

*Gender Differences in Academic Stres among Engineering  
Students in Final Year of Education*

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*Abstract: In today's scenario of pursuing education bring a tremendous amount of stress to the college students that influence both physical and mental health of the students. The purpose of this paper is to examine the differences of stress perceived in gender wise and its impact on health and mental issues to the students thereby lead to burnout of the student's community in general. The sample size used for the study is 250 students of engineering college. General health questionnaire (GHQ) and Maslach Burnout Inventory (MBI) were the instrument used to measure the level of stress and health factor concerned. The study indicates female students are more prone to stress than the male students. The study also revealed exams are described to be high stressor in about 50% of all examined students.*

*Keywords: Stress, Mental health, burnout syndrome, engineering students.*

## I. INTRODUCTION

College is a stressful time for many students. It is also noted that gender differences play a vital role in academic stress. According to the study female students are more often prone to stressful situation. Several studies have revealed that many students are affected by mental issues. Distress plays a major role in affecting the professional development and thus reduces the empathy and humanitarian attitudes among engineering students. Stressors and experiences as an engineering student are especially related to heavy workload, competition among students, rigor of the curriculum and the grading system (CGPA). On the other hand time management plays a vital role and particularly students are not in a position to allocate their time for studies. The study revealed faculty students relationship and quality interaction of the students. Academic problems have been reported to the most common source of stress for students. Stresses associated with academic stress are linked to many negative outcomes such as poor health depression and poor academic performance.

Generally reaction to stressful situation is a serious problem faced by engineering students with negative outcomes.

## II. REVIEW OF LITERATURE

**Huan et al (2005)** investigated the role of optimism together with gender, students perception of academic stress. A sample size of 491 students participated in the study. The study revealed a negative relationship between the genders of the students. Gender was not a significant predictor of academic stress and the study also revealed two-way interaction were found between optimism and gender of the participants.

**Smt. K. W (2008)** investigated the effects of gender economic background and caste difference on achievement motivated by college students. A total of 196 students were participated in the study and the sample was selected using random sampling. The results revealed there exist a significant relationship between male and female students as well as male students have a high achievement motivation while female students have a low/average level of achievement motivation.

**Van houtte (2004)** examined the achievement of students in gender differences. A total of 359 students participated in the study. The study revealed females students are less motivated than the male engineering students and this difference can be held responsible for gender difference in achievement.

### III. OBJECTIVES

- To examine the relationship between academic stressors and the gender differences.
- To find out the various causes affecting students in Burnout.

### IV. RESEARCH METHODOLOGY

#### Research Instrument:

The Structured Questionnaire is used as the research instrument for the study. To validate the study General Health Questionnaire [GHQ] were used to measure the health related issues . Maslach Burnout Inventory [MBI] were used to find out the burnout syndrome of the college students. The scale were measured using 5 point Likert type response format Questionnaire with possible responses from 1 to 5.

#### Data source:

The source of data is collected from the primary data through Questionnaire.

#### Sample Size:

A total of 95 Engineering students students who participated in the study.

#### Statistical tool:

- Demographic variables
- Descriptive statistics
- Reliability statistics
- ANOVA
- Regression

#### A) Demographic variables & health status of students

	Male [54]	Female [41]
Age	22	24
Length of studying	1.9	5.6
<b>Mental health</b>		
No change	20%	11%
Better	15%	13%
worse	19%	17%
<b>Physical health</b>		
No change	21%	15%
Better	19%	3%
worse	14%	23%

**B) Descriptive Analysis****Perceived stressful effect of selected study activities**

	Male	Female	Both
<b>General stress level</b>			
No	3.2%	1.91%	4
Mild	3.45%	1.94%	3
Moderate	2.99%	1.90%	3
High	3.4%	1.96%	7
<b>Exams</b>			
No	4.02%	1.01%	2
Mild	3.39%	1.10%	4
Moderate	2.21%	1.3%	14
High	2.9%	1.11%	8
<b>Communication with the teaching staff</b>			
No	4.09%	15.91%	4
Mild	8.39%	1.94%	3
Moderate	2.29%	1.10%	3
High	6.9%	1.96%	7

**C) Reliability Analysis**

Cronbach Alpha	No. of Items
General Health Questionnaire [GHQ]	0.66
Maslach Burnout Inventotry [MBI]	0.76

**D) Regression Analysis**

Model	R	R square	Adjusted R square	Std error of estimate
1	0.462	0.542	0.466	0.00042

**V. DISCUSSION**

This study presented academic stress influence mental health status of students. About half of female and 1/3<sup>rd</sup> of male students in our study estimated general stress level as moderate or high. The study also found some gender difference in the self perception of physical health and stress effects of academic activities. It seems to be confirmed sources of academic stress include the exams and elements of assessments from the curricula (kepping 2000). It is also noted that examination were most frequently perceived as high stressor. Female students manifested more stress effects in communication with faculty staff and members. Personality is main intrinsic factor that predicts the range of burnout among engineering students.

Considering these findings, the whole examination process should be reevaluated recognition of relation with faculty teaching staff as the second common academic stressor in our study, institutional efforts to build relationship between the students and faculty will have crucial importance. A good rapport with the teacher increases and encourages autonomy.

The presented paper shows the first findings of the academic distress among engineering students.

**VI. CONCLUSION**

High prevalence of psychological distress among students at the end of their engineering studies suggests need to apply the measures of mental health. The problem should be identified and it is undetected history since and it is important to follow and

recognize critical moments in academic process. Certain measures must be taken to control stress and outburst of students in pursuing their education.

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