

## **8. Education in Times of Corona: the Psychological Impact of the COVID-19 Epidemic on College Students in Assam.**

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### **Abstract:**

The COVID-19 epidemic has been spreading in India and other parts of the world since December 2019. The epidemic has brought not only the risk of death from infection but also unbearable psychological pressure. We sampled college students from different colleges by using convenience sampling. They responded to a questionnaire packet that included the 7-item Generalized Anxiety Disorder Scale (GAD-7) and those inquiring the participants' basic information. We received 204 responses. Results indicated that of the 204 college students, 21.6% had no symptoms of anxiety, whereas the proportions of students with mild, moderate, and severe anxiety were 24%, 20.1%, and 34%, respectively. The results also indicate that living in urban areas in contrast to rural area was a protective factor against anxiety experienced by the respondents (OR = 1.978, 95% CI = .725 – 5.396). However, having a relative or an acquaintance infected with COVID 19 was a risk factor for anxiety (OR = 1.982, 95% CI = .248 – 15.833). Moreover, there is a negative association between social support from family and friends during COVID 19 situation ( $r = -.133$ ,  $p < 0.058$ ) and ( $r = -.320$ ,  $p < 0.001$ ). It also indicates that college students are going through anxiety as the number of cases has been increasing day by day which made them to worry about their academic delays.

### **8.1 Introduction:**

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS- CoV-2). First identified in December 2019 in Wuhan, China, it resulted in an ongoing pandemic. The first case may be traced back to 17 November 2019. As of 4th June 2020, more than 6.51 million cases have been reported across 188 countries and territories, resulting in more than 386,000 deaths. More than 2.8 million

people have recovered. The COVID-19 coronavirus pandemic is the biggest health crisis for generations, and it has had a devastating impact on the lives of people across the world. The pandemic is also a mental health risk for our society.

The uncertainty, anxiety, fear of becoming ill or seeing a love one become ill, loss of normal routines, difficulties of social connection, and in many cases disruption to education could have a profound impact on the nation's mental health. Common symptoms include fever, cough, fatigue, shortness of breath, and loss of smell and taste. While most cases result in mild symptoms, the time from exposure to onset of symptoms is typically around five days but may range from two to fourteen days. The epidemic brought not only the risk of death from the viral infection but also unbearable psychological pressure to people in India and the rest of the world. The continuous spread of the epidemic, strict isolations measures and delays in starting schools, colleges and universities across the country is expected to influence the mental health of college students. For children and young people who are already struggling with their mental health, this is an extremely difficult time. This is the time when we must all pull together, and lookout for those who are most at risk in our society. We hope the government will fully recognize the growing mental health impact that COVID-19 will continue to have on children and young people.

The closure of schools and universities to most students creates uncertainty both in the short term and in relation to educational and employment outcomes in the future. For children who are living in difficult or dangerous situation, the closure may also represent the loss of a safe and stable environment. Many of them manage their mental health through maintaining routines that are being disrupted by the measures to control the pandemic because they are not being able to take part in day-to-day activities that they regarded as important coping mechanisms for example, dance or exercise classes and staying at home for a long time without having anything to do can mean to overthink things and were more likely to use negative coping strategies, like self-harm. As well as social distancing with friends, non- immediate family and other trusted adults may affect in their day-to-day life as many are confident or comfortable using phones or who had limited access to technology because they are more comfortable in physical proximity with their friends and felt that talking online not same as talking physically. College student's anxiety about COVID-19 might have been related to the effect of the virus on their studies (Cornine, 2020) and future employment. Despite the extraordinary challenges many students with mental health needs will face over coming months, most were keen to share advice, support and solidarity with others. So, it's very important to share supportive messages, blogs, videos and advice with one another in this epidemic situation.

