



## ASSESSMENT OF THE LEVEL OF STRESS DUE TO E-LEARNING AMONG STUDENTS OF CLASS-XII DURING COVID-19 PANDEMIC IN SELECTED SCHOOL, WEST BENGAL.

### Nursing

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### ABSTRACT

A descriptive study was conducted to assess the level of stress due to e-learning among class XII students during COVID-19 pandemic in a selected Govt. high school, West Bengal in the month of February 2022. The objective of the study was to assess the level of stress due to e-learning among XII students during COVID-19 pandemic. The population of the study was consisted of class XII students and non probability purposive sampling was used to obtain 80 samples from science section, class XII of Bidhannagar Govt. High School, Kolkata. Tool-I for demographic variables and tool-II, a structured questionnaire (modified PSQ) with 20 items was used to collect data. The study findings showed that mean stress score was  $53.84 \pm 2.66$ . It also revealed that maximum no of students (99%) had moderate level of stress (with the score of 40-59). The study was believed to be helpful in the field of nursing education, practice, administration and research. Based on the study findings recommendations were made for studies on large samples in different settings.

### KEYWORDS

Stress, e-learning, COVID-19, Pandemic

#### NEED OF THE STUDY:

After announcement of complete lockdown during COVID-19 pandemic, the educational institutions were closed, the teaching-learning process switched from offline physical classes to online/e-learning. The science subjects of class XII are practical based, if the students learn these subjects through e-learning a huge gap between theoretical and practical knowledge may appear and also makes it difficult to understand the subjects which causes a certain level of stress in them.

The students may hesitate to open up their problem in online classes and it also is difficult for the teachers to evaluate the level of understanding of the students through online classes which creates a great amount of stress for both. The lack of social interaction in peer group leads to feeling of loneliness, social isolation, and boredom. Staying focused on online classes is a challenge. Along with benefits of online learning, a huge share of stress and fatigue may arise in the students. In online classes there is a chance of being distracted by social media and other apps. Students may feel anxiety if they can not join the online classes due to network problem or any technical issues. This stress and anxiety is often overlooked but potentially dangerous to the mental and physical health of the students as they have significant impact on the quality of life and education. Since class XII is the bridge between the higher study and the secondary education there is a significant need for conducting a research to assess the level of stress among students of class XII especially for science students due to e-learning during COVID-19 pandemic. The findings would be beneficial for the students to resolve the problem.

#### THE OBJECTIVES:

To assess the level of stress due to e-learning among students of class XII during COVID-19 pandemic.

#### RESEARCH METHODOLOGY

##### RESEARCH APPROACH AND RESEARCH DESIGN

Quantitative research approach and descriptive survey research design was adapted to accomplish the objectives of the study.

#### DATA COLLECTION TOOLS

##### TOOL 1: Structured Questionnaire Items On Selected Demographic Variables

It comprised of 12 items: age, sex, area of living, type of family, number of family members, number of sibling, mother's education, father's education, monthly family income, family environment, previous experience of e-learning and availability of network.

**TOOL 2:** Structured questionnaire items (modified PSQ) for assessment of stress level due to e-learning during COVID-19 pandemic. It comprised of 20 items for assessment of stress level. The response to the items was numbered from 1 representing 'Almost Never', to 4 representing 'Usually.'

#### Scoring Of The Tool:

- Almost Never 1
- Sometimes 2

- Often 3
- Usually 4

#### GRADING:

| Outcome                  | Attained Score |
|--------------------------|----------------|
| Low level of stress      | 20-39          |
| Moderate level of stress | 40-59          |
| High level of stress     | 60-80          |

#### DATA COLLECTION PROCEDURE:

Data was collected from 23.2.2022- 25.2.2022 after obtaining administrative approval from the Headmaster. Informed written consent of the parents of the students and informed minor assent of the students in the presence of their parents were taken. The purpose of the study was explained and reassured them that the data obtained would be kept confidential. Structured questionnaire items were distributed among the respondents. It took about 12 minutes to complete.

#### PLAN FOR DATA ANALYSIS:

The obtained data were analyzed by using descriptive and inferential statistics based on the objectives of the study.

Frequency and percentage distribution to describe the demographic variables

Frequency and percentage distribution to describe the stress score  
Mean median and standard deviation of stress score.

