# EXAMINATION STRESS OF HIGHER SECONDARY STUDENTS IN RELATION TO THEIR GENDER, LOCALITY AND STREAM OF STUDY

Dipannita Saharia and Marami Goswami

Examination stress is one of the most common features of higher secondary students which they face in their academic life. Higher secondary stage happens to be crucial stage of education in India as it determines the future path of the students. This study investigated differences if any in the level of examination stress experienced by the students in terms of their gender, locality and stream of study. Stratified random sampling technique was used for data collection. Results of the study showed that there exists a significant difference between the examination stress of male and female students and between rural and urban students. It was also found that students of Arts stream experience significantly higher level of examination stress as compared to students of Science and Commerce streams. However, no significant difference was found in the examination stress level of the students of Science and Commerce stream.

KEYWORDS: Examination, Gender, Locality, Stream, Stress, Students

### INTRODUCTION

We all experience stress in our life. Stress means some kind of pressure or tension, some kind of external or internal threats and challenges to which a person tries to cope or deal with. It may be physical, mental, emotional or social

Dipannita Saharia 🖂

Research Scholar, Dept. of Education, Gauhati University, Guwahati, Assam, India. Email: dipannitasaharia@gmail.com

Marami Goswami

Prof., P.G. Dept. of Education, Dr. Anita Barua Sarma College of Education (NERIM), Guwahati, Assam, India. E-mail: marami525@gmail.com pressure or challenge. Generally stress is viewed as a negative emotional, cognitive, behavioural and physiological process that occurs as a person tries to adjust or deal with stressors (Bernstein, et al. 2008). The term "stress", as it is currently used was coined by Selye in 1936, who defined it as "the non-specific response of the body to any demand for change" (http://www.stress.org/what-is-stress/american institute of stress). Auerbach and Grambling (1998) regard stress as an unpleasant state of emotional and physiological arousal that individuals experience in situations that they perceive as dangerous or threatening to their well-being. Stress is explained by Pargman (2006) as "an uncertain reaction to external and internal factors". Stress refers to that quality of experience, produced through a person-environment transaction that, through either over arousal or under arousal, results in psychological or physiological distress (Aldwin, 2007).

Stress is very common and unavoidable phenomenon in students' life. Students confront with stress in their academic life due to academic failure; fear of failure, under achievement or parental pressure. In the academic scenario, stress has become an inevitable factor not only in the lives of the students but also everyone related to them. Parents of students especially the adolescents have to face the stress of helping their children deal with academic stress as well as their own stress (Holahan & Moos, 1987). In general, students experience stress in situations such as appearing for exams, going to a new institution, dealing with friends, divorce or separation of parents, death of a relative, etc. Among those causes, examination stress is very common among the students and in the area of stress, examination stress has received relatively less attention. Today's competitive world and the pressure to perform well and secure good marks in the examination are causing tremendous stress among the students. Students show different signs and symptoms of stress before and during their examination. Some of the common signs of examination stress among the students are having irregular sleep, feeling of tiredness, loss of appetite, isolation and sadness, feeling of headache or ache all over, suffer from upset stomach, feeling of restlessness or a condition of inability to recall whatever they have studied etc. However, a number of studies suggest that a minimal level of stress is helpful as it reminds us about the work to be done, pushes us to complete the work and thus facilitate learning and enhance learning ability. But when the stress level is high, then it may cause various emotional and psychological problems and if the students fail to cope with that situation, it is seen that they may take extreme steps to escape from that situation.

Though stress generally refers to negative feelings having negative psychological effects, sometimes a mild degree of stress can be beneficial

bringing positive result or effects. Stress is not only caused by negative things, positive things also cause stress (Davidson, 2001; Centre, 2010). Thus, stress can be of two forms:

- Positive Stress
- ii) Negative Stress

Positive stress results from positive events in one's life and it is associated with feeling of relief. While negative stress results from negative events of life and it leads towards disease.

People react to stress differently. Different students also react differently to examination stress. Factors like gender, locality and courses of study affect the stress level of the students. Studies have found that there are significant differences between female and male students in academic stress. The female students experience more stress than the male students. A cross-sectional study conducted by Landstedt and Gillander (2012) revealed that the girl students were highly stressed. Stress affects females more especially in academic career (Pourrajab et al. 2014). Calvarence (2015) found that more females experience higher levels of depression, frustration and anxiety than their male counterparts when reacting to stress. Anbumalar. et al. (2017) also found similar results in their study on gender differences in perceived stress levels and coping strategies among college students. In this study, female students reported higher levels of perceived stress than their male peers. These studies indicate that gender is an important factor that determines the level of stress experienced by the students at the time of their examination.