The main purpose of this study to find out how the COVID 19 has impact on the students in their studies. The global lockdown of education institution has cause major (and likely unequal) interruption in students learning, disruption in internal assessments and the cancellation of public assessments for qualification or their replacement by an inferior alternative. Going to school / universities is the best public policy tool available to raise skills even a relatively short period of missed school / universities will have consequences for skill growth. Perhaps to the disappointment of some, children have not generally been sent home to play.

The idea is that they continue their education at home, in the hope of not missing out too much. Families are central to education and are widely agreed to provide major inputs into child's

learning as described by Viarengo (2014) that the link between students test scores and the school students attend, the policies and practices of the school, student's family background and their parents involvement in their education. This global home schooling will surely produce some inspirational moments, some angry, fun, frustrated moments.

The closure of schools, colleges and universities not only interrupts the teaching for students around the world; the closer also coincides with the key assessment period and many exams have been postponed or cancelled. Internal assessment is perhaps thought to be less important and many have been simply cancelled. But the loss of this information delays the recognition of both high potential and learning difficulties and can have harmful long-term consequences for the students.

## **8.2 Review of Literature:**

As per Sintema, (2020) the learning institutions pre-maturely closed on 20 March 2020 and all the citizens were advised to self-isolate in a bid to control the spread of COVID-19. According to him it was hypothesized that COVID-19 would negatively impact on the performance of students in the 2020 Grade 12 national examination for mathematics, science and design and technology subjects as they need more practical knowledge than theory. Thus, it might somehow cause difficulties for the students to understand over voice call or video call. So, due to COVID-19 there will be likely drop in the pass percentages of secondary school students in their subject area and if the COVID-19 epidemic is not contained in the shortest possible time considering that the school academic calendar was abruptly disturbed by the early untimely closer of all schools in the country.

According to Ming-Yen Ng, (2020) study approval was obtained from the institutional Review Boards of the university of Hong Kong- Shenzhen Hospital, where written consent was obtained for patients in Shenzhen, whilst consent requirement were waived for the cases recruited in Hong Kong according to local institutional review board requirements. The COVID-19 infection pulmonary manifestation is predominantly characterized by ground-glass pacification with occasional consolidation on Computed Tomography (CT). Radiographic findings in patients presenting in Shenzhen and Hong Kong are in keeping with 4 previous publication from other side.

As per Sahu, (2020) worldwide many teachers and students have been excited by the move to the online delivery mode but there is always a chance that some faculty who are not tech-savvy will not be able to cope up with this mode and also transition to online mode has raised question for the faculty about their capability to deal with the existing technology and many universities do not have enough infrastructure or resources to facilitate online teaching with immediate effect.

The transition from face-to-face teaching to online delivery has a serious impact on assessments and evaluation. Applying assessments online on those courses designed for face-to-face learning is a challenging task for students as well as for faculty. In addition, student who do not have an internet facility will suffer a clear disadvantage while participating in the evaluation process, which would adversely affect their grade point averages which will lead to unfavorable effect on the psychological health of students. He also suggests that universities should cancel or postpone all events, sports, workshops, conferences and other activities for an indefinite period.

According to Raj Kumar, (2020) symptoms of anxiety and depression (16-28%) and self-reported stress (8%) are common psychological reactions to the COVID-19 pandemic and may be associated with disturbed sleep. Several individual and structural variables moderate this risk. According to him in this situation both the needs of the concerned people and the necessary preventive guidelines must be considered. He thinks that there should be more representative research from other affected countries, particularly in vulnerable populations.

In another study, Kidger (2012) concluded that school environment has a major influence on adolescent mental health, although students' perceptions of teacher support and school connectedness are associated with better emotional health. Most of the time spent in schools and colleges help many to release their stress in the campus by occupying any particular area in the campus, however due to the current epidemic situation students are being kept far from their school environment. Duong et al. (2020) state that for the first time in a hundred years since the 1918 flu pandemic, the US population was mandated to stay in their households and avoid public contact. As now it is happening, due to COVID-19 where every colleges and universities have cancelled in- person classes and campus activities, impacting millions of students. As due to this situation students are unable to contact their teachers properly over the phone and we know the difference between face to face and over a phone conversation.

