Research Article

A STUDY ON ACADEMIC STRESS OF THE HIGHER EDUCATION LEVEL STUDENTS AT JADAVPUR UNIVERSITY

Priyom Roy and *Avijit Pradhan

Department of Education, Jadavpur University, West Bengal, India

Abstract

In order to find out the rate of prevalence of academic stress among the higher education level students of Jadavpur University based on their gender, caste category, marks on the previous exam and no. of siblings, the researchers conducted the study. Using cross sectional survey design, the study has been administered on 121 Jadavpur University students with the help of convenient sampling technique. A self-made questionnaire was used by the researchers for the sake of data collection. Chi-Square test was used as inferential statistics. And it has been found that the rate of prevalence of Academic Stress among the female students (21.62% at severe level) was more than their male counterparts (8.51% at severe level) and the observed difference was statistically significant.

Keywords: Academic Stress, Higher Education Level.

INTRODUCTION

Just after deaths and taxes, Stress has been identified as the 3rd human lives' problem (Bernstein *et al.,* 2008). Though it is common to every people, it takes different forms depending on the situation (Yumba, 2008). The institution of higher studies is a place, where the amalgamation of diversities is an obvious thing and where everyone can have the higher accessibility to the deep sea of knowledge. Academic commitments, financial pressures, and the lack of time management skills have resulted in many university students experiencing intense stress at predictable times during each semester (Mc Kean *et al.,* 2000). This can affect health, emotional state and academic performance, once stress has become perceived negatively or has become excessive. Hence, it is important that higher education level students develop effective strategies in order to manage stressful situations. The present study examines the perception of academic stress among male and female higher education level students, regarding their caste category, no. of siblings and marks on previous exam. Coping with Stress is one of the 10 life Skills which helps us to deal with the stressful situation very effectively. In our everyday life, most of the time we want to control things, but when we become unable in doing so, we feel stressed i.e. it is our tendency to establish balance (Sinha, Muktipada and Ghoshal, Chandikaprasad 2015). Sometimes stress is seen as the stimulus-response process.

Transactional Model of Stress

According to Lazarus and Folkman (1984), stress is a dynamic process involving individuals and environment. The environment provides the initial stimulus, but the key determinants of stress are the way individuals perceive the environment and how they use the coping resources available to deal with it. This approach is appropriate to this study, because the dynamic relationship between the person and the environment in stress perception and reaction is especially magnified among the higher education students.

*Corresponding Author: *Avijit Pradhan,*
Department of Education, Jadavpur University, West Bengal, India

LITERATURE REVIEW

D'Souza Lancy, Gowda H M Ramakrishne and Kumar G Y Yashodhar(2016) in their study "Relationship between shyness and academic stress among adolescents" found that all the domains of stress were significantly and positively correlated with various domains of shyness. Essel, George and Owusu, Patrick (2017) conducted a study entitled as "Causes of students' stress, its effects on their academic success, and stress management by students", where it was mentioned that there are different factors that cause stress among students (the factors were grouped into four, namely Relationship factors, Environmental factors, Academic factors, and Personal factors). With respect to Relationship factors, working with new people was the main cause of stress for students. On the other end, in the case of Environmental factors, worries about the future was the main factor causing stress among students, whereas class workload was the main element of stress with regard to the Academic factors and in the category of Personal factors, financial problems caused most stress to students. It has been concluded that stress can, however, be managed through the introduction of a stress management course and engaging in extracurricular activities. On the basis of gender there are also some varying factors which lead them to become stressful differently. Female students due to their emotional instability, become more stressful than their counterpart. Such kind of findings was supported by the research results of the study entitled as "Academic Stress: A Case of the Undergraduate students" conducted by Yamba, W. (2008) and "Perceived Academic Stress of University Students across Gender, Academic streams, Semisters and Academic performance" by Banu, P. Deb, S. Vardhan, V. and Rao, T. (2015). On the other hand Dr.Prabhu, P. S. (2015) in his study entitled as as "A Study on Academic Stress among Higher Secondary Students" found different results. In his study it has been significantly proved that male students face greater stress than the female ones. Depending upon the stream of academic courses, students feel stressed differently. It has been observed in a study entitled as "Stress and Academic Achievement among Undergraduate Students in University Putra Malaysia" conducted by Elias, H. Ping, W. S. and Abdullah, M. C. (2011) that the medical students face more stress than that of the others.
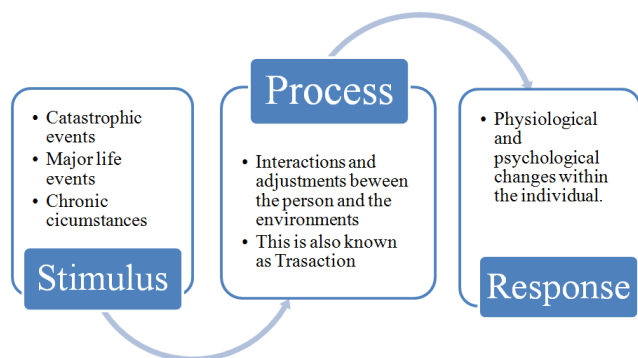
Figure 1. Stress as the stimulus response process.

