# The impact of Covid-19 on students' mental health

Miraz Uddin<sup>1</sup>, Burhan Uddin<sup>2\*</sup>

MSS Student, Department of Sociology, University of Chittagong, Chittagong-4331, Bangladesh<sup>1</sup> MBA Student, Department of Marketing, Comilla University, Comilla-3506, Bangladesh<sup>2</sup> miraz46.cu@gmail.com<sup>1</sup>, burhan.mkt@stud.cou.ac.bd<sup>2\*</sup>



# **Article History**

Received on 6 April 2021 Revised on 21 April 2021 Accepted on 22 April 2021

#### Abstract

**Purpose:** The research has been conducted to investigate the influential factors on students' mental health during the Covid-19.

**Research methodology:** The research is quantitative in nature. The structured questionnaire has been prepared to collect the data from 250 Bangladeshi students through a personal interview method using a 7-point Likert scale. The research used the convenience sampling method to collect the data and data were analyzed through SPSS 25.0 software.

**Results:** The research found that economic factors, social factors, and educational factors have a significant impact on the students' mental health during the Covid-19 pandemic situation.

**Limitations:** The study is limited by geographical and sample size in the aspect of students' mental health during the pandemic situation.

Contribution: All sorts of people will be benefited from this study obtaining a clear understanding and scenario about the students' mental health during the pandemic situation. Educational institutions, teachers, psychologists, behavioral therapists, social researchers, politicians, legal agencies, and others that are engaged in the education sector will be fruitful by this study's outputs. Governments and governmental agencies may plan and promote their strategies and policies by having a clear concept about students' mental health during the Covid-19 pandemic.

**Keywords:** Mental health, Student, Covid-19, Education, Social aspect, Economic condition

**How to cite:** Uddin, M., & Uddin, B. (2021). The impact of Covid-19 on students' mental health. *Journal of Social, Humanity, and Education*, 1(3), 185-196.

## 1. Introduction

China was the first country for detecting Coronavirus disease (COVID-19) at Wuhan city in December 2019 (WHO, 2020). On 11 March 2020, the World Health Organization (WHO) declared the coronavirus as a pandemic (Time, 2020). 08 March 2020 the first three cases of COVID-19 were found in Dhaka, Bangladesh (Islam et, al., 2020). The density of the population in Bangladesh is another factor to spread out COVID-19 throughout the country. After that, it has become a major public health disquiet in Bangladesh. According to the Institute of Epidemiology Disease Control and Research (IEDCR), by 03 May 2020, there were a total of 8,790 Bangladeshi cases ensured where 175 people had died and 177 people rescued from COVID-19 (IECDR, 2020).

Due to the tremendous spread out of COVID-19, It has been affected the people mentally in Bangladesh. Psychologists say that coronavirus infection has led to an increase in 'psychological disorientation' in humans. Particularly among people, the fear of being infected with corona, the risk of infection of nearby people, the fear of death, uncertainty about livelihood, and financial crisis create stress. Patients with coronary heart disease, homeless people, and professionals who go out of the house in emergencies are at the highest risk of mental health. Besides, many have already committed suicide due to panic and

depression during the COVID-19 pandemic. Research has also shown that this mental crisis reached its climax during the Corona period. The survey co-conducted by Begum Rokeya University (BEROBI)) in Rangpur and Western Sydney University in Australia was published on 14 May 2020. It is said that coronary heart disease has a detrimental effect on mental health and psychology. As the COVID-19 spread out increasingly across the country, it has become a source of concern and concern among the general public, including adults, professionals, front-runners, and other diseased people in the country. Noor, J., (2021) found that 91.4 percent of respondents were concerned about the current situation. 72.6 percent are suffering from insomnia. In addition, 61.8 percent expressed frustration and anger and 73.5 percent expressed frustration and apprehension about the future. 6.2 percent overall panicked. 59.4% of the respondents said that life has become meaningless for them.

Mental health is a key element of overall wellbeing. According to WHO, mental health an affluent state where the individual can realize his or her own skills, cope with the normal pressure of life, work productively and in a fruitful way and be able to contribute to his or her community. Mental health includes personal well-being, autonomy, self-efficiency of feeling, self-reliance, and self-realization of one's own intelligence and mental potential among others mental problems can be mainly characterized by anger, anxiety, panic, depression, loneliness, isolation, loss of personality, self-esteem, suicidal feelings or suicide. It is usually more noticeable in adults and older people. According to DW survey-2015, there are about 35 million mentally ill people in Bangladesh and the main cause of the disease is poverty, family unrest, employment, etc. cited as cause of the disease. Unemployment, layoff, low incomes, lockdowns are also making people more mentally ill. The pandemic has spread out rapidly in Bangladesh with the detection of coronavirus on 8 March 2020 and all educational institutions in the country have been closed since 17 March 2020. A large part of the population of Bangladesh is occupied by students. Due to COVID-19, students have been confined to their homes for the closure of educational institutions and they have been suffering from various kinds of mental illness and mental weakness by the periodic increased lockdown time. The reasons for their mental illness are low income, lack of tuition and many have lost their jobs and increasing unemployment rate, as a result, their mental health has been disrupted.

