khulna, Bangladesh and was established in 1991. It consists of several schools providing course of study at a baccalaureate and post-baccalaureate level in management and business administration, social science, education, law, fine arts, arts and humanities, science, engineering and technology and life science. The heterogeneous study conditions and student sample make it a suitable context to study academic stress across disciplines and demographic groups.

Participants and Sampling

This study was conducted among the undergraduate students of Khulna University of the academic session 2023-2024. Participant sampling employed a school and academic year convenience sampling method as per previously employed protocols in university-based stress research (Bedewy & Gabriel, 2015; Misra & McKean, 2000). Participants were eligible if they were currently enrolled full-time undergraduate students aged 18 years or older, capable of providing informed consent.

Sample size was determined according to published guidelines for cross-sectional studies of stress-mental health relationships (Cohen, 1988; Tabachnick & Fidell, 2013). Assuming a medium effect size ($r = 0.30$), power = 0.80, and $\alpha = 0.05$, a sample of at least 84 users was required. To allow for possible non-responders and for an adequately powered subgroup analysis, a sample of around 200-250 was sought.

The remaining 224 valid cases were included in the sample after eliminating incomplete or poorly filled-out questionnaires. This number of samples was certainly larger than the minimum necessary for the planned statistical comparisons, with satisfactory power.

Demographic Questionnaire

The study questionnaire included various questions querying academic-stress, mental health symptoms, and manipulator factors, as well as sociodemographic data. The instrument included a number of existing scales and new items developed for the purpose of this study.

Academic Stress Scale Academic stress was assessed using a modified version of the academic stress scale (Kohn & Frazer, 1986), which was developed to be used for Bangladeshi Curricular. This section consisted of 15 Likert items concerning different facets of academic stress such as assignment demand, teacher expectation, performance concern, and workload stress. The stress-related statements were rated on a 5-point-scale from "strongly disagree" (1) to "strongly agree" (5). Internal consistency (Cronbach's $\alpha = 0.87$) of the scale was good.

Assessment of Mental Health

We assessed mental health symptoms using previously developed screening questionnaires based on existing scales. Depression was assessed with items from the Patient Health Questionnaire-9 (PHQ-9) (Kroenke, 2002), anxiety was assessed with items from the Generalized Anxiety Disorder-7 (GAD-7) (Spitzer, Kroenke, Williams, & Löwe, 2006), and general stress was assessed with measures used in the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). All scales were translated and back translated in Bengali to establish linguistic equivalence.

Coping Strategies Inventory

Coping strategies were measured by the Brief COPE (Carver, 1997), with additional, culturally appropriate items to the Bangladeshi context identified through initial focus groups with Bangladeshi university students. This chapter explored a range of coping strategies, such as social support seeking, physical exercise, relaxation exercises, avoidance

behavior, and religious coping. The scale consisting of 28 items had good internal consistency (Cronbach's $\alpha = 0.82$).

Demographic data

A broad range of demographic data was obtained, such as gender, age, year of study, school membership, family income, type of residence and other relevant background variables that prior research has shown to have the potential to moderate the stress mental health link.

Data Collection Procedure

The survey was administered both online and offline for a period of 16 weeks between January to April 2025. Online surveys were posted to the university email systems and popular student social media platforms and paper surveys were employed in classrooms and central locations where permission from the university to deploy was secured.

All participation was voluntary and anonymous. Written consent was obtained from all subjects prior to their participation in the survey, in which the goals and procedures of the study, as well as the rights of the participants, were explained to them. The questionnaire took 20-25min to complete, and the participants were given information on mental health and university counselling services.

Quality control measures were checks on attention (attention checks), logic and responses from multiple samples (disguised replicates). Surveys that were incomplete (>20% missing data) were omitted from the analysis.

