



TO ASSESS THE IMPACT OF STRESS ON ACADEMIC PERFORMANCE.

ABSTRACT

Students experience stress during their academic years. This stress is related to issues including, financial issues, health_problems, social issues and academic difficulties. Stress can either negatively or positively influence academic achievement, the aim of this study is to explore the relationship between stress and academic performance of the students and identify sources of stress effecting academic performance. Problems like lack of mutual help from the class mates or batch mates, linguistic barriers, high workload, lack of interest in some of the courses, lack of healthy teacher-students relationships etc were causing a lot of stress among the college students. Persistent stress leads to low self-esteem of students, difficulty in handling different situation, sleep disorder, decreased attention and abnormal appetite which eventually effects the academic achievement and personal growth of students Academic related factors are the major cause of stress in students. It is important that students should be counseling and trained to manage stress effectively otherwise it can adversely influence their health and academic performance.

Keywords: Linguistic barriers, Workload, Persistent stress, Abnormal appetite

INTRODUCTION

Stress is an unavoidable facet of living a human life and is experienced almost every day, from small daily hassles to major life events. Stress is an essential part of learning, performance, and motivation because it increases arousal during an action, which pushes individuals to perform to a higher level. However, when the level of stress exceeds an individual's coping ability, there are major detrimental impacts on the individual's life. Stress is shown to significantly increase negative affect, decrease self-esteem, decrease self-efficacy, and affect cognitive appraisal. Dr. Sian Beilock, psychologist, points out that her research indicates that stressful academic situations impact the performance of students. If stress is not managed properly, it can prevent students from successfully achieving their academic goals.

While students want to perform well in their studies, in their quest to achieve these goals, they could experience situations and events that cause stress. Students are expected to balance their academic work with other things such as extracurricular activities and even jobs.

REVIEW OF LITERATURE

Jamal (2007) conducted a study in which it was examined that the relationship between the measures of job stress and job performance among employees working in a large North American-based multinational corporation in Malaysia and Pakistan. Data was collected by means of a designed questionnaire, from employees, on job stress and turnover intention. Job execution and absenteeism data were obtained from the company's records. It was found that in both countries, data were more supportive of the negative linear relationship between stress and performance than other types of relationships. Overall, 90% of contrasts supported the negative linear relationship, whereas a u-shaped or curvilinear relationship was supported in 10% of instances.

Jacobs *et al.* (2007) conducted a study where university-based statistics of performance and self-rated employee productivity were used to examine the relationship between stress levels, organizational commitment, health, and performance. The authors directed a secondary analysis of data from staff in 13 higher education institutions. In common with the earlier research, the authors found that stressors had a negative linear relationship with all the performance measures which were used. However, this relationship was also quite influenced by physical health, psychological well-being, and organizational commitment, and by the measure of performance used. In addition, the authors found differences in the relationship between performances and stress by category of staff, which suggests that the influence of job factors. These findings were then discussed in relation to previous research and their implications for English academic institutions.

Lang et al. (2007) set a twofold aim of their study. They were: First, in differentiating between specific job characteristics, the authors examined the moderating influence of role clarity on the relationship between job demands and psychological and physical strain. Second, to provide a more comprehensive link between the job demands and job performance, the authors examined strain as a mediator of that relationship. Participants were 1,418 Army cadets attending a 35- day evaluation center. Survey data were collected on 26th day of the assessment center and performance ratings were assessed throughout the assessment center period by expert evaluators. Role clarity was found to moderate the job demands stress relationship. Specifically, cadets that experienced high demands reported less physical and psychological strain when they reported high role clarity. Moreover, it was found that psychological strain significantly mediated the demands-performance relationship.

Parker and Ettinger (2007) defined the major factors of stress which are likely to be present as a lack of control over a situation or an event, uncertainty, ambiguity or a poor performance related to anticipation level. However, the authors were really curious to see if this is the case in case of any work place or if this situation varies from place to place. In addition, human resource management conducts many functions or events such as festivals, campus parties, or other activities in order to decrease the stress level. Even majority of the employees are much more willing to manage their stress by finding out some alternatives to deal with it in a better way.

Bloisi et al. (2007) defined stress as “the body’s psychological, emotional, and physiological responses to any demand which is perceived as threatening to a person’s well-being. It was cited that stress gives both positive and negative responses to our actions, because our rational evaluation and assumption of the stressors makes difference in how we react to the issue which is perceived as stressor and how we deal with it. There is constructive as well as destructive stress. Constructive stress is the feeling of anxiety which makes us perform well in our daily life. Stress could also be defined as the driving force to test ourselves and encourage ourselves to do something whereas the destructive stress presents undesirable effect of stress that is known as distress.

