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## Undergraduate Students' Mental Health During Pandemic Situation

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### Abstract:

World stepped into 2020 with expectation and enthusiasm. But pandemic struck in within months with Covid -19 virus and modern life went into a complete chaos. Every part of daily living got affected and mental wellbeing was challenged as never seen before. The situation is still persisting without any way out to find till now. Students are also affected by this present situation. This study was attempted to find out the present mental condition of undergraduate students both male and female in one department. Objective also included the study of present mental condition of high achiever and low achiever of the same. An academic session wise analysis of the present mental condition was done on undergraduate students (male and female) of one course of study. This is a case study and quantitative data analysis method is used for analysis. Researchers conducted a survey on undergraduate students of one department from a college of Nadia district. A questionnaire was framed regarding mental health of students. The questionnaire consisted of 20 multiple choice type questions, where the statement of questionnaire was narrated in three-point scale.

There were eleven null hypothesis, one independent variable (Mental health of graduate students) and three attribute variables i.e., gender (male & female), achievement (high & low), semester/ year (2<sup>nd</sup> semester, 4<sup>th</sup> semester & 3<sup>rd</sup> year). The validity and reliability were checked by maintaining proper procedure. Some descriptive statistics like – Mean, SD and inferential statistics like- t-test were used for data analysis. From the study researchers found that, lockdown due to the Covid-19 pandemic has influenced the mental condition of graduate students. Also, there were nine significant mean differences among eleven null hypotheses.

**Key words:** Mental health, Pandemic situation.

### 1. Introduction:

Normally mental health indicates a state of well-being in emotional, psychological and social aspect. It helps a person to cope with the normal stress of life and also to keep mentally stable. No man can lead a normal life, without a healthy mental condition. So, good mental health is essential for each human being and students are no exception. One of the important conditions

of good teaching – learning is mental wellbeing of a learner. But as world stepped into 2020 with expectation and enthusiasm, pandemic struck in within months with COVID -19 virus and modern life went into a complete chaos. As a result, the mental condition of human being is challenged every day. Students are also badly affected by this situation. After literature review, researchers found some study regarding mental conditions of student. Saleem, S., & Mahmood, Z. (2013)<sup>1</sup> studied on ‘Mental health problems in University students: A prevalence study’ and found that different difficult situations are responsible for the unstable mental condition of students. Some of those unstable mental conditions are - loss of confidence, lack of self-regulation, anxiety etc. Kuttan, S. (2020)<sup>2</sup>. Studied on ‘Mental health during lockdown: The psychological impact of COVID -19 on healthcare works’ and found the same result. In this connection, researchers have selected the present study.

## 2. Literature Review:

Following are some related literature-

Chirikov, Lgor; Soria, Krista, M; Horgos, Bonnie; W. Jones; Daniel. (2020)<sup>3</sup>. studied on “Undergraduate and graduate students’ mental health during the COVID-19 Pandemic”. The main objective was to find out the mental health condition of undergraduate and graduate student. It is survey research. After data analysis, researcher found some major depressive disorder and high rate of anxiety.

S. Changwon; H. Udeep; S. Alec; W. Xomei; & S. Farzan. (2020)<sup>4</sup>. studies on “Effect of COVID-19 on college students’ Mental Health in the United States: Interview Survey study”. The main objective was to assess the mental health of college student. Interview survey method was conducted for this study. After data analysis, researchers found different mental disorder in high percentage.

## 3. Research Gaps:

Researchers found no sufficient literature review regarding students’ mental health in West Bengal. Hence, researchers have selected the following problem – **“Mental health of undergraduate students during lockdown period: A case study”**.

<sup>1</sup>Saleem ,S.; Mahood, Z.; & Naz, M. (2013). Mental ealth problem in University students: A prevalence of students. *FWV Journal of social science*. Vol 7(2).

<sup>2</sup> Kuttan, S. (2020). Mental health during lockdown: The psychological impact of COVID -19 on healthcare works. *Finance Express*. Retrieve from- [www.financialexpress.com/lifestyle/health/mental,dated 13-6-2020](http://www.financialexpress.com/lifestyle/health/mental,dated 13-6-2020)

<sup>3</sup>.Chirikov, Lgor; Soria, Krista, M; Horgos, Bonnie; W. Jones; Daniel. (2020). “Undergraduate and graduate students’ mental health during the COVID-19 Pandemic”. eScholarship. Retrieve from- [www.scholarship.org/uc/item/80K5d5hwn](http://www.scholarship.org/uc/item/80K5d5hwn) ,dated 24-04-2021

