

The psychological impact of SARS-COV-2: assessing anxiety and wellbeing within university students in Bangladesh during the pandemic

Md. Yousuf Ali^{1,*}, Ahnaf Tahmid Arnab² and A S M Firoz-Ul-Hassan
Department of Government and Politics, Jahangirnagar University, Dhaka-1342,
Bangladesh

Abstract

The main focus of this study was to explore the emotional experiences of Jahangirnagar University students amid the COVID-19 pandemic, shedding light on their well-being and anxiety levels during this unprecedented time. Using a multidimensional approach, our descriptive and exploratory statistics reveal the demographic characteristics of the diverse group of students, including a skewed gender ratio attributed to the pandemic. Notably, living arrangements significantly influence emotional states, as students residing with their families report lower anxiety levels, indicating the potential protective role of familial support during crises. Online class attendance emerges as a pivotal factor impacting emotional well-being, with regular participation associated with higher levels of well-being, while sporadic or non-attendance correlates with heightened anxiety. The study further reveals the impact of part-time job loss during the pandemic on student emotional states, highlighting the economic strain experienced by many students. A substantial proportion of students' report both moderate to severe anxiety and sufficient well-being, underscoring the complexity of emotional experiences during this tumultuous period. Binary logistic regression identifies gender-based disparities and social support as predictors of well-being and anxiety, while factor analysis illuminates the underlying structures of these constructs. In conclusion, these insights call for prioritizing mental health support and fostering conducive environments within academic institutions, particularly Jahangirnagar University, thereby facilitating student resilience and academic success during uncertain times.

Key words: Psychological wellbeing, mental anxiety, COVID-19, students, Jahangirnagar University, Bangladesh.

INTRODUCTION

The initial identification of this contagious illness occurred in December of 2019, specifically in Wuhan City located in Hubei Province, China (Lu *et al.*, 2020b). Since then, it has exhibited swift transmission throughout China and across international borders (Holshue *et al.*, 2020; Huang *et al.*, 2020; Wang *et al.*, 2020). The outbreak of SARS-CoV-2, the viral pathogen responsible for the onset of COVID-19, has been documented in a study conducted by Lu *et al.* (2020a). The World Health Organization (WHO) designated the outbreak a Public Health Emergency of International Concern on January 30th, 2020, and subsequently classified it as a worldwide pandemic on March

¹ Department of Political Science, Dhaka International University, Dhaka, Bangladesh

² Core Team, Centre for Research and Information, Dhaka, Bangladesh

*Corresponding author. Email: yousuf.polic@diu.ac

11th, 2020 (WHO, 2020a). As of 10:12 a.m. CET on February 4, 2021, the WHO reported that COVID-19 had affected a cumulative total of 103,631,793 individuals in 220 nations, regions, or territories. Furthermore, the global mortality count attributed to this disease stands at 2,251,613 (WHO, 2020b).

Bangladesh experienced significant negative consequences as a result of the COVID-19 pandemic, contributing to its overall global burden. The Institution of Epidemiology, Disease Control and Research (IEDCR) in Bangladesh officially confirmed the initial case of COVID-19 on 8 March 2020 (Khan *et al.*, 2020). In response to the identification of the initial COVID-19 case on March 8, 2020, the government of Bangladesh implemented the closure of all educational institutions on March 17, 2020, as a measure to mitigate the rapid proliferation of the deleterious virus (Al-Amin *et al.*, 2021). In order to minimize the spread of the virus, the government of Bangladesh implemented several restrictions on its population. Later, a statewide lockdown was implemented on 26 March under the pretext of a general vacation, and it was later prolonged on seven occasions until 30 May 2020 in order to mitigate the spread of transmission (The Business Standard, 2020). More specifically, the holiday was initially extended until 11 April, then 14 April, 25 April, 05 May, 07 May, 16 May and, eventually, 30 May (The Business Standard, 2020). Both public and private offices, educational institutions and markets were closed during these times of lockdown and general holidays, and land boundaries were sealed. All public and private offices were closed during the holiday period, except for offices handling the required commodities and daily services. The key rationale behind the government's decision to lift the lockdown on 30 May was identified, despite the fact that educational institutions continued to stay shut nationwide. Following the closure of educational institutions, the Minister of Education issued a directive mandating all universities to use online education. According to Al-Amin *et al.* (2021), educational institutions in Bangladesh, including public and private universities, colleges, and schools, have transitioned their instructional activities to online platforms. The rapid emergence of the pandemic and subsequent lockdown measures has resulted in students being restricted to their residences, leading to heightened levels of psychological distress and anxiety (Akhtarul Islam *et al.*, 2020b; Khan *et al.*, 2020).