Vokic et al. (2007) revealed that occupational stress is the nonspecific response of the body to any demand which is placed upon it. It is basically a mental and physical condition which affects an individual’s productivity, effectiveness, personal health as well as quality of work.

METHODOLOGY

A system of broad principles or rules from which specific methods or procedures may be derived to interpret or solve different problems within the scope of a particular discipline. It is a theory of producing knowledge through research and provides a rationale for the way a researcher proceeds. It is the philosophical underpinning of a given research practice.

1. Academic Stress Scale

Scale was developed by Kim in the year 1970 was used in the present study. The scale was adopted to Indian conditions by Rajendran and Kaliappan (1990) by administering the adapted version of the Students' Academic Stress Scale.

It is a five point scale developed to measure the academic stress of the respondents of the study. The following points were assigned to the respondents depending on their responses :

Extreme Stress		5
High Stress		4
Moderate Stress		3
Slight Stress		2
No Stress		1

The overall occurrence of academics related stress among the respondents were calculated through excluded method of quantitative classification in which each was categorized into the following scores :

S. No.	Score	Category
1	0-38	Extreme Stress
2	39-76	High Stress
3	77-114	Moderate Stress
4	115-152	Slight Stress
5	153-190	No Stress

TEST STATISTICS

Chi – Square Test

Chi–square (χ^2) value for age, education, gender, income, occupation, knowledge level, attitude and satisfaction level was calculated with the statistical formula of chi – square test of independence at [(C – 1) (R – 1)] degree of freedom.

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^c \frac{(o_{ij} - e_{ij})^2}{e_{ij}}$$

Where,

r = row

c = column

O_{ij} = observed frequency of the cell in the ith row and jth column

E_{ij} = expected frequency of the cell in the ith row and jth column

A calculated value of chi square test was compared with the tabulated value of chi square at 5 per cent level of significance.

RESULTS

1. ACADEMIC STRESS SCALE

Academic Stress Scale was developed by Kim in the year 1970. The scale was adopted to Indian conditions by Rajendran and Kaliappan (1990) by administering the adapted version of the Students' Academic Stress Scale. The Student Academic Stress Scale (SASS) is a test devised by researchers to measure academic stress in university students. It is 5 point scale in which the measures are:

1 is No stress

2 is Slight stress

3 is Moderate stress

4 is High stress

5 is Extreme Stress

1.1 ACADEMIC STRESS AMONG FEMALE RESPONDENTS**n1 =60**

ACADEMIC STRESS SCALE						
S. No.	ACADEMIC STRESS	NO STRESS	SLIGHT STRESS	MODERATE STRESS	HIGH STRESS	EXTREME STRESS
1.	Teachers have too much expectations from the students.	3 (5)	9 (15)	17 (28.34)	21 (35)	10 (16.67)
2.	Poor interest in some subjects .	3 (5)	14 (23.34)	17 (28.34)	16 (26.67)	10 (16.67)
3.	Fear of direct reporting to parents	2 (3.34)	12 (20)	20 (33.34)	16 (26.67)	10 (16.67)
4.	Lack of concentration during study hours.	4 (6.67)	10 (16.67)	18 (30)	19 (31.67)	9 (15)
5.	Difficulty in remembering all that is studied.	3 (5)	10 (16.67)	16 (26.67)	20 (33.34)	11 (18.34)
6.	Worrying about the examinations.	4 (6.67)	11 (18.34)	20 (33.34)	17 (28.34)	8 (13.34)
7.	Lack of self-confidence.	2 (3.34)	15 (15)	20 (33.34)	12 (20)	11 (18.34)
8.	Language barrier	3 (5)	12 (20)	16 (26.67)	17 (28.34)	12 (20)
9.	Teacher did not listen to our ideas	3 (5)	8 (13.34)	21 (35)	21 (35)	7 (11.67)
10.	Conflict with friends/college authorities.	2 (3.34)	11 (18.34)	20 (33.34)	21 (35)	6 (10)
11.	Worry about results after examinations.	3(5)	9 (15)	18 (30)	20 (33.34)	10 (16.67)
12.	Hesitate to ask the teacher for detailed explanation	3 (5)	8 (13.34)	22 (36.67)	19 (31.67)	8 (13.34)
13.	Biased attitude of the teacher.	5 (8.34)	7 (11.67)	21 (35)	19 (31.67)	8 (13.34)
14.	Inadequate space or room for study at home/hostel	1 (1.67)	11 (18.34)	20 (33.34)	19 (31.67)	9 (15)
15.	Lack of assertiveness (confidence) in the class.	2 (3.34)	11 (18.34)	16 (26.67)	18 (30)	13 (21.67)
16.	Time allotted for completion of the course is less	2 (3.34)	12 (20)	19 (31.67)	18 (30)	9 (15)
17.	Teacher shows socio-economic status on students.	1 (1.67)	14 (23.34)	18 (30)	20 (33.34)	7 (11.67)
18.	Slow in getting along with the curriculum.	2 (3.34)	12 (20)	17 (28.34)	19 (31.67)	10 (16.67)
19.	Exams are tough	5 (8.34)	9 (15)	20 (33.34)	17 (28.34)	9 (15)
20.	Unable to complete the assignment in time.	1 (1.67)	11 (18.34)	19 (31.67)	18 (30)	11 (18.34)
21.	Lack of communication between teachers and students.	6 (6.67)	3 (5)	21 (35)	16 (26.67)	4 (6.67)
22.	Monotonous (boring or tedious) teaching style by the teacher.	2 (3.34)	9 (15)	20 (33.34)	19 (31.67)	10 (16.67)
23.	Not enough discussion in the class.	2 (3.34)	10 (16.67)	21 (35)	16 (26.67)	11 (18.34)
24.	Lack of mutual help among classmates/batch mates	2 (3.34)	8 (13.34)	22 (36.67)	19 (31.67)	9 (15)