Dr. Prabhu, P. S. (2015) in his study entitled as as "A Study on Academic Stress among Higher Secondary Students" found that the stress of the science students are more than that of the arts ones. Besides Banu, P. Deb, S. Vardhan, V. and Rao, T. (2015) in their study entitled as "Perceived Academic Stress of University Students across Gender, Academic streams, Semisters and Academic performance" found that the students of the Humanities and Social Sciences are more stressed than that of the Science & Management students. It is clear that there are various angle/perspective to Academic Stress of the students. But Dr.MuktipadaSinha and ChandikaprasadGhoshal (2015) in their book "Life Skills Education for Adolescents" pointed out that in a real sense, all of the causes of stress are psychological in nature. Stress depends upon how we observe or perceive a particular situation. A situation can be stressful to oneself, but it can be most normal to others. Jain, Geeta and Singhai, Manisha (2017) in their study "Academic Stress Amongst Students: A Review of Literature"mentioned that that Stress is always seen as subjective process and it encompasses individual's personal analysis and counter to a threatening event. Stress can result in depression, anxiety and many other hazardous conditions. Stress is common in nature and it is not negative all the time. It helps to avoid danger (American Institute of Stress, URL- https://www.stress.org/using-key-communication-skills-to-manage-stress accessed on 23rd December, 2020). A study entitled as "An Assessment of Academic Stress among Students of Bachelor's Level" conducted by SandeshDhakal(2013) to examine stress on a student's academic performance which can be both positive and negative depending on its severity. The researcher presented that minimal level of stress can lead to positive outcomes such as motivation and improved task performance while severe stress can result in anxiety, depression, social dysfunction and even suicidal intention. It is also found that Stress becomes the hidden treasure when one can handle it in a skilful way. That's why in order to cope with the stressful situations of life, we need to incorporate Life Skills Education to the students in a proper way. Blackburn, Tida (2020) in his/her study "The Relationship Between Mindfulness, Academic Stress, and Attention", mentioned that through mindfulness (being fully present in the moment; being aware of one's surroundings, mind, and body; and being able to filter out distractions that are stressful in one's life) one can reduce the level of stress and anxiety. In the study results indicated that greater levels of mindfulness have an association with lower levels of academic stress.

Rationale of the Study

There are different demographic variables, which have a relationship with the different degrees of academic stress. But after reviewing the above ones, the researchers have identified that there is a lack of the knowledge of relationship between academic stress at higher education level and some of the demographic variables, like- gender of the students, caste category of the students, no. of siblings of the students and marks on the previous examination of the students.

Statement of the Problem

Hence, the researchers identified the research problem and stated it as "A Study on Academic Stress of the Higher Education Level Students at Jadavpur University".

Objectives

The researchers identified the following objectives of the present study-

1. To find out the rate of prevalence of academic stress of higher education level students.
2. To find out the relationship of academic stress at the higher education level with respect to their gender, family income, no. of siblings and previous year's academic marks.

Hypothesis:

$^{0}H_{1}$: There is no significant difference between male and female students at higher education level with regard to their academic stress.

$^{0}H_{2}$: There is no significant difference among the different caste categories of the students at higher education with regard to their academic stress.

$^{0}H_{3}$: There is no significant difference in the Stress level at the Higher Education level students regarding their marks on previous examination.

$^{0}H_{4}$: There is no significant difference in the Stress level among the Higher Education level students taking into account the Number of Siblings.

METHODOLOGY

The present study was conducted using cross sectional survey design. All the students, who are studying at graduate and postgraduate level at JadavpurUniversity are considered as the population of the study. Since a good number of samples representing the population are required to collect information from the target group, samples or students were chosen conveniently from Jadavpur University. The study was conducted on a total of 121 effective respondents, who belong to different socio-economic backgrounds. In the study Independent variables are the influencing variables which may have some impacts on the dependent variables. The used independent variables are Gender (male/female), Caste Category (General/SC/ST/OBC-A/OBC-B), No. of Siblings (no siblings/one sibling/more than one siblings) and Marks on the Previous Examination (>60%/<60%). And in the study, the impact of academic stress on higher education students as outcome was the Dependent variable. The study aimed at measuring the influence of independent variables on the status of dependent variable.