The COVID-19 epidemic has exerted a substantial influence on individuals' overall welfare. Several prevalent consequences encompass heightened levels of tension and worry, feelings of aloneness and seclusion, as well as the onset of depression and various mental health ailments. An empirical investigation conducted by Frontini *et al.* (2021) revealed a positive association between individuals' levels of pandemic-related worry and their self-reported experiences of depressive and anxious symptoms. It was observed that university students in Bangladesh who encountered alterations in their daily routines as a consequence of the pandemic had a higher propensity to manifest symptoms associated with despair and anxiety (Khan *et al.*, 2020). The objective of this study was to examine the levels of well-being, psychosocial distress, and associated mental health issues among adult students of Jahangirnagar University during the COVID-19 pandemic.

MATERIALS AND METHODS

Source of Data: The study focuses primarily on primary data from students in Jahangirnagar University. The survey was conducted from 16 January to 10 February 2021 at Jahangirnagar University. The targeted population was the currently enrolled students at Jahangirnagar University, Bangladesh. The total number of sample size was 448, out of which 222 responses were collected offline via a structured questionnaire. The rest or 224 responses were collected online via an e-questionnaire prepared and deployed on Google Forms. Total collected responses 448, but six of responses were excluded for incomplete answering and two are no responses of our e-questionnaire although they enrolled out study. The total number of valid responses was 440, and the respondents were included based on several criteria (Fig. 1).

Sampling Techniques: The stratified sampling technique was used to gather the desired responses by stratifying each of the nine faculties and institutes in Jahangirnagar University. Each questionnaire, both online and offline had an attached consent form which was required to be filled in by the respondent before answering the survey questions. On the field, enumerators were involved to gather responses from individual respondents, and the online questionnaires were distributed via social media platforms like Whats App, Facebook, and Messenger.

Measures: The study explores three main areas of research, i.e., the demographic information of the respondents, their self-rated wellbeing scenario, and their self-rated anxiety scenario at the time of the pandemic in Bangladesh. The demographic queries contain the age ('18-21', '22-25', '26<'), gender, faculty, locality, time spent with the family during the pandemic, attendance in online classes, and involvement in part-time jobs.

'Wellbeing' was explored via the 'Warwick-Edinburgh Mental Wellbeing Scale' (WEMWBS). The WEMWBS is a 14-item reliable questionnaire used for screening and predicting self-rated wellbeing conditions among respondents (Tennant *et al.*, 2007). Due to the socio-cultural differences among Bangladeshis, an item was removed from the original questionnaire, and the questionnaire was converted to a 13-item and 4-point Likert scale. The scores in the WEMWBS scale range from '1=Never' to '4=Always'. The levels of wellbeing were categorized into '0-13=Bad', '14-26=Good', and '27<Better'.

