Stress : A Segment of Life of University Students

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Abstract

Stress is normally most critical part of everyone's life living in this world. It gives a negative notion that can affect one's mental status of mind and physical health of living being. The main aim of this study was to detect the most critical factors of stress affecting undergraduates & post graduates students of university. The four factors that had taken under examination were financial stress, Emotional stress, Academic Stress and Social Stress. To accomplish this research work stress inventory has developed using statistical methods. Respondents were under graduate & post graduate students of university with different demographics such as age, education, gender. Results has presented descriptively and inferentially using SPSS. Anova and T-test used to verify the relationship between stress factors and demographics. Factor analysis is used to sum up the list of 41 critical factors into most important identified three correlated factors namely (1) Educational group, (2) Mental stress creator & (3) future concern. Unavailability of parents support and paramount match to live with as a partner can be an emotional stress. Less income students find difficulty to pay college fees of higher education & unable to spend money on enjoying the college life with friends which is a predictor of financial stress. Pressurized life and unexpected behaviour from people of society has lied under Social stress. Education pattern and teaching system of universities are the causes of academic stress.

Keywords *: Financial stress, Social stress, Emotional stress & Academic stress , Graduate & post graduate students.*

Introduction

Stress is an unavoidable part of life everybody meet with stress in his/ her life; it can take a toll on students" physical health, mental health, and academic success and even on every part of life unless they discover to cope with it appropriately. College students experience stress connected to changes in lifestyle, increased workload, new tasks, interpersonal relationships and a lot of other things. Tremendous levels of stress can hinder work efficacy and lead to meager academic performance and at the same time it affects one's overall happiness. College students who have experienced stressful life events also reported worse health outcomes and reduced quality of life most of the time. Alteration of students' environment from school surroundings to university surroundings could cause a mental, educational and social shock to them, since this didactic system has vast differences. The students have to countenance new methods of training, new atmosphere, new scholastic requirements, new kind of relations between students and faculties and even new relations among students themselves.

Stress is one of the major facets of our contemporary life, resulted from the swift changes and modernity in human beings, so this period is called the age of stress. Students undergo from many stresses like educational stress resulted from testing and exams, home works and additional school necessities which may go beyond their abilities. Mothers have their own stress resulted from child schooling, workers, leaders, and whole society have diverse form of stress, sometimes the same person undergoes from different kinds of stress at one moment (Hussien and Hussien, 2006). Hancock and Szalma (2008) noted that two common themes exemplify modern stress theory. First, psychological meaningfulness (the most important factor); the attendance of a mechanism through which persons evaluates events in terms of their meaning richness to the mental or physical happiness. Second, individuals control their inner states and

assign these mechanisms to reimburse for perturbations persuaded by exterior events, including task demands etc.

As any psychological thought in this field, stress has diverse descriptions. Ibrahim (1998) defined "stress as a severe emotional response resulted from internal or external change". According to Greenberg and Baron (2000) stress is personal, physiological and emotional reactions against stimulus. Hussien and Hussien (2006) defined it as the state by which the individual undergoes from substantial and mental hyper tension resulted from aspects that can't be gripped and exceeds human aptitude to deal with. Stressors submit to the factors or stimulators that can be source of intellectual or physical pressure. A number of scientists classify these stressors in relation to their intensity, regularity or duration of the stress (Hussien and Hussien, 2006). Weightman (1999) categorizes stressors into three major categories: 1) Sudden trauma, 2) chronic stressors and 3) daily irritation. Keeping in mind this ideology there are three chief trends in revising stress. First, stress is a stimulus that threats the individual life, so stress is a self-governing variable invented from the person's interior surroundings that is within the body of the person. Second, stress is retort to the exterior situations, so stress is treated as a dependent variable which affects physiological, emotional and cognitive body functioning of individual in all ways. Third trend is the transactional approach which is a blend of the two earlier trends independent and dependent variable. (Hussien and Hussien, 2006).

Review of Literature

Many researchers studied the stress experienced by students and the demographic factors affecting it. The study of Hamaideh (2011) intended to recognize stress and responses to stress among university students and inspect the correlations between student stressors and study variables. The results showed that the uppermost group of stressors experienced by students was self imposed stressors followed by strain over their brains. Cognitive responses were found to be the greatest responses to stressors experienced.

