

# A Study of Factors Influencing Stress among College Students

SUMAN GHALAWAT AND SUNITA MEHLA

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*Background & objectives:* Being a student can be the most interesting time of one's life. New friends, new places and new challenges can make a student life stressful. The performance and learning capability of the students in academics generally gets affected when they confront with problems like physical, social, problems related to family, and emotional. As a result, it is important that individuals develop different strategies in order to manage stressful situations. Every educational institution has its own values and systems, and hence there would be difference in the indicators, reasons and results of stress. The present paper has empirically investigated two objectives: first, to investigate the factors that influence the individual stress level, and second to develop a model framework for effective stress management among students.

*Methods:* The study is based on data collected from a sample of 150 respondents from different colleges of Hisar district in Haryana State, and used factor analysis and discriminant analysis to attain the above said objectives of the study.

*Major findings & Policy Implications:* The results of factor analysis reveal five factors named as: personal problem, relationship problem, social problem, academic problem and lastly environmental problem. Factor analysis discloses that students get more stress from personal, relationship and social problems. The academic and environmental problems are not creating so much stress and students do not consider it as much relevant. Further results of discriminant analysis reveal that students of colleges are usually facing stress more from relationship and environmental problems. Furthermore colleges are now focusing on this stress related problem and taking steps in this direction by offering stress management programs, and promote mental health and wellbeing strategies through 'Art of life' campaigns for their students and encourage them to be part of it.

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Key Words: strategies, empirically, academic problem, factor analysis, discriminant analysis.

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Suman Ghalawat is an Asst. Professor, Dept of Business Management, CCS Haryana Agricultural University, Hisar, Haryana. Mob-09466280882; E-mail: sahrawat\_s@yahoo.com

Sunita Mehla is an Associate Professor, Department of Business Management, CCS Haryana Agricultural University, Hisar. Mob-9466479109; E.mail: sunitamehla02@gmail.com

**Introduction:**

In our daily life, stress is an essential and unavoidable feature associated with the lifestyle as some stress would be quite common and indifferent to individuals. Stress is sometimes unavoidable as it is related to outside happenings, may be enjoyable or leads to nervousness. Anything happening in the surroundings has been taken as a challenge or risk depending upon a person's reaction to it (Lazarus & Folkman, 1984). Inspiring stimulus leads to favourable results such as inspiration and enriched job performance while risky ones lead to uneasiness, dysfunctional, attempt to suicide and even depression as well.

In today's scenario, stress has been considered as a disorder by different professionals from various sectors. It has effects on people's behaviours, communications and efficiency of individuals. The relationship between individuals and their environment and evaluated as hazardous and far away from their capabilities to deal with the stress (Lazarus, 1966). Stress has also been defined as physiological, non-specific reaction to the inside or outside anxieties. Hence it can be concluded that individual way of perceiving and emotionally reacting to a specific thing leads to stress but not the stressors. Shah et. al, (2009), mentioned that students of the University are generally exposed to different stressful situations. Students are confronted with different problems from the environment as well as their nonstudent groups.

It was seen that students felt stress to attain high grades and the degree is also high (Hisrich, 1996). Getting high grades is not the only basis for stress. There are some other reasons like more homework, uneasy classroom, and lot of assignments (Kohn & Frozer, 1986). In addition to educational necessities, dealing with teachers and burden of deadlines might be the reasons of stress. Association with friends and family, way of sleeping and eating habits and moreover, their feeling of isolation may affect many students (Shah et.al, 2009 & Wright, 1967).

**Review of Literature:**

In stress management, Lazarus and Folkman (1984) defined eight distinct coping mechanisms for individuals and expected to be used while confronted with stressful situations. These are confrontation, finding societal support, deliberately solving the problems, control on self, accommodating responsibility, isolation, constructive review and evasion as well. Generally, students caught in the stressful situation when they are joining the new world of specialization. Students generally facing stress including more academic burden, should be reduced up to some extent if ignored, the resultant may be exhaustion due to fear of failure or blocking, submission to either by chance or course curriculum and brain drain (Neufeld, 1990).

There is a difference in the experience of stress by different individuals in the same situation leading to personal factors like preparation, behaviours and personalities (Dantzer and Kelley, 1989). Intellectual evaluation makes a balance in the hassles and capability to cope up would not leads to facing anxiety, stress and obstruction (Neufeld, 1990).

Stress has become the burning issue now days in academic institutions. Most of the researchers have done broad research in behavioural science and carried on stress and its consequences, and decided that this topic needs further consideration (Agolla, 2009). Academic institutions face both types of negative and positive outcomes of stress if not managed properly (Stevenson & Harper, 2006). Every academic institution has different settings of work if compared with non-academic; and hence leads to anticipate difference in reasons, symptoms and results of stress (Chang & Lu, 2007).