25.	Lack of fluency while speaking the language other than the mother tongue.	2 (3.34)	11 (18.34)	20 (33.34)	18 (30)	9 (15)
26.	Difficulty in public speaking.	2 (3.34)	10 (16.67)	18 (30)	21 (35)	9 (15)
27.	Syllabus/ course allotted are too tough.	2 (3.34)	12 (20)	19 (31.67)	17 (28.34)	10 (16.67)
28.	Feeling of inferiority.	4 (6.67)	8 (13.34)	19 (31.67)	20 (33.34)	9 (15)
29.	Unable to discuss Academic failures with parents.	1 (1.67)	10 (16.67)	17 (28.34)	20 (33.34)	12 (20)
30.	Not able to grasp the subject matter.	2 (3.34)	11 (18.34)	20 (33.34)	17 (28.34)	9 (15)
31.	Lack of practical knowledge	3 (5)	12 (20)	15 (15)	19 (31.67)	11 (18.34)
32.	Incomplete and confusing study material.	2 (3.34)	13 (21.67)	19 (31.67)	17 (28.34)	9 (15)
33.	Eleventh hour preparation for the examinations.	2 (3.34)	10 (16.67)	20 (33.34)	19 (31.67)	9 (15)
34.	Importance of the subject matter.	1 (1.67)	12 (20)	18 (30)	17 (28.34)	12 (20)
35.	Teacher student ratio is not balanced	2 (3.34)	11 (18.34)	20 (33.34)	17 (28.34)	10 (16.67)
36.	Difficulty in adjusting with opposite gender.	2 (3.34)	13 (21.67)	19 (31.67)	20 (33.34)	6 (10)
37.	Inadequate subject knowledge of the teacher.	2 (3.34)	12 (20)	17 (28.34)	21 (35)	8 (13.34)
38.	Inadequate lab facilities.	5 (8.34)	10 (16.67)	16 (26.67)	19 (31.67)	10 (16.67)

It was clearly revealed from the survey that majority of the respondents were lying under the range of moderate stress to high stress. In the case of no stress, very few individuals agreed. The maximum number of female stated that from the given statements poor interest in some subjects can cause slight stress to i.e nearly 23.34 per cent. Among the statement causing moderate stress was lack of mutual help from the class mates or batch mates which approximately 36.67 per cent female agreed. In case of high stress, the most agreed percent was 35 per cent with the statement that the teacher or advisor did not listen to their ideas and instead put their own. Ideas or thoughts means anything related to the research topics, innovative problem many students stated that it is leading to high stress among 35 per cent of the respondents. Twenty percent of the respondents stated that problems like language barrier, ability to not to discuss their academic failures with parents and importance of subject matter are causing extreme stress situations among them.