Socially, students are also emotionally damage and lockdowns create social distance between them and other people while they are at home. Their mental interaction is reduced during the pandemic situation. Learning does not only depend on teaching, it also requires interaction, which is hampered by the coronavirus pandemic. Students are facing despair as the family crisis is visible and deprived of entertainment due to the distance created with friends resulting in frustration, loneliness, depression that affect their mental health. Education is responsible for affecting students' mental health due to the shutdown of educational institutions in Bangladesh, leading to mental depression, stress, and fear of their studies. As a result, there has been a possibility of drop out and session jam as long shutdown of educational institutions undefinedly. The mental stress inside them has increased day by day. Again, due to the availability of online classes in almost all country institutions, students need to sit in front of the device all day to maintain their studies. As a result, they have to face various physical disabilities. According to UNESCO, about 1.5 billion students in 190 countries are isolated and disconnected from their institutions. Many psychologists and behavioral therapists have emphasized depression, fear, panic, resentment, anger, isolation, loneliness, neglect, humiliation, and vain thoughts caused by censorship and social distance.

The study was conducted to identify the prime influential aspect on students' mental health during the Covid-19 pandemic. Besides, the research performed to know the other significant aspects that impact students' mental health due to the Covid-19 pandemic, including the impact of economic, social, and educational factors.

# 2. Literature review

Mental health has a boundless impact on individuals' physical health by influencing health behavior that is patterned, shaped, and embedded in the socio-cultural environment. The involvement of individual appearances such as effect, cognitive, social skills along with social & material context is difficult to interferences to improve mental health condition via improving mental health (Brown ER,

Ojeda VD, Wyn R, Levan R, 2000). It is already mounted adequately that mental illness, throughout the spectrum of disorders, is each a direct purpose of mortality, morbidity and a tremendous threat component for poorer economic, fitness and social outcomes, though these negative consequences fluctuate through kind of disease and socioeconomic fame (WHO, 2001b).

However, it is now turning clear that the presence or absence of nice mental health or 'wellbeing' additionally influences consequences throughout a vast vary of domains. These encompass healthier lifestyles, higher physical health, expanded recovery, fewer barriers in a day by day living, greater instructional attainment, increased productivity, employment, and earnings, higher relationships, increased social brotherly love and engagement, and extended excellent of existence (Brown ER, Ojeda VD, Wyn R, Levan R., 2000).

Lots of studies have been conducted to investigate the impact of earnings on individual mental health. These studies found that altering an individuals' income might be affected by the individual's mental health condition. Compare to the high-income holder, low-income individuals are more depressed and worried about their daily life. Higher income helps to improve mental health conditions (Gardner and Oswald, 2007). An attempt was contributed by Benzeval et al. (2014), who tried to connect mental health along with income and classified it into three categories as material, psychosocial and behavioral. McInerney et al. (2013) and Askitas and Zimmermann (2011) examined their studies and detected the financial crisis is an exogenous shock. There exist lots of instruments by which the stock of income may have an impact on an individual's mental health.

According to Davidson, Dowrick, & Gunn (2016), social distancing is harmful to people, especially for individuals with a mental illness. Having a mental illness, an individual is neglected than those of individuals who do not have a mental illness (Follmer & Jones, 2017), social belief, practices, norms, and conventional negative attitudes towards mentally ill individuals direct to social distancing (Norman, Sorrentino, Windell, & Manchanda, 2008). According to Arboleda & Stuart (2012), education helps to reduce the mental illness of mentally ill individuals. As Cleveland et al., (2013) illustrated, several types of attitudes and perceptions drive social distancing, and depression is created at the moment of personal failure. There does not exist any key differential aspects between psychiatrists and the general population on their social distance from the individuals having a mental illness (Lauber et al., 2004). Saraceno & Barbui (1997) found that one of the significant obstacles to mental improvement is poverty. They stated poverty as a risk fact for mental improvement. Individuals who have maintained quarantine or isolation face mental stress, depression, anxiety, and adverse health outcomes that direct them to learn more about the disease (Satt N., 2020).