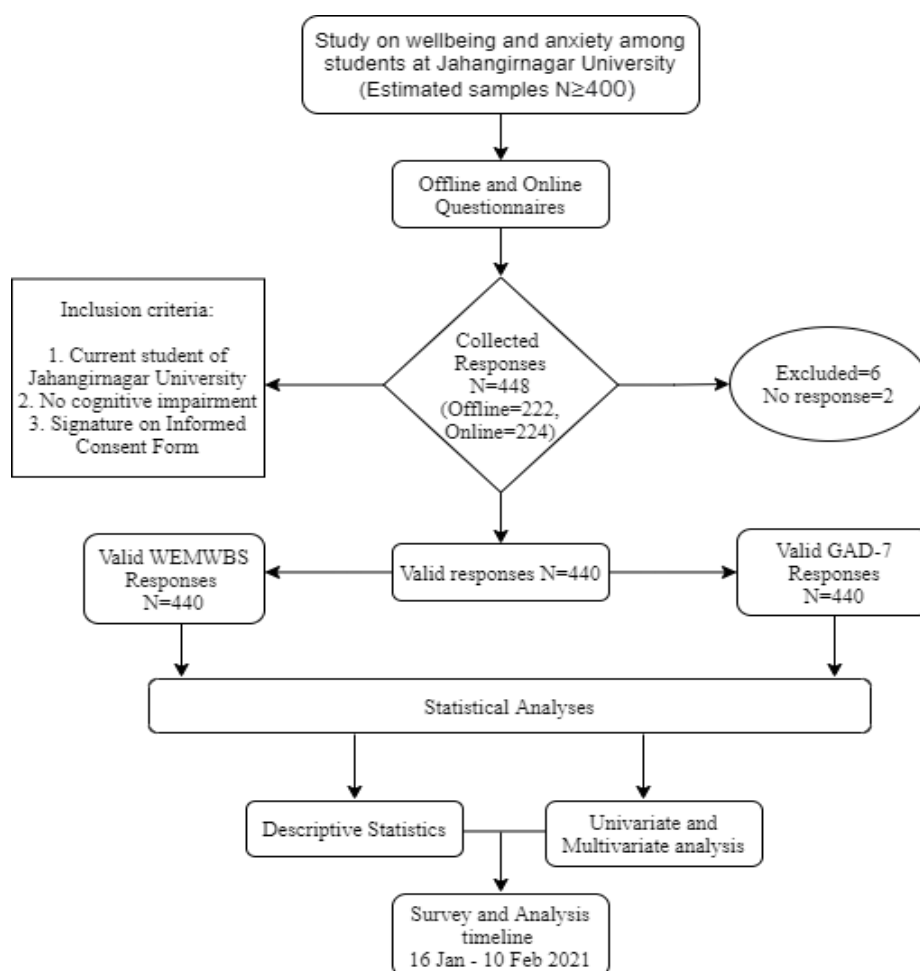


Fig. 1. Flowchart of the Study

'Anxiety' was explored via the 'Generalized Anxiety Disorder scale' (GAD-7). The GAD-7 is a 7-item and 4-scale questionnaire used for analyzing self-rated anxiety among desired respondents (Spitzer *et al.*, 2006) with efficient reliability in cross-sectional and longitudinal studies (Hossain *et al.*, 2019). The scores in this study for GAD-7 scale range from '1=Never' to '4=Always'. The levels of anxiety among respondents were categorized into '0-4=Nil', '5-9=Mild', '10-14=Moderate', and '15-21=Severe' anxiety.

Statistical Analysis: The study employs a wide range of univariate and multivariate statistical analyses. The responses from the respondents were summarized via frequency tabulation, and explored via descriptive and exploratory statistics. The binary logistic regression (Hosmer *et al.*, 2013) was employed to identify and explore the factors behind the self-rated wellbeing and anxiety responses. Each of the dependent variables, i.e., 'wellbeing' and 'anxiety' were categorized into binary groups of values 'yes'=1 and

'no'=0 in each case. The logistic regression is used to predict *logit* transformations of the probability of a characteristic being present or absent, such as:

$$\text{logit}(p) = b_0 + b_1X_1 + b_2X_2 + \dots + b_kX_k$$

Here p stands for the probability of the presence of a feature. The *logit* transformation is defined as the logged odds:

$$\text{Odds} = \frac{p}{1-p} = \frac{\text{The probability of a characteristic being present}}{\text{The probability of a characteristic being absent}}$$

And,

$$\text{logit}(p) = \text{loglog}\left(\frac{p}{1-p}\right)$$

In addition to the utilization of logistic regression, which involves the acceptance rather than the selection of parameters that maximize the likelihood of observing sample values (Islam *et al.*, 2020a), exploratory factor analysis was also employed to validate and ensure the reliability of the responses. Furthermore, it was utilized to establish clear distinctions between the features of 'wellbeing' and 'anxiety' by creating two separate numerical clusters. All the statistical analyses were performed on SPSS v.26, and the visualizations were carried out via specific R packages and Python libraries.

RESULTS AND DISCUSSION

Descriptive and Exploratory Statistics: The descriptive statistics in Table 1 summarizes the collected responses and variables as frequencies. Most of the respondents in the study belong to the age group of 22-25 (66.4%) followed by the age group of 18-21 (26.6%) and that of >25 (7%). The female to male ratio was 1:3 since there were lesser female respondents available to reach due to the pandemic. Results show that 80% of the students lived with their families during the entirety or at least a certain period of time amid the first two waves of the pandemic. The distribution of locality within the respondents was uniform, while the faculties that they belong to differed to an extent. Half of the students reported that they regularly attend online classes, however, a big chunk of the students either rarely attend (33.4%) or do not attend (17.5%) the online classes at all. The study also finds that 13.7% of the students already lost their part-time jobs, if they had any, due to the pandemic.