Tools- A total of 30 questions measuring 7 latent variables of stress was developed by the researchers for measuring the possible indicators of Academic Stress of the students. The seven variables were identified as cause of Academic Stress among the Higher Education level students. These were

Academic Stress due to performance anxiety, Academic Stress due to lack of self-confidence, Academic Stress due to parental expectations, Academic Stress due to peer pressure, Academic Stress due to social/personal relationships, Academic Stress due to financial condition, Academic Stress due to school environment. 4-5 questions were developed on each of these variables of stressors keeping in mind the criteria of sufficiency. The questionnaire of Kohn and Frazer (1986) was used as guide to develop the questions. The questions were developed by the researcher in consultation with his supervisor and experts in the field. The questions were initially developed in English or adopted from other English questionnaires. The Bengali version was later developed using translation technique with the help of bilingual (English and Bengali) experts. The response format was a 4 point Likart Scale ranging from 4 (Strongly Agree) to 1 (Strongly Disagree). A higher score indicated a higher level of stress and vice-versa. The gathered raw data of 121 students were individually tabulated in the excel sheet. Data was analysed using Chi-Square test on statistical package for social sciences (SPSS package, version 20.0).

Analysis and Interpretation

Descriptive Statistics with graphical presentations and Non-Parametric Inferential Statistics viz. Chi Square test were used to analyse and interpret the data.

Table 1. Overall percentage distribution of stress among the higher education level students

Over all stress			Total
Academic stress level of the students	Low	Total number	8
		% of total	6.61%
	Moderate	Total number	93
		% of total	76.85%
	Severe	Total number	20
		% of total	16.52%
Total		Total number	121
		% of total	100%

Out of the total students (N=120), 20 (16.67%) students scored to such an extent that they are regarded as Severely Stressed. These students need intervention. Among the students, 93 (77.5%) students were moderately stressed. Another 7 (5.83%) students were there having Low level Stress. That means rest of the students instead of the Severely Stressed, are treated to be normal students.
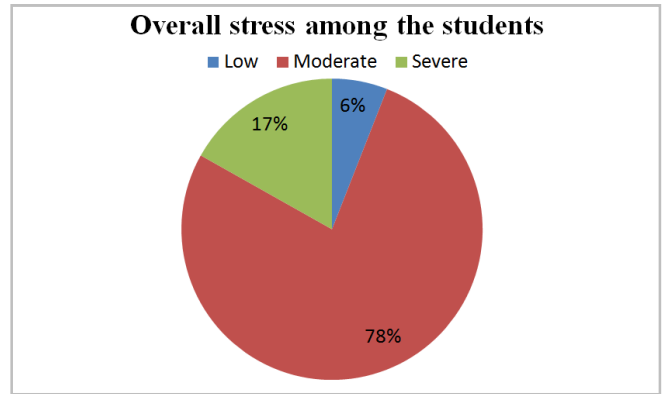

Figure 2. Overall stress level among the Students at Higher Education

Table 2. Percentage wise distribution of stress among the higher education students on the basis of their gender

Overall Academic Stress			Gender of the Students		Total
			Male	Female	
Academic stress level of the students	Low	Total no.	1	7	8
		% within gender	2.13	9.45	6.61
	Moderate	Total no	42	51	93
		% within gender	89.36	68.91	76.85
	Severe	Total no	4	16	20
		% within gender	8.51	21.62	16.52
Total		Total no	47	74	121
		% within gender	100%	100%	100%
		% of total	38.84	60.15	100

$^{0}H_1$: There is no significant difference between male and female students at higher education level with regard to their academic stress.

Variable	Category	N	df	χ^2	Level of significance	Remarks
Gender	Male	47	2	6.889	0.032	S*
	Female	74				P<0.05

S*- Significant

Above table revealed that the calculated Chi-Square value is 6.889 and P=0.032 with df=2. But the table value of Chi-Square with df =2 at 0.05 level is 5.991 and at 0.01 level of the significance is 9.210. Hence the calculated Chi-Square value is quite higher than table value of Chi-Square at 0.05 level of significance. So the null hypothesis cannot be accepted (at 0.05 level, p<0.05). Therefore it can be concluded that found difference in the rate of academic stress between the male and female students at higher education level is significant and it cannot be attributed to any chance factor.

