

# Impact Of COVID-19 On Mental Health Of Management Students.

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## **Abstract**

*An individual always want to cherish their College life, as it is one of the most memorable days of life. But the ongoing pandemic situation has forced the educational institutes since March 2020, and classes are held in online mode. Both the partners of this show, students as well as teachers are missing all the fun of regular classes on campus. This paper deals with the impact of COVID-19 on the Mental Health of students pursuing MBA Degree. A Self-developed questionnaire having 36 items was considered for the study. Exploratory Factor Analysis (EFA) was used to identify the determinants leading to Mental Health due to COVID-19. Total 350 questionnaire was distributed, out of which 327 was received back. Multi Regression Analysis was applied in order to find the parameter which is more prominent in influencing mental health among the MBA students due to COVID-19.*

*Keywords: COVID-19, Depression, Emotions, Anxiety*

## **INTRODUCTION**

The COVID-19 pandemic has been a period of upheaval for the globe. Even the student community of all age have also become the victims of this. The objective of this study was to identify the impact of COVID on the Mental Health of students pursuing MBA degree. MBA is post graduate course and generally students opt for their career after it. This pandemic situation has given rise to lots of uncertainty among the student community. They are worried about the way classes are held (on line classes), online exams, campus placements etc. this paper explored the factors responsible for the mental health and also identified the prime factor, out of it. Management education is a very demanding stream and apart from the regular curricular activities, students need to take part in various co-curricular and extracurricular activities. Due to COVID Lockdown institutes are closed down and colleges are unable to conduct various types of competency development activities for the students. This has resulted uncertainty about the future among the students.

## **LITERATURE REVIEW**

There exists lots of studies which showed that COVID-19 has an impact on the mental wellbeing of the people and the magnitude is high, in places, where people affected is more. (Fiorillo and Gorwood, 2020). It is resulting in psychological disorders such anxiety and depression. (Duan and Zhu, 2020). Pandemic has forced the government to implement strict laws, to prevent it from spreading (Adhikari et al., 2020). COVID-19 pandemic has affected human survival, health, well-being, and development in many ways. (Ahorsu et al., 2020). Many studies related to COVID-19 has found a link between COVID-19 fear and anxiety (Mertens et al., 2020). Recently it was found that COVID-19 fear is associated with anxiety and stress (TzurBitan et al., 2020). Due to fear and depression, cases of suicide have also been reported ( Bhuiyan, M. M. ,2020) (Mamun and Griffiths, 2020). Lockdown, new cases and deaths have adversely affected the emotions of people and resulted in mood swings and depression (Duan and Zhu, 2020) (Viscuso, D. G. I., 2020) In the early stages of pandemic, severe symptoms of anxiety, stress, and depression was found (Huang and Zhao, 2020). Studies show that anxiety and depression are

closely linked (Díaz et al., 2012). People affected with COVID are also experiencing high level of fear and anxiety (Forbes et al., 2010). Studies has proved that Anxiety and depression are positively related and are the predictors of each other (Jansson-Fröjmark and Lindblom, 2008). According to some studies, mental health issues are more in students due to lockdown, as they are not able to mingle with their classmates and friends. (Chen et al., 2020; Mazza et al., 2020; Santini et al., 2020).

### RESEARCH METHODOLOGY

Primary Data for this study is collected with questionnaire. It was classified in 2 parts. The first part was, demographic data and the second part was statements related to the impact of COVID-19 on the mental health of the respondents. Respondents were students pursuing M.B.A. Program. A total number of 350 questionnaires were distributed, out of which 327 responses was received back.

### OBJECTIVES OF THE STUDY

Objective of the study was as follows:

- *To explore the factors influencing mental health among Management Students during the pandemic time.*
- *To identify the most prominent factor out of the emerged factor.*
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### PRIMARY DATA

Questionnaire having 36 questions was used to collect the primary data. The questions are classified into demographic and non-demographic variables.