Previous works of literature summarized that spread out of rumors through social media and other online platforms might negatively impact society and country. Social media can impact an individual's behavior especially when they are passing through an epidemic situation. In the past few decades, social media has been spread out a lot of misinformation about diabetes, anorexia, anti-vaccination, and Zika virus or Ebola epidemic (Sommariva et al., 2018). The information of the Ebola epidemic created local weather of international anxiety with rumors and misinformation rapidly spreading via social media platforms. A similar vogue is being determined with the contemporary prevalence of extreme acute respiratory syndrome coronavirus two (SARS-CoV-2), which has been declared as a pandemic. Unverified records or rumors on social media and anxiousness go hand in hand as anxious persons, or the humans who are in danger of creating anxiousness or for these for whom it serves as a medium to ventilate their affective country are the folks who are extra possible to share these sorts of records with others except verifying the supply (Pezzo & amp; Beckstead, 2006).

Jones et al., (2017) stated that rumors are much difficult to control when they spread out through social media and hardly keep under control. Among the several types of rumors, the health-related rumor that are misinformation about the uses of medicine and healthcare & dangerous to public health is spread put tremendously. Twitter, Reddit, and Amazon have taken some initiatives to remove fake accounts on these platforms. Although the task is quite challenging to implement, they are trying to remove all the rumors and hoaxes that are spread out using social media platform regarding this pandemic. All other social media platforms should adjust themselves to detect and eliminate all the misinformation and rumors (Telemed J E Health, 2006). Sommariva et al., (2018) supposed that, as the online platform and social media have open and easy access to all sorts of people, they can easily share their experiences and activities and any other unverified information in most cases. Once misinformation and rumor have been spread out through social media, it is very tough to protect and control. Especially the health-related rumor is spreading quickly (Oh and Lee, 2019).

Committing suicide is a dangerous social problem derived from mental health problems where electronic and print media and online platforms like social media, blogs, and online forums play a significant role in increasing or reducing the problem (Arafat et al., 2020; Armstrong et al., 2018). Media news and report against suicide most of the time do not maintain the World Health Organization's (WHO) and other regulatory institution's guidelines and rules of reporting on suicide on media (Arafat et al., 2020).

Social interaction is the situation where individuals interact face to face with each other. Previous researchers suggest that their physical activities may judge the situation of an individual. They found the impact of the social interaction and social relationship of an individual's psychology, perception, physical and mental activities.

The world health organization (WHO) declared the Covid-19 as a pandemic, educational institutions have been shut down. To continue the educational programs, they have to think of alternative methods for education, from physical learning to the online platform (Kapasia et al. 2020). Recently, online or digital learning has been considered an alternative way of conventional learning (Adnan and Anwar 2020). Cook (2009) found that it is no difference between online or e-learning and conventional learning, but it requires improving the method and its experiences. So educational institutions have to abide by the governmental role and policies and participants need to be encouraged to adjust themselves in the remote learning system. (Aucejo et al. 2020).

Aucejo et al. (2020) examined that, Students who are getting comparatively fewer facilities have to face the most negative impact due to Coronavirus disease (Covid-19). Their academic life has been interrupted due to the lowering family income, unavailability of digital gadgets, high cost of the internet, etc. Furthermore, 1.5 billion college students throughout the world are now disadvantaged of fundamental schooling (Lee, 2020), leading to a severe psychological have an effect on their health. Moreover, modifications in day-by-day pursuits along with lack of outside activity disturbed slumbering patterns and social distancing have affected the intellectual well-being of the students.

Previous portions of the literature confirmed the closure of instructional establishments as a tremendous approach for breaking the necessary transmission chain throughout the pandemic (Luca et al., 2018). Still, it has terrible consequences on students' educational study, along with gaining knowledge of interruptions, disruption to assessment, and they have an impact on is extra extreme on college students from deprived backgrounds (UNESCO, 2020a).

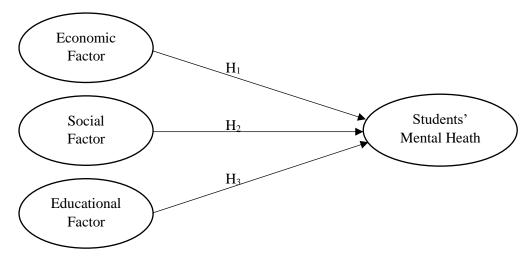
According to <u>UNESCO (2020b)</u>, the nationwide closure of schools, colleges, universities, and different academic institutions, came about for the COVID-19, are adversely impacting over 60% of the world's

scholar population. In this COVID-19 period, amongst the world's scholar population, tertiary-level college students are experiencing instructional disruptions on an unheard-of scale. The lookup established that this COVID-19 scenario triggered issues in students about tutorial things to do alongside social and monetary affairs and concern of contamination (A1-Tammemi et al., 2020). The pandemic heavily hit the tertiary- stage students' social existence as no assembly with buddies and family (Cao et al., 2020), monetary circumstance as dropping of part-time jobs and emotional fitness as growing frustration, nervousness, and boredom (Brooks et al., 2020) and tutorial existence as developing concerned about future schooling and profession (Cao et al., 2020).