1.2 ACADEMIC STRESS AMONG MALE RESPONDENTS

n2 =60

S. No.	ACADEMIC STRESS	NO STRESS	SLIGHT STRESS	MODERATE STRESS	HIGH STRESS	EXTREME STRESS
1.	Teachers have too much expectations from the students.	3 (5)	9 (15)	18 (30)	21 (35)	9 (15)
2.	Poor interest in some subjects .	3 (5)	15 (15)	15 (15)	15 (15)	12 (20)
3.	Fear of direct reporting to parents	2 (3.34)	11 (18.34)	22 (36.67)	17 (28.34)	8 (13.4)
4.	Lack of concentration during study hours.	4 (6.67)	10 (16.67)	16 (26.67)	21 (35)	9 (15)
5.	Difficulty in remembering all that is studied.	3 (5)	12 (20)	14 (23.34)	19 (31.67)	12 (20)
6.	Worrying about the examinations.	4 (6.67)	11 (18.34)	21 (35)	16 (26.67)	8 (13.34)
7.	Lack of self-confidence.	2 (3.34)	8 (13.34)	22 (36.67)	14 (23.34)	8 (13.34)
8.	Language barrier	3 (5)	11 (18.34)	19 (31.67)	17 (28.34)	10 (16.67)
9.	Teacher did not listen to our ideas	3 (5)	9 (15)	21 (35)	20 (33.34)	7 (11.67)
10.	Conflict with friends/college authorities.	2 (3.34)	9 (15)	22 (36.67)	21 (35)	6 (10)
11.	Worry about results after examinations.	3 (5)	9 (15)	20 (33.34)	20 (33.34)	8 (13.34)
12.	Hesitate to ask the teacher for detailed explanation	3 (5)	8 (13.34)	22 (36.67)	23 (38.34)	4 (6.67)
13.	Biased attitude of the teacher.	5 (8.34)	8 (13.34)	21 (35)	18 (30)	8 (13.3)
14.	Inadequate space or room for study at home/hostel	1 (1.67)	13 (30)	20 (33.34)	17 (28.34)	9 (15)
15.	Lack of assertiveness (confidence) in the class.	2 (3.34)	11 (18.34)	19 (31.67)	19 (31.67)	9 (15)
16.	Time allotted for completion of the course is less	2 (3.34)	12 (20)	18 (30)	20 (33.34)	8 (13.34)
17.	Teacher shows socio-economic status on students.	1 (1.67)	14 (23.34)	18 (30)	21 (35)	6 (10)
18.	Slow in getting along with the curriculum.	2 (3.34)	12 (20)	17 (28.34)	20 (33.34)	9 (15)
19.	Exams are tough	5 (8.34)	9 (15)	19 (31.66)	18 (30)	9 (15)
20.	Unable to complete the assignment in time.	1 (1.67)	9 (15)	21 (35)	18 (30)	11 (18.34)
21.	Lack of communication between teachers and students.	6 (10)	3 (5)	22 (36.67)	16 (26.67)	3 (5)
22.	Monotonous (boring or tedious) teaching style by the teacher.	2 (3.34)	7 (11.67)	21 (35)	19 (31.67)	11 (18.34)
23.	Not enough discussion in the class.	2 (3.34)	10 (16.67)	20 (33.34)	17 (28.34)	11 (18.34)

24.	Lack of mutual help among classmates/batch mates	2 (3.34)	8 (13.34)	23 (38.34)	19 (31.67)	8 (13.34)
25.	Lack of fluency while speaking the language other than the mother tongue.	2 (3.34)	9 (15)	21 (35)	18 (30)	10 (16.67)
26.	Difficulty in public speaking.	2 (3.34)	10 (16.67)	20 (33.34)	21 (35)	7 (11.67)
27.	Syllabus/ course allotted are too tough.	2 (3.34)	9 (15)	19 (31.67)	20 (33.34)	10 (16.67)
28.	Feeling of inferiority.	4 (6.67)	8 (13.34)	18 (30)	21 (35)	9 (15)
29.	Unable to discuss Academic failures with parents.	1 (1.67)	10 (16.67)	19 (31.67)	20 (33.34)	10 (16.67)
30.	Not able to grasp the subject matter.	2 (3.34)	11 (18.34)	19 (31.67)	17 (28.34)	11 (18.34)
31.	Lack of practical knowledge	3 (5)	13 (21.67)	14 (23.34)	19 (31.67)	11 (18.34)
32.	Incomplete and confusing study material.	2 (3.34)	12 (20)	19 (31.67)	18 (30)	9 (15)
33.	Eleventh hour preparation for the examinations.	2 (3.34)	11 (18.34)	17 (28.34)	19 (31.67)	11 (18.34)
34.	Importance of the subject matter.	1 (1.6)	12 (20)	18 (30)	17 (28.34)	12 (20)
35.	Teacher student ratio is not balanced	2 (3.34)	11 (18.34)	21 (35)	16 (26.67)	10 (16.67)
36.	Difficulty in adjusting with opposite gender.	2 (3.34)	13 (21.67)	20 (33.34)	20 (33.34)	5 (8.34)
37.	Inadequate subject knowledge of the teacher.	2 (3.34)	12 (20)	19 (31.67)	21 (35)	6 (10)
38.	Inadequate lab facilities.	5 (8.34)	9 (15)	16 (26.67)	20 (33.34)	10 (16.67)

