

A STUDY ON STRESS AMONG THE ENGINEERING STUDENTS OF INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

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Abstract

Stress is considered as an inevitable phenomenon in the life of every individual that is bound to exist in their personal, academic, social and emotional life. The present problem aimed to study the overall level of stress among the engineering students of Indian Institute of Technology Guwahati. The study also highlighted the difference in the level of stress between the male and female engineering students of Indian Institute of Technology Guwahati with respect to pressure, physical stress, anxiety and frustration.

Keywords: Stress, Engineering Students.

Introduction

Stress is considered as an unavoidable phenomenon in the life of every individual. It was the endocrinologist, Hans Selye who first coined the term stress in the 1930's and he defined it as "any external event or any internal drive which threaten to upset the organism equilibrium".

The Indian Institute of Technology Guwahati is regarded as one of the premier Institutes which was established with a vision to promote high class technological education in India. Established in the year 1994, the IITG is a public institution established by the Government of India and is the 6th Indian Institute of Technology in India with the motto 'Knowledge is Power'.

It is seen that college students in the IIT are exposed to many challenges like the idea of living in hostels for the first time, adjusting to a new peer circle, demands and expectations from their family and relatives, new responsibilities of living an independent life, the huge load of academic pressure, etc. which in turn results in stress and if not dealt effectively can hamper not just their personal, social and emotional well-being but their academic performance will also be affected severely. (D'Zurilla, T.J. & Shetty, C.F. 1991).

Significance of the Study

The investigator has reviewed various review of literatures in order to know about the background of the subject matter. However, it is seen that very few research work on stress has been conducted in the Institute to measure the overall level of stress among the Engineering Students of IITG. So, identifying the importance of the subject, the investigator was very keen to study this research problem in depth and identify the levels of pressure, physical stress, anxiety and frustration among the male and female Engineering Students of Indian Institute of Technology Guwahati.

Statement of the Problem

The present study is entitled as 'A Study on Stress among the Engineering Students of Indian Institute of Technology Guwahati.'**Objectives of the Study**

1. To study the overall level of stress among the Engineering Students of Indian Institute of Technology Guwahati.
2. To study the difference in Level of Stress between Male and Female Engineering Students of Indian Institute of Technology Guwahati with respect to:

Pressure Physical Stress Anxiety Frustration

Hypotheses of the Study

There lies no significant difference in the Level of Stress between Male and Female Engineering Students of Indian Institute of Technology Guwahati with respect to: Pressure, Physical Stress, Anxiety and Frustration

Delimitation of the Study

Due to the time constraint, the present study is delimited to only the pressure, physical stress, anxiety and frustration of the male and female Engineering Students of the Indian Institute of Technology Guwahati.

Review of Related Literature

The findings from several individual studies and narrative reviews indicate that overall the students experienced moderate levels of stress as found in studies by Elias, H., Ping, W. S. & Abdullah, M. C., (2011); Thawabieh, A.M. & Qaisy, L. M., (2012). Again, in certain studies it was found that students are subjected to very low levels of depression, anxiety and stress (Pariat, L., Rynjah, A. & Kharjana, M. G. (2014) & Prabhu, M. & Mohan, G. M. (2014). Added to this, it was also observed that in studies conducted by Bulo, J. G. & Sanchez, M. G. (2014) & Singh, M. et. al (2017) high prevalence of depression, anxiety and stress and high co-morbidity was seen among the students and interpersonal stressors also highly affected the college students than the environmental factors.

Significant gender differences were also observed among the students with respect to their perceived levels of stress like in studies conducted by Misra, R. & McKean, M. (2000) and Kumar, S. & Bhukar, J. P. (2012).

Research Method

For the present study Descriptive Survey Research was used by the investigator.

Population of the Study

For the present study, the Engineering Students of the Indian Institute of Technology Guwahati were selected as the population. Based total student strength of IITG for the session 2018-2019 as on 31-03-2019, the total student capacity in the Institute in B. Tech and M. Tech courses is 3601 out of which 2737 are in B. Tech and 864 are in M. Tech.

Sample of the Study

A sample of 150 students consisting of 85 male and 65 female engineering students from IITG were selected.

Tools for Data Collection

In the present study, the investigator has used Stress Scale by Vijaya Lakshmi and Shruti Narain was be used by the researcher. The scale consists of 40 items divided into four dimensions: Pressure, Physical Stress, Anxiety and Frustration.