The wellbeing and anxiety responses are sorted out in Table 2. The responses show that 20.23% students reported mild anxiety, 48.41% reported moderate anxiety, 22.05% reported severe anxiety, while 9.09% students reported little to no anxiety amid the pandemic. In the case of wellbeing, 42.73% students reported sufficient wellness, 50.45% reported mild wellness and 6.36 reported to be unwell. Maximum students in the age group of 22-25 reported severe (15.68%) and moderate anxiety (31.1%), while 29.5% of the same age group reported feeling sufficiently well. 35.2% of male students reported sufficient wellness and 15.7% reported severe anxiety, while 7.5% of the female students

reported sufficient wellness and 6.36% reported severe anxiety. Students living in the urban areas had maximum reports of severe anxiety (9.3%) while the least number of anxious students belonged to the rural areas (2.5%). While a maximum of 3.6% students who had felt unwell lived in the urban regions, more sub-urban students (16.8%) felt sufficient wellness. Students who either did not have a part-time job or lost their jobs due to the pandemic suffered much with a severe anxiety frequency of 14.5% and a severely unwell count of 3.9%.

Table 1. Frequency table for associated variables (n=440)

Variables	Frequency	Percent (%)
Age		
18-21	117	26.6
22-25	292	66.4
>25	31	7.0
Gender		
Female	141	32.0
Male	299	68.0
Living with family during the pandemic		
Yes	286	65.0
No	88	20.0
For a certain period	66	15.0
Type of locality		
Urban	141	32
Semi-urban	161	36.6
Village	138	31.4
Faculty/Institute		
Arts and Humanities (AH)	92	20.9
Biological Sciences (BIS)	32	7.3
Business Studies (BS)	25	5.7
Law	24	5.5
Mathematical and Physical Sciences (MPS)	42	9.5
Social Sciences (SS)	202	45.9
Institute of Business Administration (IBA)	15	3.4
Institute of Information Technology (IIT)	8	1.8
Attendance in online classes		
Yes	216	49.1
No	77	17.5
Sometimes	147	33.4
Part-time jobs		
Yes	155	35.2
No	225	51.1
Lost during COVID-19	60	13.7

Table 2. Results of the WEMWBS and GAD-7 (n=440)

Variables	Wellbeing			Anxiety					Total
	Not Well	Mild	Sufficient	Total	None	Mild	Moderate	Severe	
Age									
18-21	12	68	37		9	24	64	20	
22-25	17	145	130		30	56	137	69	
>25	1	9	21		2	9	12	8	
Gender				440					440
Female	19	89	33		3	28	82	28	
Male	11	133	155		38	61	131	69	
Living with family during the pandemic				440					440
Yes	24	166	96		21	51	150	64	
No	5	25	58		7	20	37	24	
For a certain period	1	31	34		13	18	26	9	
Locality				440					440
Urban	16	70	55		16	18	66	41	
Semi-urban	9	78	74		14	41	80	26	
Village	5	73	59		11	30	67	30	
Faculty/Institute				440					440
AH	5	51	36		7	20	46	19	
BIS	1	16	15		1	6	11	14	
BS	3	13	9		0	8	12	5	
Law	0	11	13		2	7	12	3	
MPS	2	17	23		6	10	16	10	
SS	16	101	85		23	37	101	41	
IBA	2	9	4		0	1	11	3	
IIT	1	4	3		2	0	4	2	
Attendance in online classes				440					440
Yes	14	121	81		20	48	119	29	
No	7	34	36		16	12	33	16	
Sometimes	9	67	71		5	29	61	52	
Part-time jobs				440					440
Yes	11	69	75		14	33	75	33	
No	16	122	87		21	39	116	49	
Lost during	3	30	25		6	17	22	15	

The diamond plot (Fig. 2) shows the 7 variables concerning ‘anxiety’ and the scales within the questionnaire. The variables in GAD-7 used to evaluate anxiety were fear, annoyance, restlessness, difficulties in relaxation, overthinking, inability to stop worrying, and nervousness. Results show that most of the students have strongly felt these symptoms at least ‘some of the time’ during the pandemic. A maximum of 61.8% of the students felt nervous ‘some of the time’ while the minimum threshold of 43.2% students felt annoyed ‘some of the time’. 17.3% students reported feeling afraid ‘all the time’ while 14.3% worried too much during the pandemic. Fig. 2 shows that most of the students fall above the average line, and have felt strongly about these anxious items - with a negligible percentage of denial (‘never’).