Students skilled considerable instructional disruptions as the pandemic interfered with their tutorial functioning (Charles et al., 2020). Since the closure of tertiary-level instructional institutions suspended face-to-face teaching-learning sessions, it interrupted the normal go with the flow of educational applications (Jacob et al., 2020). The prolong in re-opening academic establishments can negatively have an effect on their intellectual state and tutorial increase (Chandasiri, 2020). The long-time domestic quarantine duration brought about disturbance and deterioration in students learn about habits and overall performance of work, which sooner or later resulted in the increase of stress and dysfunctional gaining knowledge of behaviors (Meo et al., 2020).

## 2.1. Research framework and hypotheses

#### 2.1.1. Research framework



#### 2.1.2. Research hypotheses

From the studies of the literature review, we have developed the following research hypotheses. The three proposed hypotheses of the study are given below:

- *H*<sub>1</sub>. Economic factor influences the students' mental health during the Covid-19 pandemic.
- $H_2$ : Social factor influences the students' mental health during the Covid-19 pandemic.
- $H_3$ . Educational factor influences the students' mental health during the Covid-19 pandemic.

#### 3. Research methodology

This paper is quantitative in nature. The study used both the primary and secondary data and primary data were collected through the personal interview method to gain the actual scenario of the impact of Covid-19 on students' mental health. Primary data were collected through a structured questionnaire method using three variables such as economic factor, social factor, and educational factor. The study attempted to collect the data from 250 school, college, and university students who are affected mentally by the Covid-19 pandemic. The sample size of the study is 250 Bangladeshi school, college, and university students who are selected conveniently. Here used convenience sampling method (a non-

probability sampling technique) because it allows the researchers to limit cost & save time and facilitate also providing the readily available facility. To collect all 250 student's data, it took almost five months (15 September 2020 to 15 February 2021).

On the other hand, secondary data obtained by the different kinds of books, journals, published materials, and online sources. From the secondary data, the literature review has been developed. The questionnaire consisted of basically two parts. The first part contained the demographic factors of the respondents, such as Gender, Age, and educational qualification of the respondents. Then, the other parts were related to the three independent variables (economic factor, social factor, and educational factor) and mental health as a dependent variable. So, three questions were assigned for the first part of the questionnaire and 15 questions for the second part. Respondents were allowed to use the 7 point-Likert scales (1=strongly disagree to 7=strongly agree) to stimulate their responses towards the particular aspects. All the data were found to be reliable and steady enough as Cronbach's Alpha value exceeded 0.70 or 70%. Data were analyzed using SPSS-25.0 software. Frequency and regression analyses had been performed by this software.

## 4. Analysis and findings

Table 1. Demographic profile of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
	Male	139	55.6	55.6	55.6
Gender	Female	111	44.4	44.4	100.0
	Total	Percent  ale 139 55.6 55.6  male 111 44.4 44.4  tal 250 100.0 100.0  ader 15 25 10.0 10.0  to 20 128 51.2 51.2  to 25 63 25.2 25.2  to 30 20 8.0 8.0  to ove 14 5.6 5.6			
	Under 15	25	10.0	10.0	10.0
	16 to 20				61.2
Age	21 to 25	63	25.2	25.2	86.4
	26 to 30	20	8.0	8.0	94.4
	31 to above	14	5.6	5.6	100.0
	Total	250	100.0	100.0	
	SSC	58	23.2	23.2	23.2
Educational	HSC	123	49.2	49.2	72.4
Qualification	Graduation	63	25.2	25.2	97.6
	Others	6	2.4	2.4	100.0
	Total	250	100.0	100.0	

## 4.1. Demographic profile of the respondents

Table 1 described the demographic profile of the respondents. Most of the respondents are male (55.6%) and the rest are female (44.4%). About 51.2% of the respondents are in the age group between 16 years to 20 years. The next largest group by age (25.2%) is in the age group between 21 years to 25 years. The 3rd highest respondents are in the age group under 18 years and 25 (10%) in number. Nearly 8% of the total respondents are in the age group between 26 years to 31 years. Finally, only 5.6% of respondents are in the age group between 31 to above years. The 3rd portion of the table indicated the educational qualification of the respondents. Most of the respondent's educational qualification is Higher secondary school certificate (HSC). They are about 49.2% and 123 in number. The 2nd highest (25.2%) respondents' educational qualification is graduation. Then about 23.3% of respondents'

educational qualification is Secondary School Certificate (SSC). The rest of the respondents were from different educational backgrounds such as vocational, madrasah, etc. they are almost 2.4% and 6 in number.