#### RESULTS

**Table 1 Showing Frequency And Percentage Distribution Of Sample According To Age, Sex, Area Of Living, Type Of Family, No Of Family Members And No Of Sibling. n=80**

| Demographic variables | Frequency | Percentage (%) |
|-----------------------|-----------|----------------|
| Age                   |           |                |
| <18 yrs               | 19        | 24             |
| 18 yrs                | 61        | 76             |
| Sex                   |           |                |
| Male                  | 41        | 51             |
| Female                | 39        | 49             |
| Area of living        |           |                |
| Rural                 | 5         | 6              |
| Semi-Urban            | 7         | 9              |
| Urban                 | 68        | 85             |
| Type of family        |           |                |
| Nuclear               | 62        | 78             |
| Joint                 | 17        | 21             |
| Extended              | 1         | 1              |
| No of family members  |           |                |
| Up to 4               | 60        | 75             |
| 5-10                  | 18        | 23             |
| >10                   | 2         | 2              |
| No of sibling         |           |                |

|     |    |    |
|-----|----|----|
| NIL | 31 | 39 |
| 1   | 44 | 55 |
| 2   | 5  | 6  |

Data presented in table 1 showed that maximum (76%) respondents were 18 years of age, majority (51 %) of the students were male.

- Most of the students (85 %) lived in urban area and majority (78%) of respondents belonged to nuclear family
- Maximum respondents (75%) had family members up to 4, majority (55%) of the respondents had one sibling.

**Table 2 Showing Frequency And Percentage Distribution Of Sample According To Mother's Education, Father's Education, Monthly Family Income, Family Environment, Previous Experience Of e-learning, Availability Of Network,** n=80

| Demographic variables             | Frequency | Percentage (%) |
|-----------------------------------|-----------|----------------|
| Mother's education                |           |                |
| Primary                           | 9         | 11             |
| Secondary                         | 10        | 13             |
| Higher Secondary                  | 13        | 16             |
| Graduate and Above                | 48        | 60             |
| Father's education                |           |                |
| Primary                           | 8         | 10             |
| Secondary                         | 10        | 12             |
| Higher Secondary                  | 12        | 15             |
| Graduate and Above                | 50        | 63             |
| Monthly family income             |           |                |
| Up to Rs.10000/-                  | 35        | 44             |
| Rs. 10001/- Rs.20000/-            | 18        | 22             |
| Rs. 20001/- 30000/-               | 11        | 14             |
| > Rs.30000                        | 16        | 20             |
| Family environment                |           |                |
| Supportive                        | 76        | 95             |
| Unsupportive                      | 4         | 5              |
| Previous experience of e-learning |           |                |
| Yes                               | 33        | 41             |
| No                                | 47        | 59             |
| Availability of network           |           |                |
| Good                              | 60        | 75             |
| Poor                              | 20        | 25             |

Data presented in table 2 showed that most (60 %) of the students mothers were graduate and above where as it was 63 % for fathers.

It also presented that majority (44 %) of respondents had the family income up to Rs 10,000 per month.

It also depicted that majority (95%) of the students had supportive family environment and most of the (59 %) respondents had no previous experience of e-learning.

Maximum no of students (75 %) had good availability of network and only 25 % reported about poor availability of network

**Section II : Findings related to assessment of level of stress of the students**

**Table 3 Showing Frequency And Percentage Distribution Of Stress Score** n=80

| Level of stress          | Attained Score | Frequency | Percentage (%) |
|--------------------------|----------------|-----------|----------------|
| Low level of stress      | 20-39          | nil       | 00             |
| Moderate level of stress | 40-59          | 79        | 99             |
| High level of stress     | 60-80          | 1         | 1              |

Maximum possible score -80

Minimum possible score -20

Data presented in table 3 showed that most of the respondents (99 %) had moderate level of stress, only 1% of respondents had high level of stress.

#### Recommendations:

On the basis of the findings, the following recommendations were made for future research-

- Study can be replicated by the large sample for generalization.

- The present study can be replicated by different age group of children such as preschoolers, school going and adolescents.
- The present study can be replicated by different courses of students.
- A similar study can be conducted on parental stress for e-learning.
- The present study can be conducted with different years of nursing students
- A comparative study can be conducted with two different groups to observe the difference between stress level of two groups.
- An interventional study can be conducted to resolve the perceived stress.

#### CONCLUSION:

A descriptive survey study was conducted on the assessment of level of stress due to e-learning during COVID-19 pandemic among class XII students in a selected Govt. High School, West Bengal. After completion of the study it was found that majority (99 %) of the students had moderate level of stress and only 1 % students had reported about high level of stress. The shifting of teaching from offline to online during COVID -19 pandemic had created a huge amount of stress among the students. So there was a need to assess the level of stress to address the problem

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