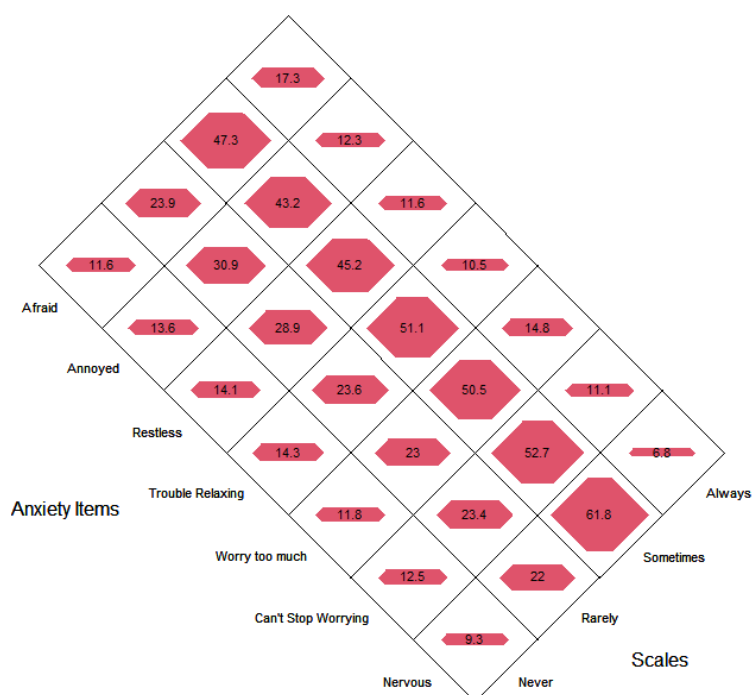


Fig. 2. Diamond plot of the Anxiety variables and scales.

The second diamond plot (Fig. 3) shows the 13 variables and scales related to the ‘wellbeing’ analysis. The variables include being cheerful, new interests, feeling loved, making up your own mind, confidence, feeling close, thinking clearly, dealing with problems, spare energy, interested, relaxed, useful, and optimistic. In this case, 56.1% of the students reported their ability to deal with problems, 47.5% felt confident and loved and 54.6% reported having energy to spare among other items. Fig. 2 shows the distribution of response tips over the ‘never’ and ‘rarely’ scales and falls largely on the ‘sometimes’ and ‘always’ scales. Although the earlier analysis of ‘anxiety’ shows how a large chunk of the respondents felt significantly anxious, 36.8% of them reported feeling optimistic (Fig. 3) about the future nevertheless. 24.5% students tried to remain cheerful and a significant 40.9% found newer interests to divert their minds off the gruesome

COVID-19. This shows how the pandemic had a silver lining for a lot of students, and how many of them chose to spend a productive time amid the chaos and nationwide lockdowns.