Studies related to stress and locality of the students also reveal that locality has an impact on students' examination stress. Sulaiman et al. (2009), found that there are significant differences in the level of stress for gender and between students in rural and urban secondary schools. A study made by Mathew (2017) shows that the academic stress of urban adolescents was consistently high when compared to that of rural adolescents. Most of the urban adolescents have severe academic stress whereas the rural students have found to have moderate academic stress. Results of the study on academic stress among higher secondary students conducted by Prabu (2015) revealed that higher secondary students were having moderate level of academic stress and the stress of the urban students was higher than the rural students. However, some study results also show that there is no significant difference in educational or academic stress among rural and urban students.

Studies have also been conducted on stress level among students of different streams of study, i.e. Arts, Science and Commerce. Baviskar et al (2013) found that Arts students had a higher level of depression and stress as compared to their peers from science and commerce streams. Kumari and Jain (2014) compared the stress and anxiety among students of different streams and students of Arts were found having highest stress and anxiety followed by Commerce students. On the other hand, a study by Sonali (2018) revealed that students enrolled in Science and Commerce stream were academically more stressed than the students enrolled in Arts stream. However, there was no significant difference found between academic stress of students of Science and Commerce stream.

# **OBJECTIVES OF THE STUDY**

The objectives of the study are to:

- 1. Identify the levels of examination stress among the students and if there is any difference in the examination stress level of male and female students.
- 2. Examine the difference of examination stress levels of the students in respect of their locality i.e. rural and urban.
- 3. Find out the difference of examination stress levels with respect to the stream of study (Arts, Science and Commerce) of the students.

# RESEARCH METHODOLOGY

A descriptive research design has been used for this study. The sample of the study consists of 200 students of 12th grade of Kamrup Metro and Kamrup Rural districts of Assam in India who were studying under Assam Higher Secondary Education Council (AHSEC). There were 100 male and 100 female students of in the age group of 17-19 years from the Arts, Science and Commerce stream. Stratified random sampling technique was used to collect the sample.

# TOOL USED

A personal data sheet requiring students' gender, locality, stream and their school management type along with basic information like name, age, etc. was prepared and used. The investigator also adopted and used the Examination Stress Scale for Adolescent Students developed by Yao-Ting Sung and Tzu-Yang Chao in this study. The scale consists of 27 items covering three dimensions: anxiety responses with 10 items, cognitive and behavioural responses with 8 items and perceived social expectation and social comparison with 9 items. Responses were to be given on 5 point Likert scale with scores from 0 to 4. Here, higher scores indicate a higher level of examination stress.

The sample units are categorized into three distinct groups, i.e. high, medium and low level stress group by using K-means clustering method. The raw scores range from 86 to 123 represents the High Level Exam Stress, from 63 to 85 represents the Medium Level Stress and from 13 to 62 represents the Low Level Exam Stress.

### RESULTS OF THE STUDY

## Gender Differences in Examination Stress

Regarding the examination stress of the students, it has been found that maximum number of students experience medium level of stress, followed by the students experiencing high and low level of examination stress. Table 1 show that 42% students experience medium level of examination stress, while 30% students experience high and 28% students experience low level of examination stress.

Table 1 Percentage of Students and Examination Stress Levels.

Examination Stress levels	Score Range	Number of	Total	Male	Female	Percentage		
	J	Students	Percentage			Male	Female	
High	86-123	60	30%	25	35	41.66%	58.34%	
Medium	63-85	84	42 %	40	44	47.62%	52.38%	
Low	13-62	56	28 %	36	20	64.28%	35.72%	
Total		200	100 %	100	100			

Table 2 shows that the mean score of examination stress of females is higher than that of males. To determine whether the difference of examination stress score is significant, ANOVA test has been done. It shows that the male and female students differ significantly in case of examination stress that they experience. The examination stress among female students is significantly higher than the male students.

Table 2 Mean, SD and ANOVA for Gender Differences in Examination Stress.

Gender	N	Mean	Std.	ANOVA		
Female	100	0.16	0.99	F	p-value	
Male	100	-0.16	0.98	5.37	0.0215 (Significant at 5%)	

# **Examination Stress Among Rural and Urban Students**

From Table 3 we can see that among the students experiencing high exam stress, 65% students are from urban locality, i.e. studying in urban schools and 35% are students of rural schools. In case of the students experiencing medium level of stress, 48.81% students are from urban schools and 51.19% students are from rural schools. While among the students experiencing low level of examination stress, 64% of students are from rural schools and only 29% from urban schools. This shows the clear difference in the examination stress of rural and urban students, especially in the category of high and low level stress. The ANOVA table (Table 4) shows the significance of difference between these groups.