Academics stress scale results were somewhat same in case of both the groups. Here also majority of the respondents reported that the problems related to academics causes moderate stress or high stress to the students. In case of extreme stress, the statement which covers maximum population was related to the subject matter. 20 per cent of the male respondents said that they get extreme stressed when it is difficult for them to remember all that is studied, poor interest in some subjects, importance of some subjects. In case of high stress, the statement which covers the maximum population (38.34%) is that the students hesitate to ask teacher for detailed explanation of subject matter. The statement which covers maximum students i.e. lack of mutual help among classmates and batch mates. Very few students belong to the group of no stress with the statements given in the scale.

In some of the previous researches, it was suggested that modest prevalence rate of 10 to 35 percent of college students experience functionally impairing levels of test anxiety (Chapell et al., 2005; Naveh-Benjamin et al., 1997). Academic factors were the predominant cause of stress in most students, followed by physical, social, and emotional. Majority of students with stress reported high scores of poor self-esteem, and about half scored high on

depression scales (Baste and Gadkari, 2014). Results from the literature suggest that higher level of stress to be associated with poor academic performance (Sohail, 2013).

4.14 TESTING OF HYPOTHESIS

Ho : There is no association between age and academic stress

H1 : There is association between age and academic stress

Ho : There is no association between gender and academic stress

H1 : There is association between gender and academic stress

Ho : There is no association between income and academic stress

H1 : There is association between income and academic stress

Chi square values were calculated for independent variables (age, gender and income) with the respondents' academic level of stress. The following results were obtained:

4.14.1 Testing of hypothesis

S.No	VARIABLES	DEGREE OF FREEDOM	TABULATED VALUE (p)	CHI-SQUARE VALUE	Result	HYPOTHESIS
1	Age / Academic stress	4	0.950	0.713	P > 0.05	Ho accepted
2	Gender/ Academic Stress	2	0.0345	1.576	P < 0.05	H1 accepted
3	Income/ Academic stress	8	0.573	6.667	P > 0.05	Ho accepted

*At 0.05 level of significance

The results revealed that null hypothesis is accepted in the first and last case i.e. for age (0.71) and income (6.66) of the respondents. So we can conclude from that that there is no association of age and family income with the academic stress of the respondents. People belonging to any age group can stress according to their problems and also there are many students whose family income is very less but are very bright in studies. Some are even getting scholarships for the same.

In the case of gender(1.57), alternate hypothesis will be accepted. So we can conclude from that that there is some association of gender with the academic stress as female students stress more in comparison with the male. Gender was found to be one of the most important factors in the development of stress, and the results indicating a stage of female predominance. Stress has different effects on sexes. Results of various studies about occupational stress indicate that women experience more stress than men in their workplaces **Cooper (2015)**.

SUMMARY AND CONCLUSION

The American Institute of Stress points out that "stress can have wide ranging effects on emotion, mood, and behavior." Stress affects both students' physical and mental functioning, and eight ways are discussed in this hub. These negative symptoms could affect the quality of students' academic performance. A high level of stress reduces students' ability to concentrate on their studies. Consequently, it makes it difficult for them to memorize facts for tests.

Even more, poor concentration could limit students' ability to think critically or at optimal levels when they write their papers or during tests. So poor judgment could lead to weak responses on exams and on their course work.

FINDINGS:

- There were 18 per cent of male students and 22 per cent female students who were not satisfied with their academic performance.
- When it comes to the academic workload most of the students thought that either it is extremely high or high.
- Some of the respondents stated that they face problem of language barrier with their batchmates and teachers, which causes stress in them.
- Many respondents reported that ability to not to discuss their academic failures with parents and importance of subject matter are causing extreme stress situations among them.
- The statement which covers the maximum population is that the students hesitate to ask teacher for detailed explanation of subject matter and also lack of mutual help among classmates and batch mates are causing high stress among them.

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