Table 3. Percentage wise distribution of Stress among the Higher Education Students on the basis of their Caste Category.

Overall academic stress			Caste of the students					Total
			SC	ST	OBC-A	OBC-B	General	
Academic stress level of the students	Low	Total no	4	0	1	1	2	8
		% within caste	7.84%	0%	8.33%	7.7%	5.12%	6.61%
	Moderate	Total no	37	6	7	9	34	93
		% within caste	72.54%	100%	58.33%	69.23%	87.17%	76.85%
	Severe	Total no	10	0	4	3	3	20
		% within caste	19.60%	0%	33.33%	23.07%	7.7%	16.52%
Total		Total no	51	6	12	13	39	121
		% within caste	100%	100%	100%	100%	!00%	100%
		% of total	42.14%	4.95%	9.91%	10.74%	32.23%	100%

$^{0}H_2$: There is no significant difference among the different caste categories of the students at higher education with regard to their academic stress.

Variable	Category	N	df	χ^2	Level of significance	Remarks
Caste	General	39				
	SC	51				NS*
	ST	6	8	7.950	0.438	P>0.05
	OBC-A	12				
	OBC-B	13				

NS*-Not Significant

As the result is not significant, therefore the found difference among the different caste categories of the students is statistically insignificant.

Table 4. Percentage wise distribution of Stress among the Higher Education Students on the basis of the Marks of the students on Previous Examination

Overall Academic Stress			Marks of the Students		Total
			Below 60%	Above 60%	
Academic stress level of the students	Low	Total no.	0	8	8
		% within marks	0	7.14	6.61
	Moderate	Total no	8	85	93
		% within marks	88.9	75.9	76.85
	Severe	Total no	1	19	20
		% within marks	11.11	16.96	16.52
Total		Total no	9	112	121
		% within marks	100%	100%	100%
		% of total	7.44	92.56	100

H_3: There is no significant difference in the Stress level at the Higher Education level students regarding their marks on previous examination.

Variable	Category	N	df	χ^2	Level of significance	Remarks
Academic marks	Below 60%	9	2	.999	.607	NS*
	Above 60%	112				P>0.05

NS*- Not Significant.

Above table revealed that there is no significant difference in the academic stress at higher education level students with respect their marks on previous examination.

Table 5. Percentage wise distribution of Stress among the students on the basis of their Number of Siblings

Overall academic stress			Siblings of the students			Total
			No siblings	Having one siblings	More than one siblings	
Academic level of the students	Low	Total no	1	4	3	8
		% within siblings	4.34	7.14	7.14	6.61
	Moderate	Total no	19	43	31	93
		% within siblings	82.60	76.8	73.80	76.85
	Severe	Total no	3	9	8	20
		% within siblings	13.04	16.07	19.04	16.52
Total		Total no	23	56	42	121
		% within siblings	100%	100%	100%	100%
		% of total	19	46.3	34.71	100

H_4: There is no significant difference in the Stress level among the Higher Education level students taking into account the Number of Siblings.

Variable	Category	N	df	χ^2	Level of significance	Remarks
NO. of siblings	No Siblings	23				NS*
	One Sibling	56	4	.707	.951	P>0.05
	More than One Sibling	42				

NS*-Not Significant

Here the hypothesis is accepted as the found differences are statistically not significant.

Major Findings

- Among the students, 93.37% was found to be ranged from moderate to severely stress.
- The rate of prevalence of Academic Stress among the female students (21.62% at severe level) was more than their male counterparts (8.51% at severe level) and the observed difference was statistically significant.
- The rate of prevalence of Academic Stress among the Higher Education Students was more in those students who belong to OBC-A (33.33% at severe level), OBC-B (23.07% at severe level) and SC Category (19.60% at severe level) than the other categories (General category students are 7.70% at severe level and ST students are 0% at severe level) and the found difference among the different category students was statistically insignificant.

- The students having above 60% marks on previous exam (11.11% at severe level) were more academically stressed than the students having below 60% marks on previous exam (16.96% at severe level) and the found difference among them was statistically not significant.
- Those students having more than one sibling (19.04% at severe level) are academically more stressed than those students having no siblings (13.04% at severe level) and having one sibling (16.07% at severe level) and the found difference among them was statistically insignificant.