<sup>4</sup> S. Changwon; H. Udeep; S. Alec; W. Xomei; & S. Farzan. (2020). “Effect of COVID-19 on college students’ Mental Health in the United States: Interview Survey study”. COVID- 19 information. National Library of Medicine (NIH). Retrieve from- [www.pumed.ncbi.nlm.nih.gov/32805704 dated 24/04/2021](http://www.pumed.ncbi.nlm.nih.gov/32805704 dated 24/04/2021)

#### 4.Objectives:

The selected research objectives are as following-

- To find out the present mental condition of male and female undergraduate student of one department.
- To find out the present mental condition of high achiever and low achiever undergraduate student of one department.
- To find out the present mental condition of undergraduate students (male and female) of one course of study.

#### 5. Research Hypothesis:

The selected null hypothesis is-

- $H_{0.1}$  There exists no significant mean difference of mental health condition between total male and total female undergraduate students.
- $H_{0.2}$  There exists no significant mean difference of mental health condition between total high achiever and total low achiever undergraduate students.
- $H_{0.3}$  There exists no significant mean difference of mental health condition between total high achiever male and total high achiever female undergraduate students.
- $H_{0.4}$  There exists no significant mean difference of mental health condition between total low achiever male and total low achiever female undergraduate students.
- $H_{0.5}$  There exists no significant mean difference of mental health condition between total high achiever male and total low achiever male undergraduate students.
- $H_{0.6}$  There exists no significant mean difference of mental health condition between total high achiever female and total low achiever female undergraduate students.
- $H_{0.7}$  There exists no significant mean difference of mental health condition between total high achiever male and total low achiever female undergraduate students.
- $H_{0.8}$  There exists no significant mean difference of mental health condition between total high achiever female and total low achiever male undergraduate students.
- $H_{0.9}$  There exists no significant mean difference of mental health condition between total forth semester and total second semester undergraduate students.
- $H_{0.10}$  There exists no significant mean difference of mental health condition between total third year and total second semester undergraduate students.
- $H_{0.11}$  There exists no significant mean difference of mental health condition between total third year and total forth semester undergraduate students.

#### 6. Methodology:

Researchers have done a case study for the problem. They analyzed the data qualitatively with graphical presentation. Steps followed are -

- At first, Researchers have selected the specific research problem.

- Then, they reviewed the related literature.
- After that, they have constructed a questionnaire to collect the research worthy data.
- Then, they collected data and analyzed quantitatively.
- Lastly, they have reached the generalization.

### 6.1 Variable:

Present study was done with one variable. The selected variable is mental health of graduate student. There are three attribute variables i.e., gender (male & female), achievement (high & low), semester/ year (2<sup>nd</sup> semester, 4<sup>th</sup> semester & 3<sup>rd</sup> year).

### 6.2 Sample:

Purposive sampling method was used for this study. Random selection was used for the sample area and sample size selection from one college. Researchers selected total 245 sample from a specific undergraduate college (Kalyani Mahavidyalaya) of Nadia District. One specific department (Education) was taken as sample. The sample distribution is below-

**Table- 1: Sample Distribution**

Dimension	Number	Total
Male	73	245
Female	172	
High Achiever	98	245
Low Achiever	147	
2 <sup>nd</sup> Sem	103	245
4 <sup>th</sup> Sem	84	
3 <sup>rd</sup> Year	58	

### 6.3 Tools:

For this study, researchers have developed one questionnaire consisting of 20 questions. Questionnaire was regarding the mental health of undergraduate students.

### 7. Data Analysis:

Researchers have collected data after applying the questionnaire to the sample. Then researchers scored the sheet and analyzed data. After data analysis, researchers found the following information regarding the mental condition of graduation students.

Table – 2: Data regarding student

Group	Number of Student	Mean	SD
Total graduation student	245	37.65	6.25
Total male	73	36.23	6.26
Total female	172	38.25	6.16
Total high achiever student	98	42.33	6.86
Total low achiever student	147	33.99	4.49
Total high achiever male student	22	42.68	4.20
Total high achiever female student	76	42.22	7.47
Total low achiever male student	51	33.45	4.77
Total low achiever female student	96	34.27	4.32
Total 2 <sup>nd</sup> semester student	103	39.31	5.99
Total 4 <sup>th</sup> semester student	84	35.67	6.13
Total 3 <sup>rd</sup> year student	58	37.57	6.11