### **8.3 Scope of the study:**

The petrifying and severe impact of COVID-19 has shaken the world to its core. Further, most of the government around the world have temporarily closed educational institution to contain the spread of the COVID-19 pandemic. So, these studies help the researcher to know up to how much it has effect on students as they are the one who must face lots of difficulties in these situations like:

- Potential loss of contact with friends
- Concerns about how their grades would be assessed or about the impact on their university or career prospects
- Concern about home learning, both for practical reason and because of stress related to the pandemic
- Loss of structure that school represents
- Loss of formal or informal pastoral support
- Loss of their 'safe 'place away from difficult or dangerous home environment

As these studies will help the authors to find ways to help those young peoples who have lost their support- not least because, in many cases they have lost many of their coping mechanisms, including contact with friends or routines that help them to manage their conditions. It is true that many young people who previously might not have needed mental health support are likely to do so in future, as the impact of the pandemic and the restrictions on their lives continues to sink in.

### **8.4 Objective of the Study:**

Method of guiding students to effectively and appropriately regulate their emotions during public health emergencies and avoid losses caused by crisis events have become an urgent problem for college and universities. Therefore, knowing how the young people/ students deal

with these epidemic situations and also what are the new strategic they had applied to overcome their stress regarding academic is of utmost importance. The main objectives of the study is (1) To evaluate the mental situation of college students during the epidemic; (2) To provide a theoretical basis for psychological in preventions with colleges students; and (3) to provide a basis for the promulgation of national and government policies.

## **8.5 Research Methodology:**

Descriptive Research design has been used to obtain information concerning the current status of the phenomena and to describe “what exist” with respect to variables or conditions in a situation where as exploratory research design was used to approach for gaining background information on a particular topic, a survey method using structure questionnaire was used for data collection. Data was collected through a survey of 204 respondents who were asked the factors affected influencing the resurrection movement.

The 7-item Generalized Anxiety Disorder Scale (GAD-7) is one of the most widely used instruments for the detection and screening of anxiety disorder is also used for the study. It is the module of the ‘Patient Health Questionnaire’ which is the first self- reported questionnaire developed for primary care, to aid the diagnostic process of specific disorder (Toussaint, 2020). The scale was developed to address the limited number of anxiety measures in clinical problems and to address the common issue of symptoms ratings seldom being used in clinical practice because of “their length, proprietary nature, lack of usefulness as a diagnostic and severity measure, and requirements of clinician administration rather than patient self-report”.

### **8.5.1 Data Analysis:**

Data were analyzed with SPSS Version 25.0. An analysis of descriptive statistics was conducted to illustrate the demographic and other selected characteristics of the respondents. A univariate analysis (Nonparametric test) was used to explore the significant associations between sample characteristics and the anxiety level during the COVID- 19 epidemic. Statistically significant variables were screened and included in multivariate logistic regression analyses. The estimates of the strengths of associations were demonstrated by the odds ratio (OR) with a 95% confidence interval (CI). Spearman's correlation coefficient,  $r$ , was used to evaluate the association between COVID-19-related stressors, including economic and daily- life related stressors, as well as stressors related to delays in academic activities, and anxiety level. A two-tailed  $p < .05$  was considered statistically significant.

## **8.6 Results:**

The demographic and selected characteristics of the study population are shown in Table 2. Among the sample of 204 college students, approximately 56.4% were female and 43.6% were male. The respondent living in a urban, rural –urban and rural area is 54(26.5%), 82(40.2%) and 68(33.3%) respectively. 61.3% of the respondents has a steady income and 59.3% of the respondents live with their parents whereas most respondents 198(97.1%) had no relatives or acquaintances who were infected with COVID 19 further more families without a steady income (38.7%), not living with parents (40.7%) and having a relative or an acquaintance infected with COVID 19 ((2.9%).