In a society it is very important that students should acquire and learn the basic knowledge and skills to handle the stress, and add constructive views for the development of the economy of a country. It is totally dependent upon the institution to create and maintain healthy environment which is favourable for improved learning while focussing on student's personal needs. Every student has different capabilities, values, goals and beliefs that they want to attain in their life and that is possible only when their capabilities, values, goals and beliefs are combined with that of the educational institution. Hence students can be affected by different categories of stressors like time, self-imposed, health, financial and academic (Goodman, 1993).

Student's awareness regarding broad knowledge base and opinion of short time span to develop are included in the academic stressors (Carveth et al, 1996). Students undergoing stress related to academic at probable times each semester with the greatest sources of academic stress resulting from preparing and appearing for exams, better grade competition, and to become master of large amount of content in a little bit of time (Abouserie, 1994).

According to the study conducted by Neumann et. al. (1990) on undergraduate college students concluded that students face burnout process due to the learning situations that call for high level of effort required and also do not provide supportive tools that would leads to effective coping. In higher studies students are posed with deadlines and stress for outshining in the test or paper. In that way students become the targets of stress. This shows that there is a need to examine the reasons of academic stress generally faced by the students at different management institutions. With the help of these researches, educationalist would be in a position to focus more on the sources of stress among students and recommending the use of counselling measures to help students to develop their soul and mind in a sound manner.

### Statement of Problem

The impact of stress on college students is examined in various business and social sectors across the world. This relationship in the college settings of Hisar city is missing in the literature. The study is designed to investigate the factors that influence the individual stress level and to develop a model for effective management of stress.

### Main objectives of the Study:

- To investigate the factors that influences the individual stress level.
- To develop a model framework for effective stress management among students.

### RESEARCH METHODOLOGY:

The Present study is an empirical research to examine the stress management among students. In the present study data is based on the sample of 150 respondents from different colleges of Hisar. Convenient sampling method is adopted for collecting the sample. The structured questionnaire is divided into two parts: part 1 contains demographic profile of the respondents and questions related to gender, age, qualification, family, living status, and residential status. Part 2 covers questions relating to relationship problems, academic pressure, personal and environmental problems.

Part 2 of the questionnaire contains 13 statements, and used a Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The data is analysed using SPSS version 13.0. The data has been analysed through factor analysis to identify factors which reflect significance while undergoing stress. Factor analysis is a technique to identify the critical factors from clubbing the apparently significant variables. It cuts down the total number of variables into small factors and depicts correlation between them (Nargundkar, 2005). The data has also been collected through secondary sources like journals, websites, research papers and books

The demographic characteristics of the respondents are summarized in Table 1. From Table 1 it can be concluded that males (72.7 %) were three times in contrast to females (27.3 %). The sample customers are mostly in the age group of 21-25 years (48.7%) followed by 20 years (46%) and 26-above (5.3%). Further, the respondents have a relatively equal proportion living in Urban area (50.7%) and (49.3%) in the rural area. The majority of the respondents were post-graduates (63.3%) followed by graduates (22%) and under graduates (14.7%) reflected that sample consist of literate respondents. With regard to the residential status (59.3%) were residing in the hostels and day scholars were (40.7%).

Table 1. Demographic Profile of the Respondents

S. No.	Demographic Profile	Frequency	Percent
Sex	Male	109	72.7
	Female	41	27.3
Age	Less than 20	69	46.0
	21-25	73	48.7
	26 and above	8	5.3
Marital Status	Married	68	27.2
	Unmarried	182	72.8
Education Level	Graduate	33	22.0
	Under graduate	22	14.7
	Post-graduate	95	63.3
Living Status	Rural	74	49.3
	Urban	76	50.7
Residential Status	Hostellers	89	59.3
	Day-scholar	61	40.7

**DISCUSSIONS:**

In this study, to judge the suitability of the whole sample, researcher applied Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity. The value of the Kaiser-Meyer-Olkin (KMO) and the Bartlett's Test of Sphericity as 0.571 and 146.110 respectively, depicted from the Table 2, which is significant at 1% level of significance. Hence it can be concluded that the above data is suitable for the factor analysis technique (Hair et al., 2006). Moreover, Table 3, indicates the whole reliability of the construct along with the Cronbach's coefficient alpha having the value of 0.529 that is also significant enough.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.571
Bartlett's Test of Sphericity	Approx. Chi-Square	146.110
	Df	78
	Sig.	.000

Table 3: Reliability Statistics

Cronbach's Alpha	N of Items
.529	13

**FACTOR ANALYSIS:**

The data from the survey has been analysed by employing factor analysis in order to summarize the 13 statements related to different types of stress into smaller parts. Firstly, data is checked through principal component analysis, where these 13 statements are reduced to five principal components through rotated component varimax shown in the Table 4. Here, the researcher has

considered only those factors as significant, whose eigen-values is more than one.