Sample Technique

For the present study, the investigator has used 'Purposive Sampling Technique' to collect data from the sample.

Data Collection

The investigator had collected the data directly from the primary sources i.e. the engineering students of IITG.

Statistical Techniques

For **Objective 1**: Descriptive Statistics like Mean, Standard Deviation, Skewness and Kurtosis were calculated. For **Objective 2**: Inferential Statistics like Z-test was calculated.

Analysis and Interpretation

In order to analyse the first objective, i.e. to study the overall Level of Stress among the Engineering Students of Indian Institute of Technology Guwahati percentage values of the responses were calculated as shown in Table 4.2.1

Table 4.2.1
Overall Level of Stress among the Engineering Students of Indian Institute of Technology Guwahati

Sl. No.	Levels	No. of Students	Percentage
1	High	37	24.67%
2	Moderate	95	63.33%
3	Low	18	12%

Table 4.2.1 reveals the overall Level of Stress among the Engineering Students of Indian Institute of Technology Guwahati. The table shows the levels of stress ranging from high to low. It was found that 24.67% of the Engineering Students of IIT Guwahati have high levels of stress, 63.33% of the students have moderate levels of stress and only 12% of the students had low levels of stress.

In order to analyse the second objective, the mean and standard deviation scores for both males and females were calculated. Moreover, Z-value was calculated to find out the difference in the Level of Stress between Male and Female Engineering Students of Indian Institute of Technology Guwahati with respect to: Pressure, Physical Stress, Anxiety and Frustration as depicted in the Table 4.2.3 and Figure 4.2.3.

Table 4.2.3
Difference in Level of Stress between Male and Female Engineering Students of Indian Institute of Technology Guwahati with respect to: Pressure, Physical Stress, Anxiety and Frustration

Dimensions	Groups	N	Mean	S.D	'Z' Value	Critical 'Z' Value	Remarks
Pressure	Male	85	6.33	1.28	-1.005	1.96	Null Hypothesis is accepted at 0.05 % level of significance
	Female	65	5.64	1.37			
Physical Stress	Male	85	1.10	0.01	-2.38	1.96	Null Hypothesis is accepted at 0.05 % level of significance
	Female	65	0.89	0.12			
Anxiety	Male	85	5.65	1.43	-2.72	1.96	Null Hypothesis is accepted at 0.05 % level of significance
	Female	65	5.02	1.44			
Frustration	Male	85	3.51	2.10	-1.74	1.96	Null Hypothesis is accepted at 0.05 % level of significance
	Female	65	3.31	2.11			

From Table 4.2.3 it is seen that the 'Z' values calculated between male and female Engineering Students in the dimensions Pressure, Physical Stress, Anxiety and Frustration were found to be -1.005, -2.38, -2.72 and -1.74. It is observed that the calculated 'Z' values are lower than the critical 'Z' values i.e. 1.96 at 0.05% level of significance. So the null hypotheses are accepted in all the four dimensions stating that there lies no significant difference in the Level of Stress between Male and Female Engineering Students of Indian Institute of Technology, Guwahati with respect to: Pressure Physical Stress Anxiety and Frustration.

Findings of the Study

- It was found that majority of the students have moderate level of stress.
- A considerable number of students have high level of stress.
- In the low stress level, very few students were found.
- From the analysis of objective 2, it is clear that there lies no significant difference between the male and female Engineering students of Indian Institute of Technology Guwahati.

Summary of the Study

The above study is entitled as, 'A Study on Stress among the Engineering Students of Indian Institute of Technology Guwahati.' To conduct the study, Stress Scale by Vijaya Lakshmi and Shruti Narain was used by the researcher. The study aimed to study the overall level of stress among the Engineering Students of IITG. It also aimed to study the difference in the level of stress between the male and female Engineering Students of IITG with respect to: Pressure, Physical Stress, Anxiety and Frustration. The null Hypothesis formulated was there lies no significant difference between male and female engineering students of IITG with respect to: Pressure, Physical Stress, Anxiety and Frustration.

Conclusion of the Study

The study concluded that the prevailing stress among the Engineering Students of IITG is a matter of seriousness and should draw the attention of the authorities and the government towards it. The study concluded that majority of the engineering students had moderate levels of stress. A considerable number of it had high and very few students had low levels of stress. Furthermore, the study also concluded that there lies no significant difference between the male and female engineering students of IITG with respect to: pressure, physical stress, anxiety and frustration.

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