### 8.6.1 Levels of Anxiety among College Students during the Epidemic:

		Frequency	Percent
Anxiety level	Normal	44	21.6
	mild	49	24.0
	moderate	41	20.1
	severe	70	34.3
	Total	204	100.0

Table 1 shows how the mental health of college students was affected to varying degrees during the outbreak. Of the 204 college students, 21.6% had no symptoms of anxiety, whereas the proportions of students with mild, moderate, and severe anxiety were 24%, 20.1%, and 34%, respectively.

### 8.6.2 Factors Influencing College Students' Anxiety during the Epidemic:

#### A. Univariate Analysis:

Table 2 shows the relationship between the demographic variables of students and anxiety. Gender, Place of Residence, Family Income, Living with parents and Relatives or acquaintance getting COVID 19 had no significant effect on anxiety.

Variables	Total	Anxiety level				Statistics	P(sig.)
		Normal	mild	moderate	severe		
Gender Female	115(56.4%)	24(20.9%)	25(21.7%)	23(20%)	43(37.4%)	4729.500 <sup>a</sup>	.335
Male	89(43.6%)	20(22.5%)	24(27%)	18(20.2%)	27(30.3%)		
Place of resident Urban	54(26.5)	14(25.9%)	11(20.4%)	10(18.5%)	19(35.2%)	2.955 <sup>b</sup>	.399
Rural – urban	82(40.2%)	17(20.7%)	17(20.7%)	16(19.5%)	32(39%)		
Rural	68(33.3%)	13(19.1%)	21(30.9%)	15(22.1%)	19(27.9%)		
Steady family income Yes	125(61.3%)	30(24%)	30(24%)	19(15.2%)	46(36.8%)	4833a	.792
No	79(38.7%)	14(17.7%)	19(24.1%)	22(27.8%)	24(30.4%)		
Live with parents Yes	121(59.3%)	24(19.8%)	32(26.4%)	26(21.5%)	39(32.2%)	4941.500a	.841
No	83(40.7%)	20(24.1%)	17(20.5%)	15(18.1%)	31(37.3%)		
Relatives or acquaintance got COVID 19 Yes	6(2.9%)	1(16.7%)	1(16.7%)	1(16.7%)	3(50%)	495a	.471
No	198(97.1%)	43(21.7%)	48(24.2%)	40(20.2%)	67(33.8%)		

a Maan- Whitney test      b Kruskal- Wallis test.

**B. Ordinal Regression Analysis:**

Results of ordinal multivariate analysis of factors associated with anxiety during the COVID-19 crisis are presented in Table 3. As ordinal regression use interactions between independent variables to predict the dependent variable. By ordinal regression we can be able to determine which of the independent variables have a statistically significant effects on the dependent variable. Here the result indicates that living in urban areas, in contrast to rural areas was a protective factors against anxiety experienced by the respondents (OR =1.978, 95% CI =.725–5.396). The stability of respondents steady family income (OR=.508, 95% CI =.223 – 1.160). However, having a relative or an acquaintance infected with COVID 19 was a risk factor for anxiety (OR =1.982, 95% CI =.248 – 15.833)

<b>Table 3: Ordinal Logistic Regression Analysis of Factors Influencing College Student's Anxiety.</b>						
<b>Factor</b>	<b>Number</b>	<b>Std. Error</b>		<b>OR (Exp (B))</b>	<b>P (SI G.)</b>	<b>OR (95% confidence interval for Exp (B))</b>
					<b>Lower bound</b>	<b>Upper bound</b>
Place of residence						
Urban	54(26.5%)	.512	1.978	.183	.725	5.396
Rural- Urban	82(40.2%)		2.362	.071	.928	6.013
Rural	68(33.3%)		–	–	–	–
Steady family income						
Yes	125(61.3%)	.421	.508	.108	.223	1.160
No	79(38.7%)	–	–	–	–	–
Living with parents						
Yes	121(59.3%)	.414	.823	.638	.366	1.852
No	3(40.7%)	–	–	–	–	–
Relative or acquaintance infected with COVID 19						
Yes	6(2.9%)	1.060	1.982	.519	.248	15.833
No	198(97.1%)	–	–	–	–	–

Correlation between the COVID-19-related stressors (included economy and life affected, studies delayed) and levels of anxiety during the COVID-19 epidemic.