Number of demographic questions = 6

Number of stress related questions = 30

The survey was conducted on a sample size of 327 MBA students. Responses was measured with 5 point Likert Scale. Reliability test was conducted and value of Cronbach's alpha was 0.969.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.969	30

### STATISTICAL TOOLS USED FOR DATA ANALYSIS

Statistical tools used for data analysis includes

- Factor Analysis : used to explore the factors.
  - Demographic Analysis : used for demographic profiling.
  - Multiple Regression Model: used to find the most prominent factor, among the explored factor.
- The statistical package used for data analysis was SPSS 21.

### DATA ANALYSIS

Out of 327 respondents 56.88% was boys and 43.12 % were girls. 56.88% were from first year and 44.22% from second year. In case of 56.23% respondents, both the parents are alive and in case of 43.73 % respondents either one parent or both the parents were not alive. 43.33% were the eldest son/daughter of their parents, 34.86% were the middle son/daughter of their parents and 24.77% were the youngest son/daughter of their parents.

**Demographic characteristics of the Respondents**

Variables and categories	N=3 27	%
<b>Gender</b>		
Male	186	56.8807 339
Female	141	43.1192 661
	327	100%
<b>Academic Year</b>		
First Year	183	55.9633 028
Second Year	144	44.0366 972
	327	100%
<b>Both Parents Alive</b>		
Yes	184	56.2691 131
No	143	43.7308 869
	327	100%
<b>Number of kid you are for the parents</b>		
Eldest	142	43.4250 765
Middle	114	34.8623 853
Youngest	81	24.7706 422
	337	100%
<b>Residential Area</b>		
Rural	137	41.8960 245
Urban	119	36.3914 373
Semi-urban	81	24.7706 422
	337	100%
<b>Health Issues</b>		
Yes	101	30.88
No	226	69.11
	327	100%

41.90 % stay in rural area, 36.39 % from urban and 24.77 % from semi-urban area. 30.88% were having health issues and 69.11 % were not having any health issues.

**RESULTS:**

Factor analysis was conducted in order to identify the factors that affect mental health among the management students.. Factors were identified using the Eigen value criteria that suggests extracting factors with Eigen value greater than 1.0 Principal Component Analysis and Varimax Rotation were considered for obtaining a component matrix. For confirming the adequacy and sphericity of the data set, Kaiser-Meyer-Olkin(KMO) and Bartlett’s Test values were also obtained.

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.946
Bartlett's Test of Sphericity	Approx. Chi-Square	9598.632
	df	435
	Sig.	.000

Kaiser-Meyer-Olkin(KMO) and Bartlett’s Test value obtained is .946. Any value above .5 is acceptable. The value obtained is 0.946, which is above 0.5. Hence factor analysis can be done.

**Communalities**

	Initial	Extraction
VAR00001	1.000	.702
VAR00002	1.000	.785
VAR00004	1.000	.681
VAR00005	1.000	.730
VAR00007	1.000	.705
VAR00010	1.000	.697
VAR00011	1.000	.634
VAR00012	1.000	.491
VAR00013	1.000	.696
VAR00014	1.000	.772
VAR00015	1.000	.762
VAR00016	1.000	.825
VAR00017	1.000	.733
VAR00018	1.000	.728
VAR00019	1.000	.799
VAR00021	1.000	.854
VAR00022	1.000	.802
VAR00024	1.000	.781
VAR00025	1.000	.773
VAR00026	1.000	.766
VAR00027	1.000	.567
VAR00028	1.000	.728
VAR00029	1.000	.789
VAR00003	1.000	.543
VAR00006	1.000	.756
VAR00008	1.000	.810
VAR00009	1.000	.793
VAR00020	1.000	.753
VAR00023	1.000	.749
VAR00030	1.000	.781

Extraction Method: Principal Component Analysis.