Chen *et al.* (2012) conducted a study to explain the association between college stress, coping approach and psychological happiness. They got data from (342) students in six different universities. The study has verified that psychological happiness has a negative association with college stress and a positive coping approach. In addition, they found that the male students accounted elevated level of stress, inferior mental well-being, and having fewer proclivities towards using positive coping strategies as compared to female students. Moreover, Tajularipin *et al.* (2009) examined that (29%) of the students experienced intermediate stress, and there is a major difference in the level of stress accredited to gender, and between students in rural and urban secondary schools, the consequences also designated that there are a lot of factors control students' stress such as parenting method and their actions, and parents education background and line of work.

Another study by (Chen *et al.*, 2012) has demonstrated that mental well-being has a negative association with college stress and positive coping strategies have considerable buffering effects on psychological healthiness problems. Male students reported higher level of stress, worse psychological well-being, and having less inclination towards using positive coping approaches. Students of Science background scored higher in every day personal aggravation. Students from private colleges reported peak level of educational hassle while second-year students had the top level of stress and lowest intensity of psychological well-being compared to students studying in other years of the university Whereas (Britz and Pappas, 2010), research on stress assessed the sources and outlets of stress among a group of 124 college freshmen at James Madison University. Results revealed that a high degree and frequency of stress exists among the participants, with over 50 percent of students reporting high levels of stress. The major causes of stress were found to be academic workload social pressures and time

management. High stress levels among participants associated with much unhealthy behaviour, including compromised quality of diet and decreased quantity of sleep.

Laurence *et al.* (2009) conducted a survey of (453) graduate students, (25%) reported elevated depressive symptoms in their student life, the study indicated the exams, fear of falling, shortage in clinical time, decrease in self-esteem and prompt reduction in time spent in leisure activity have been associated with higher stress levels.

Summary of literature review

1 While gone to the study of above literature review of different researchers we conclude following points

2 Male students reported higher level of stress, worse psychological well-being, and having less inclination towards using positive coping approaches.

3 The level of stress very according to subject studied by students in universities the students studied higher education subject or post graduation subject feel more stress.

4 There are a lot of factors control students' stress such as parenting method and their actions, and parents education background and line of work.

5 The major causes of stress were found to be academic workload social pressures and time management.

6 The exams, fear of falling, shortage in clinical time, decrease in self-esteem and prompt reduction in time spent in leisure activity have been associated with higher stress levels.

Objective of Study

1 To find out the most important stress factors among university students.

2 To examine the association between demographics and stress factors.

3 To confirm the correlation between demographics and stress factors.

Research Methodology

The data and information were collected by using survey forms 'stress inventory' in which information was gathered from a sample population of students in Shri Vaishnav Institute of Management Indore. The questionnaire has 41 questions which include section 1 (demographic Information), section 2 (financial stress), section 3 (social stress), section 4 (emotional stress), section 5 (academic stress).This questions were also being tested on 100 respondents.

Measures & Instruments

Ordinal scale was used to measure demographics and Likert scale for other research questions. Factor analysis was used to identify the combination of factor. Anova & t-test was used to test reliability of data.

Sample

In this research, the simple random sampling technique was executed as methodology for this research paper. Data was gathered from a survey of the population of student from college. The participants of filling in the questionnaire were from various backgrounds such as different gender, income level, education group and age.

Data Analysis & Discussion

Demographic Analysis

Anova Analysis : Anova analysis is used to examine the significance of difference the significance of difference among two sample means at the same time. The systematic procedure of this statistical technique was developed by R.A Fisher and the F distribution was named in his honor.

Acceptance & Rejection

When the computed value of F is less than the table value of F at 5% level of significance than null hypothesis will be accepted otherwise Null hypothesis is rejected**.**

ANOVA Age - Educational Group					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	53.943	46	1.173	52.313.	.
Within Groups	.1.500	23	.022		
Total	53.943	69			

Interpretation

One way Anova been used to measure the impact of age on stress level of students for first factor out of three identified core factor that is Educational Group. The calculated value of F is 52.313 which is larger than the table value at 0.05 levels with degree of freedom equals to 23/46. It indicates that there is significant difference amongst age group on stress level of students. The null hypothesis namely," There is no significant effect of age on stress level of students is rejected.

Age - Mental Stress creator					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	52.143	24	2.173	54.315	.000
Within Groups	1.800	45	.040		
Total	53.943	69			

Interpretation

One way Anova been used to measure the impact of age on stress level of students for second factor out of three identified core factor that is Mental Stress creator**.** The calculated value of F is 54.315 which is larger than the table value at 0.05 levels with degree of freedom equals to 24/45. It indicates that there is significant difference amongst age group on stress level of students. The null hypothesis namely," There is no significant effect of age on stress level of students is rejected.