Table 4. Name of Factors and Their label

S. No.	Name of Factor	Statements	Factor Loading	Cronbach Alpha value	Eigen Value	% of Variance	Cumulative %
1.	Personal problem	Do you experience of power failure?	.741	.553	2.154	16.569	16.569
2.		Do you experience transportation problems?	.731				
3.		Experience of personal illness	.553				
4.		Do you experience accommodation problems	.486				
5.	Relationship problem	Problems with opposite gender	.749	.453	1.335	10.271	26.840
6.		Problems with parents	.668				
7.		Problems with course mates	.542				
8.	Social problem	Death of a class-mate or family member	.816	.415	1.283	9.870	36.710
9.		Experience of financial problem	.729				
10.	Academic problem	Are you sure of your future based on academic course curriculum?	.836	.236	1.178	9.062	45.772
11.		Inconsideration and insensitive lectures	.493				
12.	Environmental problem	Do you experience academic work load	.886	.272	1.074	8.259	54.031
13.		Problems of congested classroom	.472				

Table 4 shows the reliability coefficients for the above extracted factors ranging from 0.236 to 0.553. These show that a fair to good internal consistency among the items of each dimension. Five factors have been extracted which accounts for 68.030 percent of variance. The percentages of variance explained by factor 1 to 5 are 16.569, 10.271, 9.870, 9.062 and 8.259 percent, respectively. The names of the factor statements and factor loadings have been summarized in Table 4. A factor loading represents correlation between an original variable and its factors. Factor loading is nothing but coefficient of correlation. Moreover, all the five factors have been assigned appropriate names according to the characteristics of the variables loaded on each factor. The five factors are: personal problem, relationship problem, social problem, academic problem and lastly environmental problem. The details of the factors are explained here.

Factor-1: Personal problem: This factor is considered to be the most significant one having the highest variance of 16.569 %. Out of the 13 statements, four have been loaded to this factor related to personal problem. It consists of statements like: experience of power failure, transportation problems, personal illness, and accommodation problems. Students needed these facilities as majority of them are hostellers in the present study and away from their family. Moreover they have to take care of themselves or else this will lead to illness and irritation among students. Thus, the loaded statement to this factor directs us to conclude that the sample respondents face problems related to transportation, power failure etc. many times. These are the major reasons of stress among them.

Factor 2: Relationship problem: This factor got 10.271% of the variance, tends to reach the second most important one. Three statements load high on to this factor. The factor includes statements such as, problems with opposite gender, parents, and course mates. The factor has been named as, relationship problems as the statements belonging to this factor reveal that some times students did not have good relations with their parents, friends, course mates and colleagues. They have encountered a new setting, friends and environment that leads to happiness when adjusted, and under stress, if not adjusted. Thus, it can be concluded that the sample respondents are in stress because they are not getting proper support from their parents and friends in the new situation.

Factor 3: Social problem: It is also considered as significant and accounts for 9.870% of the variance. This factor loaded with two features, has been named as social problem. The factor incorporates statements such as, death of a class-mate or family member, and experience of financial problem. Hence it can be concluded that some students are very much emotionally attached with their class-mates that they are not able to come out from that trauma and this leads to stress. It also happens when we lose our loved ones like our family members and thought that life ends there. When students join a new group of friends they try to copy them and need financial help if they did not get the necessary support that leads to stress.

Factor 4: Academic problem: The fourth factor that surfaced from the factor analysis accounts for 9.062% of the variations and has been christened as academic problem. Eigen value of 1.178 indicated that this factor is of moderate significance to the respondents. The two statements incorporated on this factor is related to future based on academic course curriculum, inconsideration and insensitive lectures. This shows that sometimes the sample respondents are not sure whether their future is based on academic curriculum or not. The reason being is that, days were the gone when everybody gets the job with any qualification, now the trend is towards all round development and

moreover practicality is somewhat different from academic curriculum. That is why students are more focusing on practical exposure than theoretical lectures. Hence it can be concluded that students are even not sure whether they get an opportunity for a job with that curriculum or not.

Factor 5: Environmental problem: This factor accounts for 8.259 % of variance, which is of moderate significance. It comprises of two statements. The two integrated statements of this factor incorporate environmental problem. Consequently, it is named as environmental problem as two statements have been loaded like experience academic work load, problems of congested classroom. Thus this statement reveals that the respondent felt stress due to congested classroom and extra academic burden on them. They thought that classrooms are more congested as strength of the students is more and not able to concentrate on lectures. Moreover academic burden is also increasing by assignments, presentations, case studies and midterm examinations. Students want freedom of expression and if strength is overloaded, they are not able to express their opinions properly. Moreover teacher-student ratio should be an ideal one rather than the institute focus on earning income.