Table 2. Descriptive statistics

Descriptiv	ve Statisti	ics			
Variables	N	Min	Max	Mean	SD
Economic Factor					
Low income	250	1.00	7.00	5.6080	1.41929
Rising unemployment rates	250	1.00	7.00	5.6880	1.22829
Deprived from earnings	250	1.00	7.00	5.8080	1.29687
Increasement of Poverty	250	1.00	7.00	5.5880	1.38924
		A	verage:	5.6730	1.33342
Social Factor				1	
Mutual interaction	250	1.00	7.00	5.5680	1.28842
Distance between friends	250	1.00	7.00	5.6880	1.31361
Family crisis	250	1.00	7.00	5.7000	1.45963
Social distance	250	1.00	7.00	5.8000	1.17538
	l	A	5.6890	1.30926	
Educational Factor				1	
Online classes	250	1.00	7.00	5.6600	1.31732
The shutdown of educational institutions	250	2.00	7.00	5.6280	1.38321
Session Jam	250	1.00	7.00	5.4800	1.26808
Drop out	250	1.00	7.00	5.6880	1.18840
		A	verage:	5.6140	1.28925
Mental Health				1	
Anxiety	250	1.00	7.00	5.7080	1.18844
Suicide	250	1.00	7.00	5.7320	1.31571
Mental condition	250	1.00	7.00	5.7880	1.48319
		A	verage:	5.7427	1.32911

# 4.2. Descriptive statistics

Table 2 illustrated that all the factors containing influential aspects towards students' mental health. As mean & standard deviation scores detailed, the most influential aspect in this study is social factors having a mean score of 5.6890 and a standard deviation of 1.30926. That means social factor has a positive and significant impact on student's mental health condition during this pandemic. According to the mean and SD value, the next influential factor considered is the mental health factor. Containing

mean value is 5.7427 and Sd is 1.32911. Having a mean score of 5.6730 and a standard deviation score of 1.33342, the economic factor is considered as the next level of influencer towards a student's mental health. Finally, the last influencer of this study is an educational factor that contained a mean value of 5.6140 and a standard deviation of 1.28925. Here, most of the respondents are agreed upon three factors contributing to students' mental health condition during the Covid-19 pandemic situation.

Table 3. Reliability test

Variables	Cronbach's Alpha	No. of Items
Economic	0.749	4
Social	0.736	4
Educational	0.778	4
Mental Health	0.861	3

#### 4.3. Reliability test

The above Table 3 illustrated that the internal reliability for the factors. We found no consistency error among those factors as exceeding the Cronbach's Alpha value in measurement of 0.70 (70%). The Cronbach's Alpha values for Economic factor, Social factor, Educational factor, and Mental health factor are 75%, 74%, 78%, and 86%, respectively. As <u>Hair et. al. (2010)</u> stated that, the survey instruments are consistent enough and free from the random error if the Cronbach's Alpha value exceeded 0.70 or 70%. Therefore, it is proved that the variables are steady enough and the data are reliable.

Table 4. Model summary

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.671	.451	.444	.78840		

#### 4.4. Estimating the relationship between the factors

The model summary (Table 4) showed the correlation coefficient among these variables. The value of R is 0.671 (67%), which is proved that there exists a positive and moderate relationship between Student's mental health and Economic factor, Social factor, Educational factor. But there exists only a 45% variation between Student's mental health and Economic factor, Social factor, Educational factor because of having R Square value of 0.451 (45%). The value for Adjusted R Square is nearly 44% (0.444) that indicated that there might be other factors which might have an impact on Student's mental health during the Covid-19 pandemic situation.

Table 5. ANOVA

ANOVA								
	Model	Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	125.401	3	41.800	67.249	.000		
	Residual	152.908	246	.622				
	Total	278.309	249					

#### 4.5. ANOVA

The above Anova (Table 5) attempted to illustrate the regression analysis of the factors which is conducted by linking up the factors Students' mental health and Economic factor, Social factor, Educational factor. The three variables are recommended and the results are examined in the above table. It is supposed that the F value is 67.249 and the Sig value is 0.000 (sig. f < 0.01). Achieving 3 and 246 degrees of freedom, the study demonstrated and verified that the model is fit & steady enough.

Table 6. Coefficients

			Coefficients			
	Model	<b>Unstandardized Coefficients</b>		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.946	.341		2.776	.006
	Economic	.274	.065	.261	4.192	.000
	Social	.203	.069	.197	2.945	.004
	Educational	.370	.071	.327	5.213	.000

#### 4.6. Coefficients

Table 6 evaluated the relationship using multiple regression analysis and found that all three variables impact the students' mental health tremendously. For Economic factor having Beta value= 0.261, t-value=4.192 and P< 0.05, it influences the students' mental health significantly. For Social factor having Beta value= 0.197, t-value=2.945 and P< 0.05, it influences the students' mental health significantly. Finally, For Educational factor having Beta value= 0.327, t-value=5.213, and P< 0.05, it influences the students' mental health significantly. Therefore, the above table demonstrated that all three variables have a great impact on student's mental health during the Covid-19 pandemic. So,  $H_1$ ,  $H_2$ , and  $H_3$  are accepted for this study.