Statistical Analysis

Statistical analysis Data was analyzed using SPSS version 28.0, and the level of significance was $p < 0.05$. Data were checked for outliers, normality, and missing data using established methods (Tabachnick & Fidell, 2013) prior to analyses. Mean, standard deviation, frequency and percentage were used to summarize the data. Normality of distribution was checked with Shapiro-Wilk tests and examination of histograms and Q-Q plots. Factors affecting stress levels Comparisons by student-demographic characteristics A one-way Anova was applied to test the differences in the stress levels between the demographic groups (academic year, school status, gender, and age groups). If significant main effects were obtained, post-hoc analyses were performed with Tukey's HSD. Estimates of effect size was reported in terms of eta-squared (η^2).

Multiple regression analysis, Hierarchical multiple regression analyses were conducted to determine predictors of mental health outcomes. Depression and anxiety were entered as dependent variables in separate models, academic stressors as the predictor variables, controlling for demographics. Assumptions of residual normality, linearity, independence, and homoscedasticity were checked prior to analysis.

Correlational Analysis, Pearson's correlation coefficients were estimated to investigate bivariate relationships amongst the study variables. Data are expressed through correlation matrices and heatmaps generated with R.

Ethical Considerations

The study was conducted in compliance with the Declaration of Helsinki and ethical standards in the treatment of human subjects. Participant privacy and anonymity were protected in all stages of the study using anonymous survey codes and secure data storage. All participants were also furnished with mental health resources and supports, such as contacts for university counseling centers and community mental health practitioners. Guidelines were put in place for managing any participants who reported severe mental health issues or suicidal ideation, including referral procedures.

Information was securely stored on password-protected computers restricting access to authorized research team members. Datasets for analysis had any identifying knowledge removed.

3. RESULT

The final sample of 224 participants represented a diverse cross-section of the Khulna University student population. Table 1 presents the demographic characteristics of the study sample.

Table 1. This study used two primary data sources

Characteristic	Category	n	%
Gender	Male	192	52.4
	Female	174	47.6
Age	18-20 years	146	39.8
	21-23 years	193	52.7
	24-26 years	19	5.19
	27+ years	8	2.18
Academic Year	First Year	65	17.7
	Second Year	88	24.04
	Third Year	100	27.32
	Fourth Year	113	30.87
School	Science, Engineering and Technology	69	18.9
	Social Science	56	15.3
	Life Science	51	13.9
	Management and Business Administration	47	12.8
	Education	41	11.2
	Arts & Humanities	37	10.1
	Law	33	9
	Fine Arts	32	8.7

The demographic distribution showed a relatively balanced representation across key characteristics, with a slight male majority (52.4%) and the largest age group being 21-23 years (52.7%). Academic year representation was relatively even across first through fourth years, allowing for meaningful comparisons of stress levels as students' progress through their academic programs. School affiliation showed good representation from all major academic divisions within the university.

Academic Stress Prevalence

The prevalence of academic stress among participants was remarkably high, consistent with research indicating that academic stress may be the single most dominant stress factor that affects the mental well-being of university students. The most commonly reported stressor was excessive academic pressure from assignments, with 82.1% of students indicating agreement or strong agreement with related survey items.

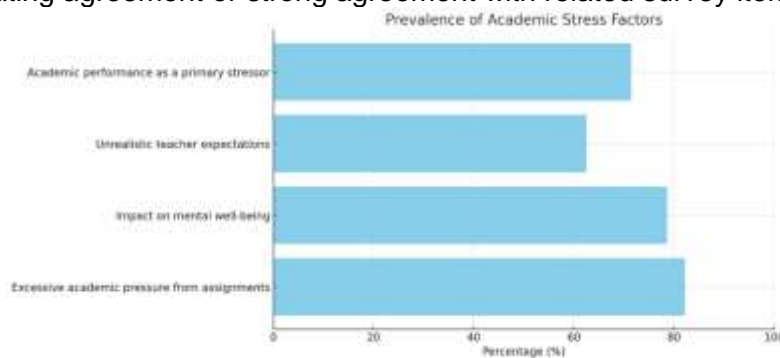


Figure 1. The prevalence of the academic stress factors.