Age - Future concern					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	37.561	3	12.520	50.442	.000
Within Groups	16.382	66	.248		
Total	53.943	69			

Interpretation

One way Anova been used to measure the impact of age on stress level of students for third factor out of three identified core factor that is future concern. The calculated value of F is 50.442 which are larger than the table value at 0.05 levels with degree of freedom equals to 66/3. It indicates that there is significant difference amongst age group on stress level of students. The null hypothesis namely," There is no significant effect of age on stress level of students is rejected.

T-Test Analysis

The independent t-test also called the two sample t-test, independent samples t-test or student's t-test is an inferential statistical test that determines whether there is a statistically significant difference between the means two unrelated groups.

T-test

Educational group

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
f1	Male	28	127.1786	13.19386	2.49341
	Female	42	72.1190	19.74496	3.04671

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
								95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
f1	Equal variances assumed	5.547	.021	12.940	68	.000	55.05952	4.25514	46.56853	63.55052
	Equal variances not assumed			13.985	67.995	.000	55.05952	3.93695	47.20346	62.91559

Interpretation

It can be seen from the table that the t-value of 12.94 is larger than the table value 0.05 level with degree of freedom 68 which is 1.668.it means there is significant difference between Male & Female gender in terms of stress level of students for first factor that is Educational group. Therefore the null hypothesis namely "There is no significant difference between Male & Female gender in terms of stress level is Rejected.

Mental stress creator Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
f2	Male	28	59.3571	1.22366	.23125
	Female	42	41.5952	9.90703	1.52869

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
								95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
f2	Equal variances assumed	31.083	.000	9.417	68	.000	17.76190	1.88624	13.99797	21.52584

		Levene's Test for Equality of Variances		t-test for Equality of Means						
Independent Samples Test										
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
f2	Equal variances assumed	31.083	.000	9.417	68	.000	17.76190	1.88624	13.99797	21.52584
	Equal variances not assumed			11.488	42.864	.000	17.76190	1.54608	14.64365	20.88016

Interpretation

It can be seen from the table that the t-value of 9.41 is larger than the table value at 0.05 level with degree of freedom 68 which is 1.668.it means there is significant difference between Male & Female gender in terms of stress level of students for Second factor that is Mental stress creator. Therefore the null hypothesis namely "There is no significant difference between Male & Female gender in terms of stress level is rejected.

Future concern Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
f3	Male	28	5.0000	.00000	.00000
	Female	42	4.1905	.59420	.09169

		Levene's Test for Equality of Variances		t-test for Equality of Means						
Independent Samples Test										
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
f3	Equal variances assumed	29.665	.000	7.191	68	.000	.80952	.11257	.58490	1.03415
	Equal variances not assumed			8.829	41.000	.000	.80952	.09169	.62436	.99469

Interpretation

It can be seen from the table that the t-value of 7.91 is larger than the table value at 0.05 levels with degree of freedom 68 which is 1.668.it means there is significant difference between Male & Female gender in terms of stress level of students for third factor future concern. Therefore the null hypothesis namely "There is no significant difference between Male & Female gender in terms of stress level is rejected.

T-test For Education & Stress Level

Factor 1

Group Statistics					
	Education	N	Mean	Std. Deviation	Std. Error Mean
f1	Graduate	24	130.4583	11.19774	2.28573
	Postgraduate	46	75.1957	21.37768	3.15197

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
								95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
f1	Equal variances assumed	13.817	.000	11.818	68	.000	55.26268	4.67599	45.93188	64.59348
	Equal variances not assumed			14.194	67.988	.000	55.26268	3.89352	47.49327	63.03210

Interpretation

It can be seen from the table that the t-value of 11.81 is larger than the table value at 0.05 level with degree of freedom 68 which is 1.668.it means there is significant difference between Graduate & Post Graduate in terms of stress level of students for first factor Educational group . Therefore the null hypothesis namely "There is no significant difference between Graduate & Post Graduate in terms of stress level is rejected.