# 5. Conclusion

The COVID-19 epidemic has influenced every aspect of human life. This pandemic has affected people in every sector. Students have to suffer more mental pressure in a pandemic than in other periods of time. Analysis of various surveys shows that students are mentally more disturbed in Bangladesh due to the COVID-19 pandemic situation. They have become mentally depressed as the educational institutions have been closed for more than a year. With the closer of educational institutions, the majority of university students are deprived of earnings. As appearing of various kinds of family and social crises in front of the students, like the quarrel between parents, lack of income in the family, and loss of job by family member leads them to be more mentally ill. In the light of these issues, they have chosen to carry out various terrorist activities in society. Basically, people are engaged in terrorism due to poverty. As sociologist Robert K Merton pointed out that lack of success, money, power, etc., people are committed crimes tendency (Merton, 1968). From the social perspective, it can be viewed that students are suffering from stress, depression, frustration, anger, anxiety, etc., due to the lockdown situation, especially when they are staying at home. Lack of communication between students has created mutual distance. Distance between friends is another factor to deprived of mutual interaction and entertainment as well that may drive them to mental stress day by day. Mental illness is the driving force for creating social inequality, suicidal tendencies, criminal tendencies, lack of mutual interaction,

Various survey analysis shows that due to COVID-19 the suicide rate has increased among Bangladeshi students. Sociologist Emile Durkheim explained the "suicide theory" he said that there are two types of

suicide in society, one is social integration and the other is regression. Integration is divided into two parts, where one is egoistic suicide. According to <u>Durkheim</u>, egoistic suicide is committed when the relationship between the individual and the group is weak (<u>Durkheim,1951, Ritzer, G.,1992</u>). The study focused on the impact of the COVID-19 on student's mental health during the COVID-19 pandemic situation and examined the economic, social, and educational factors. It is found that economic, social, and educational factors have a tremendous impact on student's mental health. Many students are unable to attend online classes because they cannot afford electronic devices or data packs, which makes them more mentally damaged. Due to COVID-19, the economic, social, and educational problems of a student are causing mental distress and it is increasing day by day.

# Limitation, contribution & direction

Several aspects limit this study. The study is conducted in Bangladesh only. So, it is restricted by the geographical location. Therefore, the results, findings, outputs may not be applicable outside the country. On the other side, the sample may not be sufficient enough for representing the all-Bangladeshi school, college, and university students. Because it used only 250 students as respondents that may not be the actual representative for all students in Bangladesh. Here measured only three variable such as economic factor, social factor, and educational factor and found them as influential factors for the students' mental health during the Covid-19 pandemic. But there may have existed others constraints that may impact the students' mental health during the Covid-19 pandemic. The total data collection period was not too long, if the time would extend, the study results will have significantly more. It iss quite challenging to collect the data during the country's lockdown situation due to the coronavirus pandemic.

All sorts of people will be benefited from this study obtaining a clear understanding and scenario about the students' mental health during the pandemic situation. Educational institutions, teachers, doctors, social researchers, politicians, legal agencies, and others that are engaged in the education sector will be fruitful by the study's outputs. Governments and governmental agencies may plan and promote their strategies and policies by having a clear concept about students' mental health during the Covid-19 pandemic. Then they can formulate their strategies and policies efficiently.

Future research for this aspect may be conducted effectively by increasing sample size, expanding geographical location and research instrument as well as expanding variables.

## References

- Adnan, M., & Anwar, K. (2020). Ed606496. *Journal of Pedagogical Sociology and Psychology*, 2, 2–8.
- Al-Tammemi, A. B., Akour, A., & Alfalah, L. (2020). Is It Just About Physical Health? An Internet-Based Cross-Sectional Study Exploring the Psychological Impacts of COVID-19
- Arafat, Y.S.M., Mali, B., Akter, H., (2020). Is suicide reporting in Bangla online news portals sensible? A year-round content analysis against World Health Organization guidelines. *Asian. J. Psychiatry* 49, 101943. <a href="https://doi.org/10.1016/j.aip.2020.101943">https://doi.org/10.1016/j.aip.2020.101943</a>.
- Arboleda-Florez, J., & Stuart, H. (2012). From sin to science: Fighting the stigmatization of mental illnesses. *The Canadian Journal of Psychiatry*, *57*, 457–463. https://doi.org/10.1177/070674371205700803
- Armstrong, G., Vijayakumar, L., Neiderkrotenthaler, T., Jayaseelan, M., Kannan, R., Pirkis, J., et al., (2018). Assessing the quality of media reporting of suicide news in India against World Health Organization guidelines: a content analysis study of nine major newspapers in Tamil Nadu. *Aust. N. Z. J. Psychiatry*, 52(9), 856–863.
- Askitas, N. and K. Zimmermann (2011). Health and well-being in the crisis. IZA Discussion Paper.
- Aucejo, E. M., French, J., Ugalde Araya, M. P., & Zafar, B. (2020). The impact of COVID- 19 on student experiences and expectations: Evidence from a survey. *Journal of Public Economics*, 191, 104271. https://doi.org/10.1016/j. jpubeco.2020.104271