The results of the correlation analysis are shown in Table 4. It has indicated that the college students are going through anxiety as the number of cases has been increasing day by day which made them to worry about their academic delays because as there is academic delay which will directly impact on the career of the students. The result of the correlation analysis in Table 6.3, worry about the economic influences of the epidemic were positively related to the levels of anxiety in college students ( $r = 0.549$ ,  $p < 0.001$ ). Moreover, worried about academic delays ( $r = 0.557$ ,  $p < 0.001$ ), “I am worried about my upcoming exams” ( $r = 0.418$ ,  $p < 0.001$ ) and “I am worried that delays will impact my career” ( $r = 0.594$ ,  $p < 0.001$ ) were also moderately and positively correlated with the level of anxiety. It can also be seen that there is a negative association between social support from family and friends during COVID 19 situation ( $r = -0.133$ ,  $p < 0.058$ ) ( $r = -0.320$ ,  $p < 0.001$ ).

<b>Table 4: Correlation Analysis Between the COVID 19 Related Stressors and College Students' Anxiety When Facing the Epidemic.</b>		
	Anxiety level r	Sig. p
I am worried about economic influence will have on me	0.549	0.001
I am worried about academic delays	0.557	0.001
I am worried about my upcoming exams	0.418	0.001
I am worried that delays will impact my career.	0.594	0.001
I have no social support from my family	-0.133	0.058
I have no social support from my friends during this COVID 19 situation	-0.320	0.001
<i>r=Correlation coefficient</i>		

## 8.7 Discussions:

From this study, it has been found that 56.4% of the respondents are female and 43.6% are male and most of the respondents 82(40.2%) are between the age of 18- 25 years group and 26-35 years (22.1%). During the survey it was found that 65.7% of the respondents are students among which 59.3% from the total respondents of 204 live with their family and had a below Rs 250000 family income and lived in an urban area but 33.3% are the respondents who live in a rural area. Most participants (97.1%) had no relatives or acquaintances who were infected with COVID-19.

From Table 5 it has found the most of the respondents are worried about their income, upcoming exams, career, day to day activities, academic delays since due to COVID 19 everything was shut down and there were no other ways to earn money as the government had announce a complete lockdown due to which schools or colleges were shut down and students



had to stay home and study through online mode which is not easy for everyone to followed that because during the survey it has found that there are some respondents who live in a rural area where there used to be a problem of network connectivity and as there is a delay of academic so the exams has been postpone due to which the respondents cannot apply for any job as still they didn't completed their exam which has worried them about their career. From the same Table 5 it was also found that the highest mean of ( $x=2.86$ ) has been calculated where the respondents were more worried about economic influence which will have on their family due to this COVID 19 situation.

During the survey it has found that the respondents are worrying too much about different things like becoming easily annoying or irritable and feeling afraid as if something awful might happen because of this COVID 19 situation they are not allowed to go anywhere and at home also they have to maintain a social distance due to which they feel alone and easily got offended on small things and as they don't have anything to keep themselves busy which made them getting irritated on small things and they always worry about the health of their love ones as in this situation if anything awful happen then would anyone come forward to help him or not.

<b>Table 5</b>			
	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
I am worried about economic influences will have on my family	204	2.86	1.249
I am worried about economic influences COVID 19 situation will have on me	204	2.77	1.224
I am worried about economic influences COVID 19 situation will have on India	204	2.54	1.188
I am worried about my upcoming exams	204	2.60	1.147
I am worried that academic delays will impact my career	204	2.68	1.146
I am worried about the influence of COVID 19 situation on daily- life	204	2.54	1.098
I am worried about academic delays	204	2.70	1.168

From the study it has found that when the respondents were asked whether they would help the COVID 19 infected person or not then 53.4% are those respondents who may or may not help the COVID 19 infected person because as it used to be in news that COVID can be infected from person to person easily so the respondent are confused whether they will help or not because for them the first priority is to take care of their health first and among 204 respondents only 39.2% clearly says that yes they will help the COVID infected person if they required any help from their side.