DISCUSSION AND CONCLUSION

Major findings of the present study would be important contributions for improvement of our understanding about academic stress of higher education level students. The study

investigated overall degrees of academic stress with respect to different independent variables VIZ- gender, Caste, no of siblings, and marks. In the findings, it has been observed that, the rate of prevalence of academic stress was more in female students than the male students and the found difference was statistically significant. Same findings have been found by Yamba, W. (2008) and Banu, P., Deb, S., Vardhan, V., and Rao, T. (2015). The possible reasons for this may be that the females rate negative events more often and more markedly than males (Allen and Heibert, 1991). The lower reactions to stressors of male students may result from their socialization process which teaches them that the emotional experience is an admission of weakness and not masculine behaviour (Davidson-Kariz 1991). The educational policy makers, administrators, teachers and teacher's educators may adopts some realistic measures or strategies in the light of the present study. The higher education authorities should have an orientation to the Life Skills Education along with the students. All of us should have a common mission to provide good mental health among the higher education level students. We have to achieve this as early as possible.

REFERENCES

Allen, S. and Hiebert, B. 1991. Stress and Coping in Adolescents. *Canadian Journal of Counselling and Psychotherapy*, Volume *25*(1). Retrieved from https://cjc-rcc.ucalgary.ca/article/view/59420

Banu, Parveen; Deb, Sibnath; Vardhan, Vishnu and Rao, Tirupati, 2015. Perceived Academic Stress of University Students across Gender, Academic streams, Semisters and Academic performance. *Indian Journal of Health and Wellbeing*, Vol 6, No 3

Bernstein, D.A., Penner, L.A., Stewart, A.C and Roy, E.J., 2008. Psychology (8th edition). Houghton Mifflin Company Boston New York.

Blackburn, T. 2020. "The Relationship Between Mindfulness, Academic Stress, and Attention". All Graduate Theses and Dissertations. 7940. Retrieved from https://digital commons.usu.edu/etd/7940.

Davidson-Katz, K. 1991. Gender roles and health. In C. R. Snyder, & D. R. Forsyth(Eds.), Handbook of social and clinical psychology: The health perspective (pp. 179-196). New York: Pergamon.

Dhakal, S. 2013. An Assessment of Academic Stress among Students of Bachelor's Level.

Elias, H., Ping, S. W., Abdullah, C. M., 2011. Stress and Academic Achievement among Undergraduate Students in Universiti Putra Malaysia.*Procedia - Social and Behavioral Sciences* 29, p. 646–655.

Essel, G., and Owusu, P. 2017. Causes of students' stress, its effects on their academic success, and stress management by students. Retrieved from http://urn.fi/URN:NBN:fi:amk-201704134793.

Jain, Geeta and Singhai, Manisha, 2017. Academic Stress Amongst Students: A Review of Literature. *Prestige e-Journal of Management and Research*, Volume 4 Issue 2 (October, 2017) and Volume 5 Issue 1(April, 2018), ISSN 2350-1316.

Kohn, J. P. and Frazer, G. H. 1986. An academic stress scale: Identification and rated importance of academic stressors. *Psychological Reports, 59*(2, Pt 1), 415–426. Retrieved from https://doi.org/10.2466/pr0.1986.59.2.415

koul, L. 2013. *Methodology of Educational Research.* New Delhi: Vikash Publishing House Pvt Ltd.

Lancy, D'Souza and RamakrishneGowda, H. M., and Yashodhar Kumar, G. Y. 2016. Relationship between shyness and academic stress among adolescents. *Asian Journal of Development Matters*, 10 (1). pp. 176-182. ISSN 0976-4674.

Lazarus R. S., Folkman S. 1984. Stress, Appraisal and Coping. New York: Springer.

Mangal, S. K. 2014. *Statistics in Psychology and Education.* Delhi: PHI Learning Private Limited.

Misra, R. and McKean, M. 2000.College students' academic stress and its relation to anxiety, time management, and leisure satisfaction. *American journal of health studies.*16(1),41-51.

Prabhu, P. S. 2015. A Study on Academic Stress among Higher Secondary Students.*International Journal of Humanities and Social Science Invention,* Volume 4 Issue 10, PP.63-68

Sinha, M., and Ghoshal, C. 2015. Life Skills Education for Adolescents.*Pragatishil Prakashok.* Kolkata.

The American Institute of Stress 2019. Using Key Communication Skills To Manage Stress. *The American Institute of Stress,* Retrieved from www.stress.org/using-key-communication-skills-to-manage-stress.

Yumba, W. 2008. Academic Stress: A Case of the Undergraduate students**,** Linköpingsuniversitet, Filosofiskafakulteten (2010), oai: DiVA.org:liu-81902.

****