Table 3

Locality Wise Differences in Examination Stress of the Students.

Examination	Score	Number of	Total	Rural	Urban	Percentage		
Stress levels	Range	Students	Percentage	Kurur	Ciban	Rural	Urban	
High	86-123	60	30%	21	39	35%	65%	
Medium	63-85	84	42%	43	41	51.19%	48.81%	
Low	13-62	56	28%	36	20	64%	29%	
Total		200	100	100	100			

From the data in Table 4, it is clear that the mean score of examination stress is higher among the urban students than the rural students. The result of the ANOVA test shows that the difference in the mean scores of examination stress of rural and urban students is significant. hence, it can be inferred that examination stress experienced by the urban students is significantly higher than the rural students.

Table 4

Means, SD and ANOVA of Examination Stress of Rural and Urban Students.

Locality	N	Mean	Std.	ANOVA		
Rural	100	-0.23	0.99	F	P-value	
Urban	100	0.23	0.95	11.37	.0009 (Significant at 1 %)	

# Examination Stress Among the Students of Arts, Science and Commerce

From Table 5, we can see that the percentage of students of Arts stream is highest in all the three categories of examination stress. The percentage of medium stressed students is higher in science stream compared to commerce stream. The percentage of high and low stressed students is higher among

commerce stream than the science stream students.

Table 5 Stream Wise Differences in Examination Stress of the Students.

Examination	Score	Number Total		Arts Sci.		Com.	Percentage		
Stress levels	Range	Students	%	7110	JCI.	Com	Arts	Sci.	Com.
High	86-123	60	30%	46	6	8	76.67%	10%	13.33%
Medium	63-85	84	42%	51	19	14	60.71%	22.62%	16.67%
Low	13-62	56	28%	23	15	18	41.07%	26.79%	32.14%
Total		200	100	120	40	40			

It can be observed from Table 6 that the mean examination stress score of the arts students is higher than the science and commerce. However there is no significant difference in the mean score of examination stress between science and commerce students. The science and commerce students are similar in terms of examination stress. So, from the sample data, it can be said that the Arts students experience more examination stress than the Science and Commerce students. The calculated F-value shows that there exists significant difference in the examination stress of the students of Arts and Science as well as Arts and Commerce stream.

Table 6 Mean, SD, ANOVA of Examination Stress of the Students of Different Streams (Arts, Science and Commerce).

Stream	N	M	SD	A	NOVA	Scheffe (Difference of Mean)			
Arts	120	.23	.97	F	P- value	Arts-Sci.	Arts -Com.	SciCom.	
Sci.	40	30	.95	0.70	.0003	0.54	0.61	0.07	
Com.	40	38	.94	8.63	(Significan t at 1%)	(0.011)	(0.003)	(0.938)	

# DISCUSSION

The results of the study show that examination stress of the female students is significantly higher than the male students. It may be because that the females are more emotional and get tensed easily than the males. Moreover, females are easily scared of, think far and deep which may be the causes of being stressed more than the males. Regarding the locality of the students, i.e. students from rural and urban schools, the result indicates that urban students experience more stress than the rural students. In this present era where science and technology have made the world a global village, still the rural life of our country and of Assam also, is somewhat simple, easy going and far from the

high competitiveness and complexities of urban life. It influences the life of the rural students also. Their parents' expectations, social and peer pressure is not very high and dominating. That is why the stress level of the rural students is less. The complexities and highly competitive nature of urban life affects the life of students adversely. They come under tremendous pressure due to high parental expectation, peer and social pressure and also pressure from teacher and institutions to perform outstandingly in their examination and evaluation. This kind of situation automatically puts the students under pressure and as a result they have to experience higher level of stress. Regarding the stream of study, students from Arts stream were found to have higher level of stress than the students from Science and Commerce stream. It has been observed e in Assam that students who score highest marks in their school leaving examination normally take admissions into science stream. It gives them the scope of choosing their career and makes them focused. Commerce stream is also job oriented and provides the students with the scope of getting one job or the other. But in comparison to Science and Commerce stream, Arts stream provides less scope of getting job. The courses provided by Arts stream are not as job oriented which perhaps create stress among the students. Another reason is that most of the students from Arts stream take their courses very lightly and don't follow deep and detailed study. Only just before the examination they are in hurry to complete the course materials which leads them to experience stress of examination.