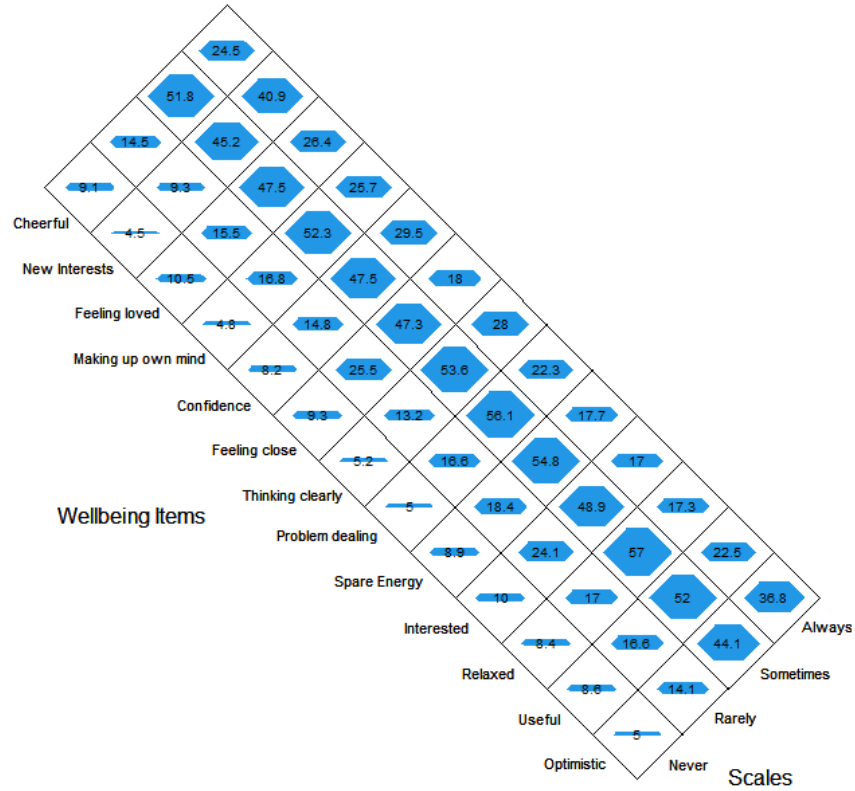


Fig. 3. Diamond plot of the Wellbeing variables and scales

Binary Logistic Regression and PCA: Table 3 summarizes the multiple binary logistic regression analysis on the anxiety, wellbeing and associated demographic variables. It shows that female students were 12.8% (95% CI: 6.651, 24.687) more likely to be well, and 2.4% (95% CI: 1.531, 3.530) more likely to be anxious than their male counterparts. Students who did not live with their families were 5% (95% CI: 2.687, 8.953) more likely to be anxious than those who lived with their families. Another significant finding shows that the students who did not attend online classes regularly were 3.8% (95% CI: 1.748, 8.082) more likely to be well than those who did. Finally, those who did not have any part-time jobs during the pandemic 2.1% more likely to be anxious (95% CI: 1.093, 4.050) than those who had or retained a job.

Table 3. Binary logistic regression model predicting self-rated wellbeing and anxiety

Variables	Wellbeing				Anxiety			
	B	P-value	OR	95% CI Lower-Upper	B	P-value	OR	95% CI Lower-Upper
Age								
18-21 ^{ref}	1.000				1.000			
>25	-.438	.295	.645	.284-1.465	.353	.388	1.423	.638-3.175
Gender								
Male ^{ref}	1.000				1.000			
Female	2.551	.000	12.814	6.651-24.687	.854	.000	2.325	1.531-3.530
Living with family during the pandemic								
Yes ^{ref}	1.000				1.000			
No	1.036	.004	2.818	1.390-5.711	1.590	.000	4.905	2.687-8.953
Locality								
Urban ^{ref}	1.000				1.000			
Village	-.424	.277	.655	.305-1.406	-.059	.862	.943	.484-1.835
Attendance in online classes								
Yes ^{ref}	1.000				1.000			
No	1.324	.001	3.759	1.748-8.082	.459	.144	1.582	.855-2.929
Part-time jobs								
Yes ^{ref}	1.000				1.000			
No	.341	.378	1.407	.659-3.005	.744	.026	2.104	1.093-4.050

^{ref}: Reference group;
 CI: Confidence Interval;
 OR: Odds Ratio

A further exploratory factor analysis of the WEMWBS and GAD-7 variables show that 2 principal components were found to have ranged above the cut-off eigenvalue of 1.000 (Fig. 3), and naturally both the 'wellbeing' and 'anxiety' variables are inclined to form two separate clusters of responses. The questionnaire proved to be valid and reliable in its own right with a Cronbach's alpha of .866 (wellbeing factors) and .849 (anxiety factors). The Kaiser-Meyer-Olkin test for the sampling adequacy of data resulted in .888, the Bartlett's Chi-squared value was 2542.653 with a significant determinant (.003, p -value < .001) under the Varimax with Kaiser normalization for Principal Component Analysis (PCA).

Table 4. Results of Exploratory Factor Analysis (N=440)

Variables	Factors*	
	Wellbeing	Anxiety
I feel confident	.742	-.060
I can think clearly	.708	-.048
I feel cheerful	.707	-.011
I am interested in new things	.689	.075
I feel useful	.688	.009
I feel loved	.675	.002
I can make up my own mind about things	.672	.019
I have energy to spare	.633	-.116
I feel close to other people	.625	.005
I feel interested in other people	.587	-.048
I worry too much about different things	.005	.803
I am not being able to stop worrying	-.055	.773
I feel nervous, anxious or on the edge	-.052	.751
I have trouble relaxing	-.008	.704
I feel afraid as if something awful might happen soon	-.045	.689
I feel so restless that it is hard to sit still	-.019	.682
I am easily annoyed	.040	.661
Variance explained (%)	27.071	21.510
Eigenvalue	4.602	3.657
Cronbach's Alpha	.866	.849

KMO = .888; Bartlett's $\chi^2 = 2542.653$; Determinant = .003; $p < 0.001$

Extraction method: Principal Component Analysis; rotation method: Varimax with Kaiser Normalization

The findings of the 'Exploratory Factor Analysis' (EFA) performed on 440 individuals are displayed in Table 4. The purpose of this analysis was to investigate the latent components associated with wellbeing and anxiety. The variables underwent a Varimax rotation with Kaiser Normalisation following the extraction of Principal Component Analysis (PCA). The research yielded two distinct components, which correspond to the constructs of wellbeing and anxiety.