Factor I explained 22.87% of total variance, Factor II explained 21.52%, Factor III explained 18.32 %, Factor IV explained 6.11% and Factor V explained 4.47%, respectively. Total variance explained by the convergence 36 statements into 5 factors is 73.29 %. These emerged 5 factors were able to explain 73.29% variance. So, there may be the possibility of presence more factors, which will explain the rest of the variance.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.38	54.59	54.59	16.38	54.59	54.59	6.86	22.87	22.87
2	1.75	5.82	60.42	1.75	5.82	60.42	6.46	21.52	44.39
3	1.49	4.98	65.39	1.49	4.98	65.39	5.49	18.32	62.71
4	1.31	4.36	69.75	1.31	4.36	69.75	1.88	6.11	68.82
5	1.06	3.53	73.29	1.06	3.53	73.29	1.34	4.47	73.29
6		2.96	76.25						
7		2.75	78.99						
8		2.32	81.32						
9		1.95	83.26						
10		1.79	85.05						
11		1.63	86.68						
12		1.37	88.05						
13		1.19	89.24						
14		1.17	90.42						
15		1.06	91.47						
16		.96	92.43						
17		.92	93.35						

18	.25	.85	94.19					
19	.23	.75	94.95					
20	.22	.74	95.69					
21	.19	.64	96.33					
22	.18	.59	96.93					
23	.16	.54	97.47					
24	.14	.47	97.94					
25	.14	.46	98.39					
26	.13	.44	98.83					
27	.11	.36	99.19					
28	.09	.32	99.52					
29	.08	.27	99.78					
30	.07	.22	100.00					

Extraction Method: Principal Component Analysis.

30 items got converged into 5 factors and the total variance explained was 73.29 %. This percentage is acceptable. It means the 30 items under study was able to explain 73.29% and still there are other components which contributes to student's mental health. Remaining 26.71 % includes the other components, which may be the scope of further study.

Statement No	Statements	Factor loading
<b>FACTOR-1 : FAMILY PRESSURE</b>		
VAR00015	My family environment is not supportive	.818
VAR00022	I have health issues in my family	.795
VAR00005	The unrealistic expectations of my parents stresses me out	.724
VAR00025	I feel I am a burden for my family	.695
VAR00010	I have family issues	.694
VAR00018	I am facing pressure from family for placement	.670
VAR00023	Financial issues at home disturbs me	.639
VAR00030	We are facing financial problems due to Covid lockdown.	.601

VAR00 020	My family wants me to find a source of income	.592
<b>FACTOR-2 : ACADEMIC PERFORMANCE</b>		
VAR00 011	Online classes will affect my performance	.744
VAR00 029	I am not happy with the online evaluation pattern.	.733
VAR00 008	Due to internet connectivity, my performance in exams are affected.	.717
VAR00 009	I am very much tensed related to assignment & exams	.701
VAR00 028	I am afraid whether I will achieve my career goals	.666
VAR00 021	My teachers are critical of my academic performance	.658
VAR00 017	I am feeling very stressed thinking of the various academic activities.	.612
VAR00 014	Assignment & submissions are too high	.587
VAR00 004	Teachers have unrealistic expectations of me	.521
VAR00 019	Online exams are affecting my performance	.507
<b>FACTOR-3 : FUTURE ANXIETY</b>		
VAR00 002	I am worried about my placement	.751
VAR00 013	I am uncertain about achievements of my career goal	.688
VAR00 016	Due to pandemic situation company won't come for campus placements.	.683
VAR00 006	There is uncertainty about college schedules due to pandemic situations.	.643
VAR00 024	Conduct of Regular on campus classes are affecting our learning	.639
VAR00 026	I am unable to plan my future goals due to covid lockdown	.627
VAR00 007	Uncertainty about future is inducing anxiety in me	.570
<b>FACTOR-4 : ONLINE CLASS COMPATABILITY</b>		
VAR00 001	I am not comfortable in attending online classes.	.801
VAR00 003	Internet connectivity is affecting my learning through online class	.521
<b>FACTOR- 5 : SELF MANAGEMENT</b>		
VAR00 027	I am finding difficulty in following routine.	.735
VAR00 012	I have time management issues	.690