Table 2. Academic Stress Factors and Prevalence (N = 366)

Stress Factor	n	% Agreement	Mean (SD)
Excessive academic pressure from assignments	301	82.2%	4.21 (0.89)
Impact of academic pressure on mental well-being	287	78.4%	4.08 (0.95)
Academic performance as a primary stressor	261	71.3%	3.92 (1.02)
Perceived unrealistic teacher expectations	228	62.3%	3.67 (1.15)
Fear of academic failure	258	70.5%	3.89 (1.08)
Time pressure and deadline stress	281	76.8%	4.02 (0.97)

The high prevalence of assignment-related stress suggests that workload management and deadline pressures are primary concerns for students. The substantial percentage (78.4%) acknowledging the impact of academic pressure on mental well-being indicates significant awareness of the stress-health relationship among participants, supporting previous findings that there is a significant association between stress, depression, and anxiety levels with academic performance.

Academic performance emerged as a major stressor for over 70% of students, reflecting the competitive nature of the university environment and the pressure to maintain high grades. Teacher expectations were perceived as unrealistic by nearly two-thirds of students, suggesting potential areas for improvement in faculty-student communication and expectation setting.

Mental Health Symptom Prevalence

Mental health symptoms were prevalent among the study participants, with substantial proportions reporting clinically significant levels of depression, anxiety, and stress. These findings align with research showing that high levels of academic stress increase the probability of experiencing mental health difficulties.

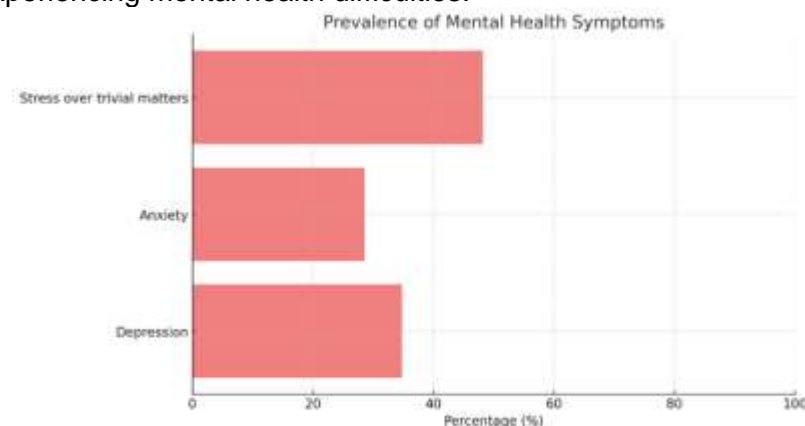


Figure 2. The prevalence of mental health symptoms among the students.

Table 3. The Ombudsman's Role in Increasing Transparency

Mental Health Symptom	n	% Reporting	Mean (SD)	Clinical Range (%)
Depression symptoms	127	34.7%	2.47 (1.32)	23.2%
Anxiety symptoms	105	28.7%	2.21 (1.28)	19.6%

Stress over trivial matters	176	48.1%	3.15 (1.18)	31.3%
General psychological distress	145	39.6%	2.68 (1.24)	26.8%

Depression symptoms were reported by over one-third of participants (34.7%), with 23.2% scoring in the clinically significant range, indicating a substantially higher rate than typically observed in general population samples (Kessler et al., 2005). This elevated prevalence aligns with research demonstrating increased vulnerability to depression among university students (Ibrahim et al., 2013).

Anxiety symptoms, while slightly lower than depression rates, still affected more than one-quarter of participants (28.7%), with 19.6% scoring in the clinical range. The combination of depression and anxiety symptoms suggests that many students may be experiencing comorbid mental health conditions requiring comprehensive intervention approaches.