Ten factors were identified as having a substantial loading, indicating a strong connection with the dimension of wellbeing. This factor was influenced by the variables "self-confidence," "cognitive clarity," "cheerfulness," "curiosity," "perceived usefulness," "feeling loved," "autonomy," "social connectedness," "interest in others," and "high energy levels." The item "I feel confident" had the highest loading, with a value of 0.742. The percentage of variation accounted for by the wellbeing factor was 27.071%, and the internal-consistency, as measured via Cronbach's alpha ($\alpha = 0.866$), was deemed to be satisfactory.

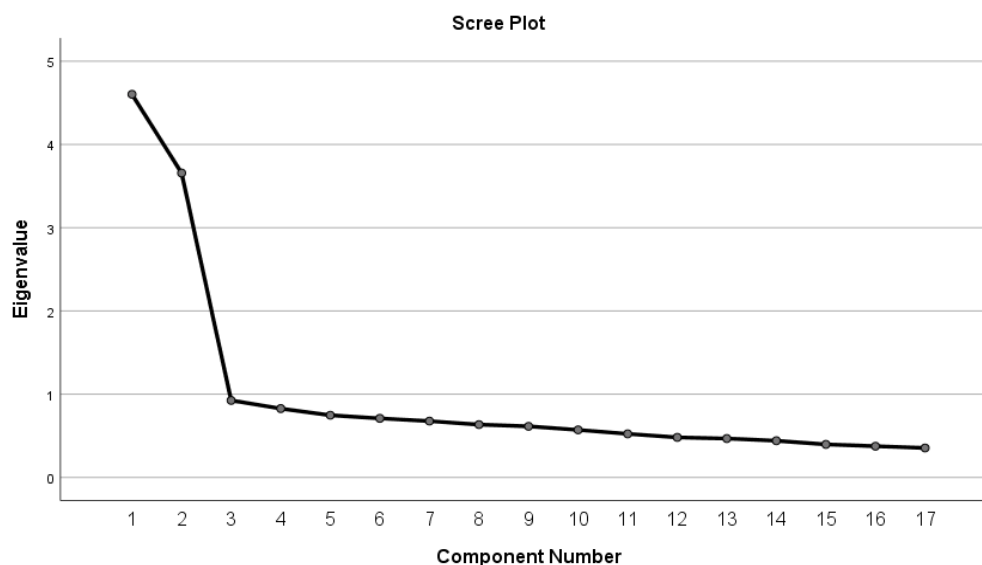


Fig. 4. Scree plot of the principle components

In relation to the component of anxiety, six factors had notable loadings, indicating their correlation with levels of anxiety. This factor comprised the variables "excessive concern across various domains," "inability to cease worrying," "experiencing feelings of nervousness, anxiety, or heightened tension," "difficulty in achieving a state of relaxation," "experiencing a sense of fear or anticipation of impending negative events," and "restlessness to the extent that remaining seated becomes challenging." The item with the greatest loading in the study was "I worry too much about different things" with a loading value of 0.803. The variable of anxiety accounted for 21.510% of the observed differences in the data, as shown by a Cronbach's alpha (coefficient) of 0.849, which suggests an acceptable level of internal consistency.

The scree plot in Fig. 4, which is a visual depiction of eigenvalues, was employed to ascertain the optimal number of components to maintain in the exploratory factor analysis (EFA). In this figure, the eigenvalues corresponding to each component are graphed in a decreasing order. The point at which the slope of the line stabilizes denotes the ideal quantity of components. The scree plot analysis in this study revealed a distinct discontinuity following the second component, indicating that a two-factor solution was deemed suitable. These results are consistent with the findings of the Exploratory Factor Analysis (EFA), in which two components, namely wellbeing and anxiety, accounted for a significant proportion of the overall variability seen in the data.

The rapid spread of the SARS-CoV-2 disease has made it one of the most dangerous and challenging health problems of the 21st century. In addition to the increasing death rate, people worldwide are also experiencing heightened anxiety and depression, which adversely affects their mental health. Students at public universities are no exception. The

fear of losing an academic year and future career prospects has caused anxiety and stress among students since these universities closed for the first time on March 8, 2020. Although online classes were initiated to compensate for the loss of the academic calendar, these e-learning options are limited due to accessibility issues and technical difficulties for many students. Some students who sought to manage e-learning and online class tools were able to secure interest-free loans from the university. However, these loans were only available to a small number of students and were insufficient. A year-long closure like this leaves Jahangirnagar University students uncertain about their studies and future careers, exacerbating ongoing mental health and well-being issues.