- Benzeval, M., L. Bond, M. Campbell, M. Egan, T. Lorenc, M. Petticrew and F. Popham (2014). How does money influence health? *Joseph Rowntree Foundation Report*.
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The Psychological Impact of Quarantine and How to Reduce It:Rapid Review of the Evidence. *The Lancet*, 395, 912-920.https://doi.org/10.1016/S0140-6736(20)30460-8
- Brown ER, Ojeda VD, Wyn R, Levan R (2000). Racial and ethnic disparities in access to health insurance and health care. Los Angeles UCLA Center for Health Policy Research and The Henry J. Kaiser Family Foundation.
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The Psychological Impact of the COVID-19 Epidemic on College Students in China. *Psychiatry Research*, 287, 112934. https://doi.org/10.1016/j.psychres.2020.112934
- Chandasiri, O. (2020). The COVID-19: Impact on Education. *Journal of Asian and African Social Science and Humanities*, 6, 37-42.
- Charles, N. E., Strong, S. J., Burns, L. C., Bullerjahna, M. R., & Serafine, K. M. (2020). Increased Mood Disorder Symptoms, Perceived Stress, and Alcohol Use among College Students during the COVID-19 Pandemic. *Impact of Covid-19 Pandemic on Well-Being*. https://psyarxiv.com/rge9k https://doi.org/10.31234/osf.io/rge9k
- Cleveland, H. R., Baumann, A., Zaske, H., Janner, M., Icks, A., & Gaebel, W. (2013). Association of lay beliefs about causes of depression with social distance. *Acta Psychiatrica Scandinavica*, 128, 397–405. https://doi.org/10.1111/acps.12088
- Cook, D. A. (2009). The failure of e-learning research to inform educational practice, and what we can do about it. *Medical Teacher*, *31*, 158–162. https://doi.org/10.1080/01421590802691393
- Davidson, S. K., Dowrick, C. F., & Gunn, J. M. (2016). Impact of functional and structural social relationships on two year depression outcomes: A multivariate analysis. *Journal of Affective Disorders*, 193, 274–281. https://doi.org/10.1016/j.jad.2015.12.025
- Durkheim, E. (1951). The Suicide. Glencoe: the free press.
- Follmer, K. B., & Jones, K. S. (2017). Stereotype content and social distancing from employees with mental illness: The moderating roles of gender and social dominance orientation. *Journal of Applied Social Psychology*, 47, 492–504. <a href="https://doi.org/10.1111/jasp.12455">https://doi.org/10.1111/jasp.12455</a>
- Gardner, J. and A. J. Oswald (2007). Money and mental wellbeing: a longitudinal study of medium-sized lottery wins. *Journal of Health Economics*, 26(1), 49-60.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data analysis. Seventh edition*. Prentice Hall, Upper Saddle River, New Jersey.
- Institute of Epidemiology Disease Control and Research (2020). Covid-19 status for Bangladesh. [cited 03 May 2020]. Available: https://www.iedcr.gov.bd/
- Islam, MS., Emran GI., Rahman, E., Banik R, Sikder T, Smith L. (2020) Knowledge, attitudes and practices associated with the COVID-19 among slum dwellers resided in Dhaka City: a Bangladeshi interview-based survey. J Public Health (Oxf). doi:10.1093/pubmed/fdaa182
- Jacob, O. N., Abigeal, I., & Lydia, A. E. (2020). Impact of COVID-19 on the Higher Institutions Development in Nigeria. *Electronic Research Journal of Social Sciences and Humanities*, 2, 126-135. http://www.eresearchjournal.com/wp-content/uploads/2020/04/0.-Impact-of-COVID. Pdf
- Jones, N. M., Thompson, R. R., Schetter, C. D., & Silver, R. C. (2017). Distress and rumor exposure on social media during a campus lockdown. Proceedings of the National Academy of Sciences, 114(44), 11663-11668.
- Kapasia, N., Paul, P., Roy, A., et al. (2020). Impact of lockdown on learning status of undergraduate and postgraduate students during COVID-19 pandemic in West Bengal, India. *Children and Youth Services Review*, 116, 105194. https://doi.org/10.1016/j.childyouth.2020.105194
- Lauber, C., Anthony, M., Ajdacic-Gross, V., & Rossler, W. (2004). What about psychiatrists' attitudes to mentally ill people? *European Psychiatry*, *19*, 423–427.