### **EDUCATIONAL IMPLICATIONS:**

Following educational implications can be drawn from the results of the study:

- 1. The study revealed that though the levels of stress are different, students experience examination stress irrespective of their gender, locality and stream of study. This indicates the necessity of stress management programmes at school level. At the same time the administrators and policy makers need to take this issue seriously and take immediate steps to introduce stress management programmes in educational institutions, especially in the final years of schooling like in 10th and 12th standard.
- 2. The results of the study also showed that female students experience more stress than the male students. So, they should be given special importance. This result will help the teachers, parents and school administration to become extra careful in dealing with the girl students and providing separate counselling and stress management programmes according to their requirement. Similarly, the result also indicates that special care should be taken of the students residing in urban localities as their

examination stress level is also significantly higher.

- 3. It has also been found in the study that students from Arts stream have more stress than the students having Science and Commerce stream of study. One of the main reasons is that the courses provided in the stream of Arts are not job oriented and give little scope to the students to choose their career. It gives an indication to the policy makers that it's time to make appropriate changes in the course content and introduce some new courses. So, apart from the stress management programmes, courses of study should also be designed in such a way that it caters to the future needs of the students of Arts stream.
- 4. The results also point out the necessity of awareness programmes and capacity building programmes to be provided to the parents and teachers so that they can identify those with examination stress and take care of them effectively.

### CONCLUSION

It can be concluded that examination stress is experienced by all the students irrespective of their gender, locality and stream of study. However, we get to see differences among the levels of examination stress of the students across their gender, locality and stream of study. There is therefore a need for policy level and institutional interventions for reducing examination stress among the higher secondary students so that they can face stressful situations and adopt proper coping strategies. Teachers, parents, peers and the society at large have to play a very supportive role in this regard. It will definitely help the students to make their academic life stress free and enjoyable and hopefully lead them towards a better future.

# REFERENCES

- Auerbach, M. S., & Grambling, S. E. (1998). Stress management psychological foundations. U.S.A: Prentice-Hall Inc.
- Aldwin, C. M. (2007). Stress coping and development: An integrative perspective. New York: The Guilford Press.
- Anbumalar, C., Dorothy, A. P., Jaswanti, V. P., Dhandapani, P., & Reniangelin, D. (2017). Gender differences in perceived stress levels and coping strategies among college students. The International Journal of Indian Psychology, 4(4), 22-33.
- Baviskar, M. P., Phalke, V. D., & Phalke, D. B. (2013). Depression, anxiety and stress: A comparative study in arts, commerce & science junior college

- students in rural area of India. Global Research Analysis, 2(11), 183-185.
- Centre, K. C. (2010). *Stress and stress management*. London: Press books.
- Calvarese, M. (2015). The effect of gender on stress factors: An exploratory study among university students. *Social Sciences*, *4*, 1177–1184.
- Davidson, J. (2001). Stress management. Indianapolis: Macmillan USA, Inc.
- Holahan, C. J., & Moos, R. H. (1987). Resource loss, resource gain, and depressive symptoms: A 10 year model. *Journal of Personality and Social Psychology*, 77, 620- 629.
- Kumari, A., & Jain, J. (2014). Examination stress and anxiety: A study of college students. *Global Journal of Multidisciplinary Studies*, 4(1), 31-40.
- Laney, C., Morris, E. K., Bernstein, D. M., Wakefield, B. M., & Loftus, E. F. (2008). Asparagus, a love story: Healthier eating could be just a false memory away. *Experimental Psychology*, *55*, 291-300.
- Landstedt, E., & Gillander, G. K. (2012). Seventeen and stressed do gender and class matter? *Health Sociology Review*, 21(1), 82-98.
- Mathew, S. (2017). A Comparative Study on Academic Stress and Coping Strategies between Adolescents studying in selected urban and rural colleges at Mangalore. *IP International Journal of Comprehensive and Advanced Pharmacology*, 2(4), 124-130.
- Pargman, D. (2006). *Managing performance stress*. New York: Taylor & Francis.
- Pourrajab, M., Rabbani, M., & Kasmaienezhadfard, S. (2014). Different effects of stress on male and female students. *International Journal for the Advancement of Counseling*, 3(3), 31-39.
- Prabhu, P. S. (2015). A Study on academic stress among higher secondary students. *International Journal of Humanities and Social Science Intervention*, 4(10), 63-68.
- Sulaiman, T., Hassan, A., Sapian, V. M., & Abdullah, S. K. (2009). The level of stress among students in urban and rural secondary schools in Malaysia. *European Journal of Social Sciences*, 10(2), 179-184.
- Sonali, S. (2018). A comparative study of academic stress among senior secondary students enrolled in different streams. *Research Guru*, 12(2), 1038-1053.