In Table 5 it has being found that the highest mean ( $x=2.86$ ) was calculated for the statements "I am worried about economic influence will have on my family" because due to this pandemic situation no one was allowed to move from their house and they don't have specific earning method through which they can survive in these pandemic situation which made them to worry about their family whereas ( $x=2.54$ ) was the least mean which was calculated for COVID 19

situation will influence on daily life because in this pandemic anyone was not allowed to move outside and due to which they have to be at home and made themselves busy within their home only because they are not allow to go for social gatherings, party etc. From Table 1, it has found that out of 204 respondents, 54.4% were female and 40.2% of the respondents live in rural – urban area, whereas 2.9% of the respondents having relatives or acquaintance who were infected with COVID 19.

In table 2, the result indicates that living in urban areas in contrast to rural area was a protectives factors against anxiety experienced by the respondents (OR =1.978, 95% CI = .725 – 5.396). However, having a relative or an acquaintance infected with COVID 19 was a risk factor for anxiety (OR = 1.982, 95% CI = .248 – 15.833).

In Table 3, it can be clearly seen that there is a negative association between social support from family and friends during COVID 19 situation ( $r = -.133$ ,  $p < 0.058$ ) and ( $r = -.320$ ,  $p < 0.001$ ). It also indicates that college students are going through anxiety as the number of cases has been increasing day by day which made them to worry about their academic delays as it will directly impact their careers.

## **8.8 Conclusions:**

The COVID 19 crisis has shattered dreams of many young students of Assam to pursue higher education in Delhi, Bengaluru and other metro cities after clearing their higher secondary or plus II examinations. There are many young people who are struggling with their mental health, but have not yet managed to access support, and others who are experiencing anxiety for the first time as a result of the pandemic. These young people need to know where to go for help which remains available during this time, with clear signposting and access to digital support, families, careers and teachers, etc. who will be a crucial source of support for young people, but they too will need help to play this part. In the absence of face-to-face support, respondents highlighted the important of online and digital tools to facilitate ongoing and existing support. While face-to-face support has public health risks and it is therefore understandable that it is extremely difficult to manage, it is important to plan for a resumption of service when it is possible. However, most respondents felt that support by phone or online would be ineffective or less effective than face-to-face support because of a lack of privacy at home or a fear of their family overhearing the session. Many respondents have experienced anxiety because of this COVID 19 outbreak. Living in urban areas, living with parents, having a steady family income were protective factors for college students against experienced anxiety during the COVID 19 outbreak. However, during the survey, it has found that out of 204 respondents only 2.9% of the respondents having a relative or an acquaintance infected with COVID 19 was an independent risk factor for experienced anxiety. The COVID 19, related stressors that included economic stressors, effects on daily-life, and academic delays were positively associated with the level of anxiety symptoms of college's students during this epidemic. It is suggested that the government and schools should collaborate to resolve this problem in order to provide high- quality, timely crisis-oriented psychological service to college students. As COVID 19 is a sudden crisis so people are still trying to adjust or accept the rules and regulation of COVID 19 as somehow one is infected with the COVID 19 then he/she should isolated themselves from their family members as it may also infect them if they don't maintain the social distancing which made them to worry that in this sudden crisis they fear if any of their family members are got infected then how they will deal with the situation and will anyone come forward to help in that situation.

Most of the respondents are worried about their academic delay they were unable to complete their courses on time which made them to think whether the situation will be normal or not and if the situation gets normal then would the environment be same as before or not. So, from the study it has been clear that almost all are worried due to COVID 19 and still they are trying to deal with the situation according to their convenience.

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