- Lee, J. (2020). Reflections Features Mental health effects of school closures during COVID-19. *The Lancet Child & Adolescent Health*, *4*, 421. https://doi.org/10.1016/ S2352-4642(20)30109-7
- Luca, G. D., Kerckhove, K. V., Coletti, P., Poletto, C., Bossuyt, N., Hens, N., & Colizza, V. (2018). The Impact of Regular School Closure on Seasonal Influenza Epidemics: A Data- Driven Spatial Transmission Model for Belgium. *BMC Infectious Diseases*, 18, 29. <a href="https://doi.org/10.1186/s12879-017-2934-3">https://doi.org/10.1186/s12879-017-2934-3</a>
- McInerney, M., J. M. Mellor and L. H. Nicholas (2013). Recession depression: Mental health effects of the 2008 stock market crash, *Journal of Health Economics*, *32*(6), 1090-1104.
- Meo, S. A., Abukhalaf, A. A., Alomar, A. A., Sattar, K., & Klonoff, D. C. (2020). COVID-19 Pandemic: Impact of Quarantine on Medical Students' Mental Wellbeing and Learning Behaviors. *Pakistan Journal of Medical Sciences*, 36, S43-S48. <a href="https://doi.org/10.12669/pjms.36.COVID19-S4.2809">https://doi.org/10.12669/pjms.36.COVID19-S4.2809</a>
- Merton, Robert, K. (1968). Social Theory and Social Structure. NY, The free press.
- Noor, J. (2021 May 22). Bangladesh Protidin. Retrieved form: <a href="https://www.bd-pratidin.com/amp/last-page/2020/06/08/536843">https://www.bd-pratidin.com/amp/last-page/2020/06/08/536843</a> (In Bengali)
- Norman, R. M. G., Sorrentino, R. M., Windell, D., & Manchanda, R. (2008). The role of perceived norms in the stigmatization of mental illness. *Social Psychiatry and Psychiatric Epidemiology*, 43, 851–859. https://doi.org/10.1007/s00127-008-0375-4
- Oh, H.J., Lee, H., (2019). When do people verify and share health rumors on social media? The effects of message importance, health anxiety, and health literacy. *J. Health Commun.* 24 (11), 837–847. https://doi.org/10.1080/10810730.2019.1677824.
- Pezzo, M.V., Beckstead, J.W., (2006). A multilevel analysis of rumor transmission: Effects of anxiety and belief in two field experiments. *Basic Appl. Soc. Psychol.* 28, 91–100.
- Saraceno B, Barbui C. (1997) Poverty and mental illness. Canadian Journal of Psychiatry, 42, 285-9.
- Sommariva, S., Vamos, C., Mantzarlis, A., Uyên-Loan Đào, L., Tyson, D.M., (2018). Spreading the (Fake) News: Exploring Health Messages on Social Media and the Implications for Health Professionals Using a Case Study. https://doi.org/10.1080/19325037.2018.1473178.
- Statt N. Major tech platforms say they're 'jointly combating fraud and misinformation' about COVID-19. Verge; 2020 Mar 16 [cited 2020 Mar 28]. Available from: <a href="https://www.theverge.com/2020/3/16/21182726/coronavirus-Covid-19-facebook-google-twitter-youtube-joint-effort-misinformation-fraud">https://www.theverge.com/2020/3/16/21182726/coronavirus-Covid-19-facebook-google-twitter-youtube-joint-effort-misinformation-fraud</a>.
- Time. World Health Organization Declares COVID-19 a "Pandemic." Here's What That Means. 2020. [cited 03 May 2020]. Available: <a href="https://time.com/5791661/who-coronavirus-pandemic-declaration/">https://time.com/5791661/who-coronavirus-pandemic-declaration/</a>
- UNESCO (2020a). Adverse Consequences of School Closures. UNESCO. https://en.unesco.org/Covid19/educationresponse/consequences
- UNESCO (2020b). Education: From Disruption to Recovery. UNESCO. <a href="https://en.unesco.org/Covid19/educationresponse">https://en.unesco.org/Covid19/educationresponse</a>
- WHO (2001b) Basic documents, 43rd edn. Geneva, World Health Organization.
- World Health Organization. Coronavirus disease (COVID-19) pandemic. 2020 [cited 03 May 2020]. Available: <a href="https://www.who.int/emergencies/diseases/novel-coronavirus-2019">https://www.who.int/emergencies/diseases/novel-coronavirus-2019</a>
- Zhao X, Rafiq A, Hummel R, Fei DY, Merrell RC (2006). Integration of information technology, wireless networks, and personal digital assistants for triage and casualty. *Telemed J E Health*, 12(4), 466-474.