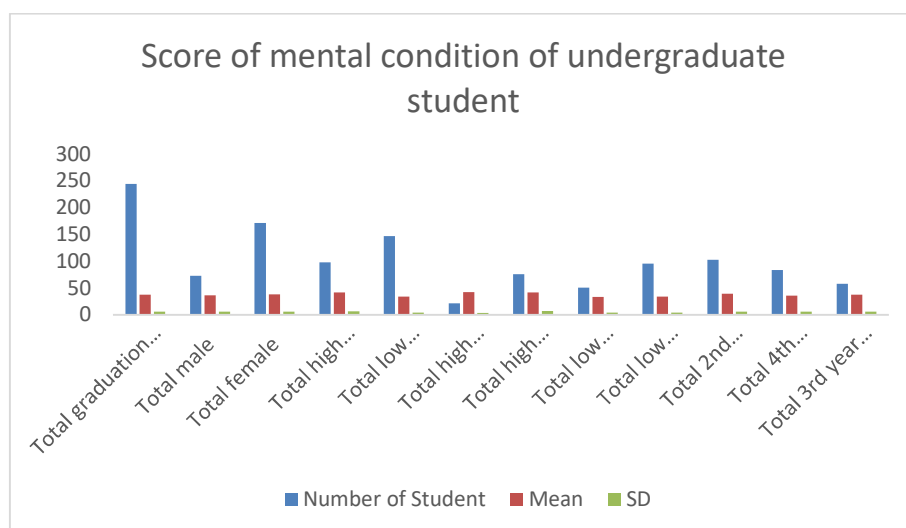


Figure 1: Graphical representation of score regarding the mental condition of undergraduate student.

For searching the research findings, researchers have used parametric test like- t-test and the following results are revealed according to hypothesis-

**H<sub>0.1</sub>** There exists no significant mean difference of mental health condition between total male and total female undergraduate students.

According to first research hypothesis, there exists no significant mean difference of mental health condition between total male and total female undergraduate students. For the

verification of this research hypothesis, researchers have complete t-test and presented the following values in the table-

**Table-3: Values of total male and total female undergraduate students**

Group	Number of students	Mean	S.D	t-value	Remark
Total male	73	36.23	6.26	3.54	Significant in 0.01 level
Total female	172	38.25	6.16		

Here, 't' value is found to be significant at 0.01 level, therefore the corresponding null hypothesis ( $H_{0.1}$ ) is rejected. It can be inferred that there exists significant difference in the mean scores of mental health condition of total male and total female undergraduate students.

**$H_{0.2}$  There exists no significant mean difference of mental health condition between total high achiever and total low achiever undergraduate students.**

According to second research hypothesis, there exists no significant mean difference of mental health condition between total high achiever and total low achiever undergraduate students. For the verification of this research hypothesis, researchers have complete t-test and presented the following values in the table-

**Table-4: Values of total high achiever and total low achiever undergraduate students**

Group	Number of students	Mean	S.D	t-value	Remark
Total high achiever	98	42.33	6.86	14.13	Significant in 0.01 level
Total low achiever	147	33.99	4.49		

Here, 't' value is found to be significant at 0.01 level, therefore the corresponding null hypothesis ( $H_{0.2}$ ) is rejected. It can be inferred that there exists significant difference in the mean scores of mental health condition of total high achiever and total low achiever undergraduate students.

**$H_{0.3}$  There exists no significant mean difference of mental health condition between total high achiever male and total high achiever female undergraduate students.**

According to third research hypothesis, there exists no significant mean difference of mental health condition between total high achiever male and total high achiever female undergraduate students. For the verification of this research hypothesis, researchers have used t-test and found the following in the table-

Table-5: Values of total high achiever male and total high achiever female undergraduate students

Group	Number of students	Mean	S.D.	t-value	Remark
Total high achiever male	22	42.68	4.20	1.77	Insignificant
Total low achiever female	76	42.22	7.47		

Here, 't' value is not found to be significant, therefore the corresponding null hypothesis ( $H_{0.3}$ ) is accepted. It can be inferred that there exists no significant difference in the mean scores of mental health condition of total high achiever male and total high achiever female undergraduate students.