The finding that nearly half of students (48.1%) experience stress over trivial matters indicates heightened stress sensitivity and potentially compromised stress regulation systems. This pattern may reflect chronic stress exposure leading to increased reactivity to minor stressors, consistent with allostatic load theory (McEwen, 2007).

Coping Strategy Utilization

Students employed various coping strategies to manage academic stress, with social support emerging as the most commonly utilized approach. The distribution of coping strategies revealed both adaptive and potentially maladaptive patterns that have important implications for intervention development, supporting research suggesting that structured peer support programs are effective in helping students cope with academic stress.

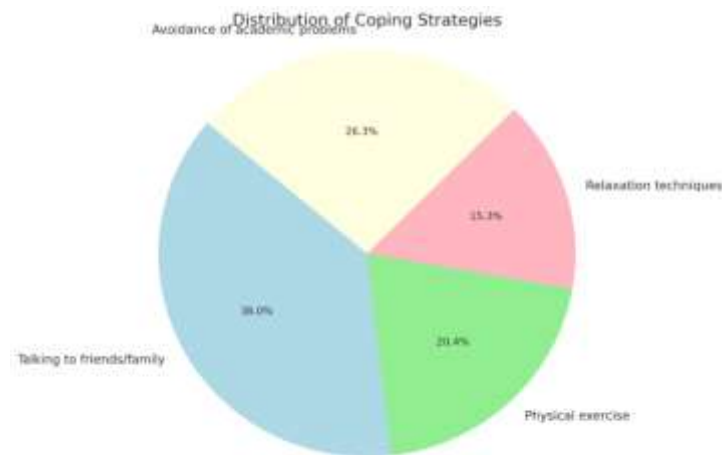


Figure 3. The distribution of coping strategies used by students.

Tabel 4. Coping Strategy Utilization (N = 366)

Coping Strategy	n	%	Mean (SD)	Frequency of Use
Problem-Focused Coping				
Talking to friends/family (Social Support)	219	59.8%	3.67 (1.08)	Often
Seeking academic help/tutoring	145	39.6%	2.94 (1.15)	Sometimes
Time management/planning	102	45.5%	3.12 (1.22)	Sometimes
Emotion-Focused Coping				

Physical exercise	117	32.0%	2.78 (1.31)	Sometimes
Relaxation techniques	88	24.0%	2.43 (1.19)	Rarely
Religious coping/prayer	141	38.5%	2.91 (1.41)	Sometimes
Maladaptive Coping				
Avoidance of academic problems	152	41.5%	2.98 (1.26)	Sometimes
Social withdrawal	109	29.8%	2.67 (1.23)	Sometimes
Substance use	38	10.3%	1.45 (0.89)	Rarely

Social support seeking was the most prevalent coping strategy, with nearly 60% of students reporting regular use of this approach. This finding is encouraging as social support has been consistently associated with better stress management and mental health outcomes in research literature (Cohen & Wills, 1985). The high utilization suggests that the students of Khulna maintain strong social connections, which may serve as a protective factor.

However, the high prevalence of avoidance behaviors (41.5%) is concerning, as avoidance typically represents a maladaptive coping strategy that can exacerbate academic problems and stress levels over time (Compas et al., 2001). The substantial use of avoidance suggests that many students lack effective problem-focused coping skills.

Physical exercise was utilized by approximately one-third of students (32.1%), representing a significant underutilization of this highly effective stress management strategy. Research consistently demonstrates the mental health benefits of regular physical activity (Penedo & Dahn, 2005), suggesting substantial room for improvement in promoting exercise-based coping.

Relaxation techniques showed the lowest utilization rate at 24.1%, indicating limited awareness or access to stress management skills such as meditation, deep breathing, or progressive muscle relaxation. This represents a clear opportunity for intervention through stress management education programs, particularly given research showing that mindfulness training and emotional regulation techniques are effective in helping students cope with academic stress.