Factor 2

Group Statistics					
	Education	N	Mean	Std. Deviation	Std. Error Mean
f2	Graduate	24	59.7500	.60792	.12409
	Postgraduate	46	42.9348	10.43158	1.53805

Independent Samples Test			
		Levene's Test for Equality of Variances	t-test for Equality of Means

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
f2	Equal variances assumed	30.506	.000	7.862	68	.000	16.81522	2.13867	12.54758	21.08286
	Equal variances not assumed			10.897	45.584	.000	16.81522	1.54305	13.70845	19.92198

Interpretation

It can be seen from the table that the t-value of 7.862 is larger than the table value at 0.05 level with degree of freedom 68 which is 1.668.it means there is significant difference between Graduate & Post Graduate in terms of stress level of students for Second factor Mental stress creator . Therefore the null hypothesis namely "There is no significant difference between Graduate & Post Graduate in terms of stress level is rejected.

Factor 3

Group Statistics					
	Education	N	Mean	Std. Deviation	Std. Error Mean
f3	Graduate	24	5.0000	.00000	.00000
	Postgraduate	46	4.2609	.61227	.09027

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
f3	Equal variances assumed	40.318	.000	5.893	68	.000	.73913	.12542	.48886	.98940
	Equal variances not assumed			8.188	45.000	.000	.73913	.09027	.55731	.92095

Interpretation

It can be seen from the table that the t-value of 5.893 is larger than the table value at 0.05 level with degree of freedom 68 which is 1.668.it means there is significant difference between Graduate & Post Graduate in terms of stress level of students for third factor future concern. Therefore the null hypothesis namely "There is no significant difference between Graduate & Post Graduate in terms of stress level is rejected.

Factor Analysis Results

The Factor Analysis was applied for the identification of the core factors responsible for stress among students of university. It is used to reduce large number of variables into a few numbers of core factors.

Test Adequacy of Sample

The Kaiser-Meyer-Olkin is the measure of sampling adequacy, which varies between 0 and 1. The values closer to 1 are better and the value of 0.6 is the suggested minimum.
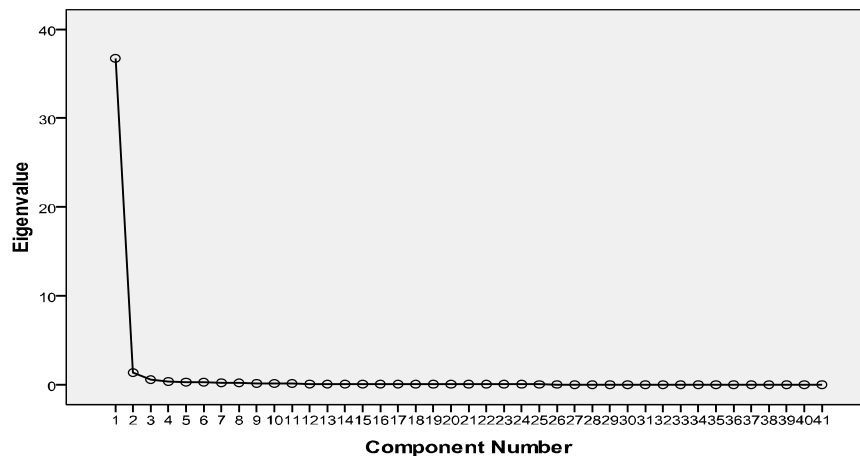
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.920
Bartlett's Test of Sphericity	Approx. Chi-Square	7897.970
	df	820
	Sig.	.000

Normally, 0 < KMO < 1

If KMO > 0.5, the sample is adequate.

Here, KMO = 0.702 which indicates that the sample is adequate and we may Proceed with the Factor Analysis.

The Factor Analysis has thus identified 3 core factors that are responsible for cause of stress among students

1 Mental Stress Creator

2 Educational Group

3 Future Concern

Factor	Eigen Values	% Of Variance	Cummulative %
(1) Mental Stress Creator	18.655	45.501	45.501
(2) Educational Group	14.346	34.989	80.490
(3) Future Concern	5.650	13.782	94.272

Conclusions of Factor Analysis

The above factors have been discussed in detail as under:

1 Educational Group

Namely Educational Group is significantly loaded by 29 variables and having variance of 45.501%.The most important variable out of this was FSM 8 I borrow Money for college. Which factor loading is .89%.