**$H_{0.4}$  There exists no significant mean difference of mental health condition between total low achiever male and total low achiever female undergraduate students.**

According to fourth research hypothesis, there exists no significant mean difference of mental health condition between total low achiever male and total low achiever female undergraduate students. For the verification of this research hypothesis, researchers have used t-test and found the following values in the table-

Table-6: Values of total low achiever male and total low achiever female undergraduate students

Group	Number of students	Mean	S.D.	t-value	Remark
Total low achiever male	51	33.45	4.77	0.31	Insignificant
Total low achiever female	96	34.27	4.32		

Here, 't' value is not found to be significant, therefore the corresponding null hypothesis ( $H_{0.4}$ ) is accepted. It can be inferred that there exists no significant difference in the mean scores of mental health condition of total low achiever male and total low achiever female undergraduate students.

**$H_{0.5}$  There exists no significant mean difference of mental health condition between total high achiever male and total low achiever male undergraduate students.**

According to fifth research hypothesis, there exists no significant mean difference of mental health condition between total high achiever male and total low achiever male undergraduate students. For the verification of this research hypothesis, researchers have applied t-test and found the following values in the table-

**Table-7: Values of total high achiever male and total low achiever male undergraduate students**

Group	Number of students	Mean	S.D	t-value	Remark
Total high achiever male	22	42.68	4.20	15.64	Significant in 0.01 level
Total low achiever male	51	33.45	4.77		

Here, 't' value is found to be significant at 0.01 level, therefore the corresponding null hypothesis ( $H_{0.5}$ ) is rejected. It can be inferred that there exists significant difference in the mean scores of mental health condition of total high achiever male and total low achiever male undergraduate students.

**$H_{0.6}$**  There exists no significant mean difference of mental health condition between total high achiever female and total low achiever female undergraduate students.

According to sixth research hypothesis, there exists no significant mean difference of mental health condition between total high achiever female and total low achiever female undergraduate students. For the verification of this research hypothesis, researchers have used t-test and found the following values in the table-

**Table-8: Values of total high achiever female and total low achiever female undergraduate students**

Group	Number of students	Mean	S.D.	t-value	Remark
Total high achiever female	76	42.22	7.47	10.89	Significant in 0.01 level
Total low achiever female	96	34.27	4.32		

Here, 't' value is found to be significant at 0.01 level, therefore the corresponding null hypothesis ( $H_{0.6}$ ) is rejected. It can be inferred that there exists significant difference in the mean scores of mental health condition of total high achiever female and total low achiever female undergraduate students.



**H<sub>0.7</sub>** There exists no significant mean difference of mental health condition between total high achiever male and total low achiever female undergraduate students.

According to seventh research hypothesis, there exists no significant mean difference of mental health condition between total high achiever male and total low achiever female undergraduate students. For the verification of this research hypothesis, researchers have used t-test and found the following values in the table-

**Table-9: Values of total high achiever male and total low achiever female undergraduate students**

Group	Number of students	Mean	S.D.	t-value	Remark
Total high achiever male	22	42.68	4.20	10.78	Significant in 0.01 level
Total low achiever female	96	34.27	4.32		

Here, 't' value is found to be significant at 0.01 level, therefore the corresponding null hypothesis (**H<sub>0.7</sub>**) is rejected. It can be inferred that there exists significant difference in the mean scores of mental health condition of total high achiever male and total low achiever female undergraduate students.

**H<sub>0.8</sub>** There exists no significant mean difference of mental health condition between total high achiever female and total low achiever male undergraduate students.

According to eighth research hypothesis, there exists no significant mean difference of mental health condition between total high achiever female and total low achiever male undergraduate students. For the verification of this research hypothesis, researchers have used t-test and found the following values in the table-

**Table-10: Values of total high achiever female and total low achiever male undergraduate students**

Group	Number of students	Mean	S.D.	t-value	Remark
Total high achiever female	76	42.22	7.47	16.50	Significant in 0.01 level
Total low achiever male	51	33.45	4.77		

Here, 't' value is found to be significant at 0.01 level, therefore the corresponding null hypothesis (**H<sub>0.8</sub>**) is rejected. It can be inferred that there exists significant difference in the mean scores of mental health condition of total high achiever female and total low achiever male undergraduate students.

**H<sub>0.9</sub>** There exists no significant mean difference of mental health condition between total forth semester and total second semester undergraduate students.

According to ninth research hypothesis, there exists no significant mean difference of mental health condition between total forth semester and total second semester undergraduate students. For the verification of this research hypothesis, researchers have used t-test and found the following values in the table-

**Table-11: Values of total forth semester and total second semester undergraduate students**

Group	Number of students	Mean	S.D	t-value	Remark
Total forth semester	103	39.31	5.99	11.38	Significant in 0.01 level
Total second semester	84	35.67	6.13		

Here, 't' value is found to be significant at 0.01 level, therefore the corresponding null hypothesis (**H<sub>0.9</sub>**) is rejected. It can be inferred that there exists significant difference in the mean scores of mental health condition of total forth semester and total second semester undergraduate students.