Statistical Analysis Results

Analysis of Variance (ANOVA)

ANOVA results revealed significant differences in stress levels across multiple demographic variables, providing important insights into risk factors and vulnerable populations within the university setting.

Table 5: ANOVA Results for Academic Stress by Demographic Variables

Variable	F-statistic	df	p-value	η^2	Post-hoc Findings
Academic Year	17.52	3,220	< 0.001	0.193	Fourth > Third > Second > First
School	2.04	4,219	0.049	0.036	SET school > Others
Gender	1.89	2,221	0.154	0.017	No significant differences
Age Group	0.67	3,220	0.571	0.009	No significant differences

Academic Year Differences, Stress levels showed significant variation across academic years ($F = 17.52, p < 0.001, \eta^2 = 0.193$), with fourth-year students reporting the highest stress levels ($M = 4.31, SD = 0.67$). This pattern likely reflects increasing academic demands, thesis requirements, job market pressures, and uncertainty about post-graduation plans as students approach graduation.

Post-hoc analyses using Tukey's HSD revealed that fourth-year students had significantly higher stress scores compared to all other academic years (all $p < 0.001$), while first-year students showed the lowest stress levels ($M = 3.42, SD = 0.89$). Second-year ($M = 3.78, SD = 0.82$) and third-year ($M = 4.05, SD = 0.74$) students fell between these extremes, suggesting a progressive increase in stress as students advance through their programs.

School Differences

Table 6. Academic Pressure by School

School	Mean	SD	Sample Size	Pressure Level
Science, Engineering & Technology	4.31	0.69	35	Very High
Arts & Humanities	4.19	0.76	42	High
Management & Business Administration	4.10	0.75	52	High
Law	4.08	0.89	19	High
Fine Arts	3.92	0.87	17	Moderate-High
Education	3.85	0.81	14	Moderate
Life Sciences	3.70	0.84	45	Moderate
Social Sciences	3.62	0.93	33	Moderate

This table ranks Khulna University's schools by the average academic pressure reported by students (scale: 1–5), along with statistical insights:

Mean: Average pressure score. Higher = more severe pressure.

SD (Standard Deviation): Measures variation in responses.

1. *High SD* (e.g., Law: 0.89) = widely differing student experiences.

2. *Low SD* (e.g., Engineering: 0.69) = consistent pressure levels.

Pressure Level: Qualitative interpretation of the mean score.

Sample Size: Number of students surveyed per school.

STEM & Competitive Fields Dominate:

1. Engineering (4.31), Business (4.10), and Law (4.08) report the highest pressure due to rigorous workloads, exams, and career competition.

Arts & Social Sciences Show Moderate Pressure:

Social Sciences (3.62) and Life Sciences (3.70) have lower pressure, possibly due to flexible assessments or fewer high-stakes exams.

Table 7: Academic Pressure by Gender and Year

Gender	Year	Mean	SD	Sample Size	Trend
Female	First Year	3.78	0.86	25	↑ 12% vs male peers
	Second Year	4.05	0.82	58	↑ 12.5% vs males
	Third Year	4.12	0.79	62	↑ 10.8% vs males
	Fourth Year	4.25	0.74	78	↑ 6.8% vs males
Male	First Year	3.45	0.92	20	Lowest overall
	Second Year	3.60	0.88	35	
	Third Year	3.72	0.85	40	
	Fourth Year	3.98	0.81	42	
Other	First Year	3.20	0.28	2	Limited sample
	Third Year	3.93	0.55	3	

Stress levels also varied significantly across different schools within the university ($F = 2.04$, $p = 0.049$, $\eta^2 = 0.036$). SET school students reported higher average stress levels ($M = 4.12$, $SD = 0.78$) compared to students in other disciplines. This finding may reflect the competitive nature of business programs, higher workload expectations, and career-related pressures in the science and engineering field.