The main focus of this study was to observe psychological health and anxiety among undergraduate and master's students at Jahangirnagar University in Bangladesh. The key findings of this cross-sectional study revealed that more than two-thirds of the students experienced low, moderate, or serious anxiety (Fig. 2). In other tests done in Bangladesh, both sadness and anxiety were found in college students. For example, a 2015 study of medical college students found that more than 54.3% of them have depression and 64.8% have anxiety-related illnesses (Akhtarul Islam *et al.*, 2020). Compared to other studies that have been done in the past, our results suggest that the current students at Jahangirnagar University of Bangladesh are experiencing a level of mental health anxiety and psychological well-being about the school closing that has never been seen before. This is because of the current global epidemic situation.

Another significant finding of this study is that university students' engagement in private tutoring is a key factor contributing to increased mental health concerns, adversely affecting their well-being (Table 2). Many poor and middle-class students work part-time jobs, like private tutoring, to help pay for their education and sometimes to help support their families. It also disclosed that students who didn't have a part-time job or who lost their jobs because of the pandemic suffered a lot. A recent study (Virgolino *et al.*, 2022) found that unemployment is strongly linked to mental health disorders such as anxiety and depression. This can make it harder for people to feel successful, accomplished, and happy, which can lead to mental decline. Similar studies also shown that losing a job can be hurt a person's self-esteem because they don't have the support of their family. This can have a bad effect on the person's mental health.

As the purpose of the study was to look at anxiety-related factors like fear, irritation, restlessness, trouble relaxing, overthinking, being unable to stop worrying, and nervousness, our findings found that most of the students strongly felt these symptoms at least "some of the time" when the university was closed (Fig. 3). A recent study (Huçaj & Rexhepi, 2022) among college and master's-level students found that they have a lot of anxiety, which also affects how they usually act. The study also showed that if all schools in Bangladesh were to close because of the pandemic, there would be major problems with academic programs and a big hole in both teaching and learning. Academic delays can have long-term effects on a student's mental health because they make it more likely that they will finish later than planned.

It seems that the quick loss of private tuition is putting students in a bad position that affects their economic and mental health (Table 3). Most people agree that living with family gives people a sense of comfort and reduces worry. Even though there is an outbreak, it is likely that female students who live with their families are healthy. The study also revealed that students who did not live with their families were more likely to experience anxiety than those who did. This is because living with family members often contributes to the mental well-being of vulnerable youth who experience anxiety. A study that was conducted on American families shows that, children in kinship care households or individual living are more vulnerable than other children living with their families in terms of early behavioral well-being and anxiety (Lin, 2018).

This study did not identify any significant disparities between male and female students regarding anxiety levels. Our study results did not yield statistically significant associations between socio-demographic characteristics, such as place of residence and exercise, and levels of sadness and anxiety. These findings are consistent with existing literature. A study conducted in Egypt (Huçaj & Rexhepi, 2022) revealed that female college students have a higher propensity for experiencing anxiety, whereas male college students demonstrate a lower likelihood of experiencing depression. Conversely, some researchers have identified a robust association between socio-demographic variables, physical activity, and feelings of sorrow and anxiety (Bonful & Anum, 2019; Figueira *et al.*, 2023; Pears *et al.*, 2022; Pitsavos *et al.*, 2006; Szwarcwald *et al.*, 2021). A study conducted in Malaysia (Aimanan *et al.*, 2024) revealed significant variations in the prevalence of depression and anxiety among individuals, which were contingent upon their age and permanent place of residence. Nevertheless, no significant disparities were seen in terms of gender, ethnicity, study major, monthly family income, and other socio-demographic variables, in relation to the prevalence of depression or anxiety.

Conclusion: The primary focus of this study was to examine the well-being and anxiety levels among students at Jahangirnagar University during the university's closure due to the COVID-19 pandemic. Descriptive statistics provided a comprehensive overview of the demographic composition of the student cohort. The study revealed that a significant proportion of students lived with their families during the pandemic, which appeared to act as a protective factor against anxiety levels. The role of online classes emerged as a critical factor affecting student well-being, emphasizing the importance of effective online education strategies and addressing barriers to student engagement in virtual learning environments. Another notable finding was the impact of part-time job losses during the pandemic; students who either lacked part-time jobs or lost them due to the crisis reported higher anxiety levels. This highlighted the economic and financial stressors faced by students during the pandemic and underscored the need for supportive measures to address such challenges. Analysis of well-being and anxiety using the WEMWBS and GAD-7 scales, respectively, revealed intriguing patterns. Additionally, the study disclosed that students living away from family during the pandemic experienced increased anxiety levels, emphasizing the importance of social support networks in times of crisis.

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