Objective 2: To develop a model framework for effective stress management among students.

To attain the above said objective, this study focuses on managing stress among students while developing a model framework where, dependent variable is taken as students felt stress and five factors i.e. personal problem, relationship problem, social problem, academic problem and lastly environmental problem are considered as independent variables. Likert 5 point scale has been used in the study where strongly disagree =1, disagree =2, uncertain =3, agree =4, strongly agree =5. Higher mean value reflects higher agreement towards that statement.

In Table 5 results of Canonical Discriminant Function coefficients yield coefficients of various factors. The equation of Discriminant is mentioned below:

Discriminant Score =  $-.306(\text{Personal problem}) + .616(\text{Relationship problem}) + .447(\text{Social problem}) - .287(\text{Academic problem}) + .560(\text{Environmental problem}) + .000(\text{Constant})$ .



**Discriminant****Table 5. Canonical Discriminant Function Coefficients**

<b>Regression Coefficients</b>	<b>Function</b>
	1
Personal problem	-.306
Relationship problem	.616
Social problem	.447
Academic problem	-.287
Environmental problem	.560
Constant	.000

Unstandardized coefficients

The results of Discriminant Equation presented in Table 3.1 explains that, the students are getting more stress with the relationship problem followed by environmental problem, social problem, academic problem and personal problem.

Moreover to authenticate the outcomes of equation, the values of Group centroid mentioned in Table 6 are used for comparing the score of Discriminant equation. In Table 6 the results are interpreted that if the score of the equation is greater than -0.298 then the respondents are expected to be under less stressed and if score is less than 0.582 then they are not expected to be free from stress. Nothing can be said with certainty in case of Discriminant score between -0.298 and 0.254.

**Table 6. Functions at Group Centroids**

<b>Q6.Do you feel under stress?</b>	<b>Function</b>
	1
Yes	-.298
No	.254

Unstandardized canonical discriminant functions evaluated at group means

The results of the classification mentioned in Table 7 offer strength to Discriminant equation. Here, the respondents are divided into two groups using Bernoulli function and 70% of the cases are selected for predicting Discriminant equation. The rest 30% cases are used for checking the strength of the Discriminant equation. The result confirms that 65% of the selected cases are correctly classified and 35% of the unselected cases are correctly classified. Discriminant equation with correctly classifying more than 60% of cases is judged as of good quality. As a result, it can be concluded that respondents are getting more stress with the relationship problem followed by environmental problem and social problem, as human being is very much emotional and attached with relatives, friends and society and respondents are less stressed from academic and personal problem. In case of stress from academic and personal up to some extent students can cope up by doing

extra labor and hard work. Hence it can be concluded that man is a social animal, means he cannot live in isolation and needs friends, relatives and society, they can make you happy and also keep you under stress when having negative terms.

Table 7. Classification Results (a)  
Classification Results(a)

Do you feel under stress?		Predicted Membership		Group	Total
		Yes	No		
Original Count	Yes	48	21		69
	No	32	49		81
%	Yes	69.6	30.4		100.0
	No	39.5	60.5		100.0

a 64.7% of original grouped cases correctly classified.

#### The limitations of the study

The limitations of this study are that these findings are based on self-reported information provided by students and thus some potential for biased reports may have occurred because of that respondents' interpretation of the questions or desire to report their emotion in a certain way or simply because of inaccuracies of responses. The study was limited to a particular point of time and this limits the scope to generalize the findings for other periods. Moreover, the study was conducted at a single place i.e. Hisar only which will restrict the generalizability to other institutions.

#### Conclusion:

The present study is an effort to investigate the factors that influence the individual stress level, by identifying stress among the students of colleges of Hisar city. The study provides better insights to the academic administrators for initiating efforts to reduce the intensity of academic stress. As academic stress was found to be more prominent among the students of professional courses by many research studies, this study primarily concentrated on exploring factors influencing individual stress level, and second to develop a model for effective management of stress among college students. Hence it can be concluded that students get stressed from personal, relationship and social problems. Students do not bother much about the academic and environment related problems and that is not creating so much stress to them. Furthermore, colleges are now focusing on stress related problems, and taking steps in this direction.

The study also focuses on the model framework for students to manage the stress. As a result, it can be concluded that respondents are getting more stress with the relationship problem followed by environmental and social problems, as human being is very much emotional and attached with relatives,

friends and society and the respondents are less stressed from academic and personal problems. Relatively stress from academic and personal can overcome some extent by doing extra labour and hard work.

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