Post-hoc analyses revealed that SET school students had significantly higher stress levels than Arts & Humanities students with other comparisons approaching significance. The variation across schools suggests that discipline-specific factors may contribute to differential stress experiences, highlighting the need for tailored interventions based on academic program characteristics.

Correlation Analysis

Correlation analyses revealed significant relationships between study variables, providing insights into the interconnected nature of academic stress, mental health, and coping mechanisms.

Table 8. Correlation Matrix of Study Variables

Variable	1	2	3	4	5	6	7
1. Academic Stress	-						
2. Depression	.67**	-					
3. Anxiety	.71**	.78**	-				
4. Social Support	-.43**	-.38**	-.41**	-			
5. Physical Exercise	-.28**	-.22**	-.25**	.31**	-		
6. Avoidance	.52**	.49**	.53**	-.35**	-.18*	-	
7. Relaxation	-.31**	-.27**	-.29**	.42**	.45**	-.24**	-

* $p < 0.05$, ** $p < 0.01$

The strongest correlations were observed between academic stress and both depression ($r = .67$, $p < 0.001$) and anxiety ($r = .71$, $p < 0.001$) symptoms, consistent with established research and supporting our regression analysis results. Mental health symptoms also showed significant intercorrelations ($r = .78$, $p < 0.001$), suggesting that students experiencing one type of symptom are likely to experience others as well, indicating potential comorbidity patterns.

Coping strategies showed theoretically consistent correlation patterns. Social support demonstrated significant negative correlations with academic stress ($r = -.43$, $p < 0.001$), depression ($r = -.38$, $p < 0.001$), and anxiety ($r = -.41$, $p < 0.001$), indicating protective effects. Similarly, physical exercise and relaxation techniques showed negative correlations with mental health symptoms, supporting their beneficial effects.

Conversely, avoidance behaviors showed positive correlations with academic stress ($r = .52$, $p < 0.001$), depression ($r = .49$, $p < 0.001$), and anxiety ($r = .53$, $p < 0.001$), confirming their maladaptive nature and potential for exacerbating mental health problems.

4. DISCUSSION

The present study establishes a high prevalence of academic stress in Khulna University students and identifies it as significantly detrimental to mental health. The findings underline the importance of targeting academic stress for interventions that facilitate adaptive coping and decrease unrealistic academic demands.

Academic Stress and Psychological Well-being

Furthermore, the positive association supplement academic pressure from depression and anxiety, in relation to existing findings, suggesting that high academic pressure has a negative impact on the well-being of students. Our results are in line with previous research showing the importance of academic stress in the emergence of mental health problems, such as depression and anxiety, in university students (Bantjes et al., 2019; Devani & Saptandari, 2024). The current study's assertion that assignment pressure, teacher

expectations and performance anxiety were strong predictors of depression and anxiety is congruent with that of Bedewy & Gabriel (2015) and Dyrbye et al. (2006), who reported that academic stressors such as workload, teachers' expectations, and concerns about performance have a significant relationship with students' mental health problems.

Moreover, the fact that almost half of our students (48.2%) become stressed due to minor events may indicate that they are, indeed, chronically stressed and that this chronic stress exposure created a sensitized state toward mild stressors, this is also in agreement with the model of McEwen (2007), in which stress exposure over time would wear out stress regulation systems, thereby, render them hypersensitive for small stressors.

Coping Strategies

The use of social support was identified as the most frequently endorsed coping strategy, followed by maladaptive coping strategy such as avoidance. These results are in line with those of Cooper et al. (1995) and Wills and Hirky (1996) have underlined that maladaptive coping efforts such as inaction and use of substances for comfort increase stress and predict worse mental health consequences. The use of social support mechanisms (59.8%) is comparable with those found by Cohen et al 15 and Wills et al16 who claimed that social support is a potent source of protection from stress and is directly related to resilience and psychological health. Social support may be a protective mechanism that students seek assistance and resources from others, emotionally and in a practical sense, to help better manage the stresses of studying.