**H<sub>0.10</sub>** There exists no significant mean difference of mental health condition between total third year and total second semester undergraduate students.

According to tenth research hypothesis, there exists no significant mean difference of mental health condition between total third year and total second semester undergraduate students. For the verification of this research hypothesis, researchers have used t-test and found the following values in the table-

**Table-12: Values of total third year and total second semester undergraduate students**

Group	Number of students	Mean	S.D	t-value	Remark
Total third year	103	39.31	5.99	3.22	Significant in 0.01 level
Total second semester	58	37.57	6.11		

Here, 't' value is found to be significant at 0.01 level, therefore the corresponding null hypothesis (**H<sub>0.10</sub>**) is rejected. It can be inferred that there exists significant difference in the mean scores of mental health condition of total third year and total second semester undergraduate students.

**H<sub>0.11</sub>** There exists no significant mean difference of mental health condition between total third year and total forth semester undergraduate students.

According to eleventh research hypothesis, there exists no significant mean difference of mental health condition between total third year and total forth semester undergraduate students. For the verification of this research hypothesis, researchers have applied t-test and found the following values in the table-

**Table-13: Values of total third year and total forth semester undergraduate students**

Group	Number of students	Mean	S.D	t-value	Remark
Total third year	84	35.67	6.13	4.32	Significant in 0.01 level
Total forth semester	58	37.57	6.11		

Here, 't' value is found to be significant at 0.01 level, therefore the corresponding null hypothesis ( $H_{0.11}$ ) is rejected. It can be inferred that there exists significant difference in the mean scores of mental health condition of total third year and total forth semester undergraduate students.

## 8. Interpretation of the Study:

Researchers revealed the following findings according to the research hypothesis-

- There exists significant difference in the mean scores of mental health condition of total male and total female undergraduate students. The mental health conditions of total female students are higher than total male student.
- There exists significant difference in the mean scores of mental health condition of total high achiever and total low achiever undergraduate students. The mental health conditions of total high achiever students are higher than total low achievers.
- There exists no significant difference in the mean scores of mental health condition of total high achiever male and total high achiever female undergraduate students. The mental health condition of total high achiever male students are higher than total high achiever female
- There exists no significant difference in the mean scores of mental health condition of total low achiever male and total low achiever female undergraduate students. The mental health conditions of total low achiever male students are higher than total low achiever female.
- There exists significant difference in the mean scores of mental health condition of total high achiever male and total low achiever male undergraduate students. The mental health conditions of total high achiever male students are higher than total low achiever male.
- There exists significant difference in the mean scores of mental health condition of total high achiever female and total low achiever female undergraduate students. The mental health conditions of total high achiever female students are higher than total low achiever female.

- There exists significant difference in the mean scores of mental health condition of total high achiever male and total low achiever female undergraduate students. The mental health conditions of total high achiever male students are higher than total low achiever female.
- There exists significant difference in the mean scores of mental health condition of total high achiever female and total low achiever male undergraduate students. The mental health condition of total high achiever female students is high than total low achiever male.
- There exists significant difference in the mean scores of mental health condition of total forth semester and total second semester undergraduate students. The mental health condition of total forth semester students are higher than total second semester students.
- There exists significant difference in the mean scores of mental health condition of total third year and total second semester undergraduate students. The mental health condition of total third year students are higher than second semester students.
- There exists significant difference in the mean scores of mental health condition of total third year and total forth semester undergraduate students. The mental health condition of total forth semester students are higher than total third year students.

## 7. Conclusion:

The present study measures the mental health condition of undergraduate students. After statistical analysis, researchers found that lockdown due to Covid-19 affected the mental health of students. Low achiever and male students are more affected than the students of other categories. Maximum students often prefer to stay at home and rest of the students do not mentally satisfied to stay at home at all. Though very few students feel continuously upset but maximum students feel upset in regular basis (often) in this lockdown period. Maximum students often get angry, 6.1% students have low concentration power, maximum students always miss the company of friends, most of the students are suffering from anxiety regarding corona virus, 71.9% students are suffering from depression (not clinically diagnosed), some students are suffering from sickness, confusion etc. Saleem, S., & Mahmood, Z. (2013)<sup>5</sup> also found the similar line of findings which proves the relevance of generalization as much possible.

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