**Component Transformation Matrix**

Component	1	2	3	4	5
1	.604	.582	.536	.082	.042

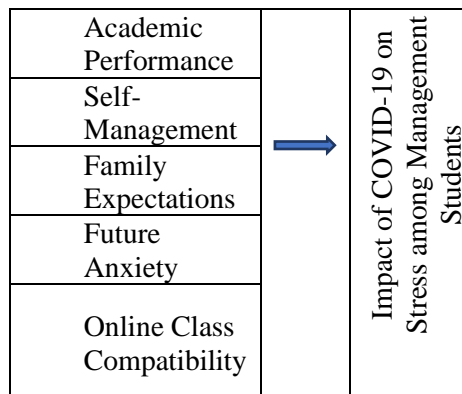
2	-.011	-.006	-.125	.987	-.097
3	.687	-.644	-.103	.022	.320
4	-.167	.310	-.229	.060	.906
5	-.368	-.388	.796	.120	.258

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.

Study started with 30 items. In total 30 items were considered for study and the items were converged into 5 factors. Below table exhibits the factor convergence.

Factor No.	No. of Items	Factor Name
Factor 1	9	Academic Performance
Factor 2	2	Self-Management
Factor 3	10	Family Expectations
Factor 4	7	Future Anxiety
Factor 5	2	Online Class Compatibility

Derived Model :



**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.664 <sup>a</sup>	.441	.432	.38192



- a. Predictors: (Constant), Academic Performance, Family Expectations, Future Anxiety, Online Class Compatibility, Self-Management

Value of  $R^2$  obtained was 0.441, which means, the derived factors namely academic performance, self-management, family expectation, future anxiety and online class compatibility are able to explain 44.1 % of the dependent variable 'MentalHealth'. All the above factors influence Respondent's Mental Health, as the significant the factors namely Family Expectation, Future Anxiety and online class compatibility value is less than 0.05. This study showed, factors like Academic Performance, Family Expectation and online class compatibility has a negative association with purchase intention. This means there exist an inverse relationship between them. Derived model proved 'Future Anxiety' has a positive association with Mental Health, and out of it 'Future Anxiety' plays the prominent role in deciding the Mental Health due to COVID-19 among the students Pursuing MBA Degree.

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.909	5	7.382	50.608	.000 <sup>b</sup>
	Residual	46.822	321	.146		
	Total	83.731	326			

a. Dependent Variable: Mental Health

b. Predictors: (Constant), Academic Performance, Family Expectations, Future Anxiety, Online Class Compatibility, Self-Management

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	2.406	.220		10.921	.000
Academic Performance	-.024	.039	-.050	-.613	.540
Self-Management	.042	.042	.089	1.000	.318
Family Expectations	-.130	.042	-.280	-3.122	.002
Future Anxiety	.704	.046	.656	15.266	.000
Online Class Compatibility	-.087	.033	-.110	-2.607	.010

a. Dependent Variable: Mental Health

Significant values of parameters like Academic Performance and Self –Management are 0.540 and 0.318 respectively. This value is more than 0.05. Hence as per this study, both the parameters are not significant.

**Predicted Model**

$$\text{Mental Health} = 2.406 - 0.024 (\text{Academic Performance}) + 0.042 (\text{Self-Management}) - 0.130 (\text{Family Expectations}) + 0.704 (\text{Future Anxiety}) - 0.087 (\text{Online Class Compatibility}) + \text{error}$$

### CONCLUSION:

Study explored the determinants of Mental Health condition due to COVID, among the MBA students, using Exploratory Factor Analysis and it converged into 5 factors. The factors thus derived was named as *Academic Performance, Self-Management, Family Expectation, Future Anxiety and Online Class Compatibility*. Derived five factors together explained 73.29 % variance. Multiple Regression Model helped to the predict the influence of the identified factor and also helped to identify the most prominent factor. Most important emerged from this study was 'Future Anxiety' and its role was 70.4 %. 100. This study confirmed the fact that '*Future Anxiety*', plays a key role in deciding the Mental Health of MBA Students due to COVID-19.

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