Sr.no	Factor name	Abbreviation	Variable name	Factor Loading
1	Educational Group	Fsm 8	I Borrow Money for College	.898
2		Fsm 4	I feel my parents cannot support me	.880
3		Asm 38	I feel that it is very difficult for me to find a balance between my academic and social activities	.809
4		Asm 40	I feel that I spend a lot of time participating in societies and activities.	.807
5		Esm23	I am not satisfied with my relations	.790
6		14ssm	I feel my life is pressurized	.784
7		39Asm	I feel I am not able to adjust study time	.782
8		34Asm	I feel a lot of pressure because some subjects use foreign language books.	.763
9		28esm	I feel my partner is not a most suitable partner for me at this point of my life	.763
10		41Asm	I feel that co curricular activates affect my study	.761
11		32Asm	I feel teachers give to much assignment	.752
12		24Esm	I feel People don't show good attitude to me	.749
13		33Asm	I spend lot of time for searching subject information	.746
14		37Asm	I feel that once I got into university, I could not keep up with the speed of the teachers' instruction.	.746
15		7Fsm	I feel difficulty in arranging money for the sake of enjoyment	.737
16		30Asm	. I feel that my parents think that I am not serious about my studies	.732
17		21Esm	I feel in trouble most of the time	.731
18		6Fsm	I feel in trouble most of the time	.728
19		36Asm	I am not able to adapt to some teachers' teaching methods.	.722
20		20Esm	I feel sad most of the time	.717
21		18Esm	I feel too bad When I get bad grade	.707
22		9Fsm	I feel cost of education is more	.694
23		10 Fsm	I repay my education loan after complication of degree	.672
24		35Asm	I feel that I do not understand a lot about some teachers' teaching content.	.662
25		31Asm	I worry that my academic results will not meet my parents' expectations.	.656
26		25 Esm	I need my close relations support me a lot	.652
27		2 Fsm	I don't like begging in front of my parents for	.633

			money	
28		11Ssm	I need approval of the people around me	.629
29		12Ssm	I Feel People admire me and my every deed	.622

2 Educational Groups

Namely Educational Group is significantly loaded by 11variables and having variance of 34.989%. The most important factor out of this was (16SSm) I always feel my parents need me which factor loading is .840%.

Table-3

Sr.No	Factor name	Abbreviation	Variable name	Factor loading
1	Mental Stress Creator	16ssm	I always feel my parents need me	.840
2		Fsm5	I have to be rich in future	.807
3		Fsm3	I feel my parents make my needs full filled	.795
4		29esm	I want a good positive healthy life with my partner	.795
5		26esm	I feel my partner (gf, bf, or other such relation) is loyal with me in every instance	.786
6		22esm	I feel my thinking is different from others	.777
7		13ssm	I have to choose something good for better future	.716
8		17ssm	I feel I gain fame and love from people	.708
9		27esm	I feel my most important relation this time for me is my partner	.7000
10		Fsm1	I depend on my parents for money	.691
11		15ssm	I am important element of my parent's life	.664

3 Future concerns

Namely is Future concern significantly loaded by 1variables and having variance of 13.782%. It contains statement I feel my future is important to me with factor loading value .673.

Table 4

Sr.NO	Factor name	Abbreviation	Variable name	Factor loading
3	future concern	Esm 19	I feel my future is important to me	.673

Implication of study

The research highlighted most critical factor for stress of students at university the factors considered are form various back ground like emotional, financial, social & academic. It is helpful for universities, college's and parents to understand factor which create stress to students and make an environment which minimize stress in student's life.

Conclusion

Stress is normally most critical part of everyone's life living in this world. It gives a negative notion that can affect one's mental status of mind and physical health of living being. The main aim of this study was to detect the most critical factors of stress affecting undergraduates & post graduates students of university. The four factors that had taken under examination were financial stress, Emotional stress, Academic Stress and Social Stress. Anova and T-test used to verify the relationship between stress factors and demographics. Factor analysis is used to sum up the list of 41 critical factors into most important identified three correlated factors namely (1) Educational group, (2) Mental stress creator & (3) future concern. Unavailability of parents support and paramount match to live with as a partner can be an emotional stress. Less income

students find difficulty to pay college fees of higher education & unable to   spend money on enjoying the college life with friends which is a predictor of financial stress. Pressurized life and unexpected behaviour from people of society has lied under Social stress. Education pattern and teaching system of universities are the causes of academic stress.

When we talked about relationships of social stress with demographic   the statistical test concluded that   Age, Education (graduate & post graduate), Gender (male & female) has significant relationship with stress level of student .

Financial stress is most influencing factor for university students .The most of the student are not localities they stay in rented paying guest room they depend on parents for money However, every student wants to full fill his expectation form life so they struggle to get it. If they don"t get what they expect with life then this can be a predictor of financial stress. The second most important factor is academic stress for stress full life of students as in the case of post graduate students they expect the education culture of university should be lenient they feel pressurized under strict rules and regulation The university students experienced a social, academic, emotional and financial stress level. Social stress is lowest in all.

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