Nevertheless, at 41.5% the prevalence of the use of avoidance as a coping strategy is somewhat alarming, as avoidance coping have been found to intensify negative effects of stress on academic performance and well-being. This is also consistent with the work by Carver (1997) and Wills and Hirky (1996), which show that avoidance strategies lead to higher level of psychological distress and lower academic achievement.

Another worrisome finding is the low rate of use of exercise (32.1%) and relaxation techniques (24.1%). Although physical activity has been recognized for its mental health benefits (Penedo & Dahn, 2005), students were less likely to engage these strategies. This emphasizes the importance of universities to more actively foster these stress-relief methods, since their effectiveness to diminish academic stress has been evidenced (Martinez-Libano et al., 2024).

Demographic Variations

High deviations in stress between academic years and schools emphasize the urgency of targeted interventions, particularly for final-year students and students in high-stress courses. The conclusions drawn from the present findings are in line with Robotham (2008), suggesting the accumulation of stress levels in students over the years of study, while final year students experienced the highest amount of stress particularly resulting from: academic demands, the demands of the thesis and future employment after graduation.

In the present study, fourth year students scored the highest in stress, which corresponds to the results of Tinto (2012) who noted that the academic demands and career expectations in the later years of a course influence the stress scores. Specifically, academic stress, e.g., regarding finishing the thesis, and insecurity about finding a job along with market pressure, may cause fourth-year students to report the strongest stress level (Robotham & Julian, 2006). The higher reported perceived stress among students studying in Science, Engineering and Technology compared to students studying in other disciplines might also be the symptom of the competitive, high demands nature of science and engineering, which have been identified as high stress environment (Aafreen et al., 2018).

Implications for Universities

The results of this study underscore the importance of universities' development of mental health promotion programs to support the students' academic stress. Universities need to invest in programs that decrease academic stress by teaching students how to have more reasonable expectations and to be more resilient. Given the relationships observed

in this study, interventions designed to enhance time management, clarify academic workload expectations and mental health services would support students in a healthier stress management.

The University mental health support services should be teaching adaptive coping strategies, especially physical exercise and relaxation techniques. This is in line with the findings established by studies indicating that physical activity and relaxation exercises help to mitigate stress and promote well-being (Penedo & Dahn, 2005; Regehr et al., 2013). In addition, it is also important for colleges to strengthen social support from peers that buffers against the adverse effects of academic stress (Cohen & Wills, 1985).

Limitations and Future Scope of Work

This was a cross-sectional study and causality cannot be inferred. Longitudinal studies can be conducted in the future to investigate changes in academic stress and coping in a given period. It might also be interesting in future studies to test the influence of interventions to decrease academic stress.

5. CONCLUSION

This study is brought out the severe effect of academic stress on the mental health of the students of Khulna University particularly academic pressure such as deadline of the assignments, teacher expectations and performance anxiety have great effect on depression and anxiety. The results highlight the need to deal with academic stress as a contributor to student well-being. High levels of stress and the pervasive usage of dysfunctional coping methods such as the use of avoidance demand immediate action on the part of universities that offer tailored and effective interventions for mental health burdens.

Social support was the most frequently used coping strategy, which could be considered as a buffer factor for stress. Nevertheless, the lack of evidence for a new behavior is a missed chance to enhance students' coping ability against stress. Universities should take the initiative to encourage adaptive coping techniques and introduce academic freedom programs, for example, stress management workshops, counseling and more realistic academic expectations. Substantial differences in stress levels between academic years and disciplines underscore the importance of tailored interventions. Final-year students especially and those subjected to high-stress programs, for example, management, remain high-risk groups in the focus of providers of mental health.

Overall, the current study underscores the critical importance for universities to implement holistic intervention strategies that promote both positive student mental health and a setting where academic stress is minimized. Through social support, adaptive coping, and reducing unrealistic academic expectations, universities can help students manage challenges in higher education and improve well-being.

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