

## **A Comparative study on stress and its contributing factors among the Graduate and Post-graduate students**

**Harajyoti Mazumdar\*<sup>1</sup>, Dipankar Gogoi<sup>2</sup>, Lipika Buragohain<sup>2</sup> and Nabanita Haloi<sup>3</sup>**

<sup>1</sup>*Department of Biotechnology, Asian Institute of Management and Technology, Assam, India*

<sup>2</sup>*Department of Biotechnology, Asian Institute of Management and Science, Assam, India*

<sup>3</sup>*Department of Environmental Science, Gauhati University, Assam, India*

---

### **ABSTRACT**

*Students stress is an unavoidable phenomenon which is often seen in their lives. Post graduate students were easily target of stress than the graduate students. Factors such as physical and mental, family, job, relationship and social were the main source of stress among the students. There is always a dilemma for the students regarding its performance in exam and to secure a good job. There were some other factors such as Behavioral, psychological and psychosomatic which contributes to the stress. Disturbed relationship and alcohol used show highest and lowest percentage of behavioral factors. Anger, low self esteem, low satisfactions, depression and anxiety were some of the important psychological factors which were observed among students. On the other hand there were different psychosomatic factors such as headache, sleep problems, tachycardia, ulcers and high blood pressure was involved. These factors contribute to the stress among the graduate and post-graduate students. In our study we have found that there were different percentages of stress symptoms among the male and female students. Headache, blood pressure, anxiety, back pain, neck pain, appetite and skin rashes were more predominately observed among females. On other hand poor sleeping patterns, hair falls, erratic moods, heart diseases and depressions was found to be more often in males*

**Key words:** Stress, Behavioral, psychological, psychosomatic, relationship.

---

### **INTRODUCTION**

Stress is an unavoidable phenomenon in every aspects of human life. It is generally an emotional imbalance which may be due to several reasons such as tests, papers and projects, competitive nature within your chosen field, financial worries about school and future job prospects [1]. It was found that college students are more passionate than school age students. They are dreamful, ambitious; need proper guidance in this particular stage. All people have minimum stress but excessive stress may cause anxiety and it's harmful for health. Another report suggests that teenagers always face problems in adjusting with various stresses. Teenagers especially those who are students always face learning problems, career management and also problems in solving personal and social matters. Students are starting to shift from a life that is dependent on others to a life that needs them to release the dependency and start carrying their own responsibilities [2]. College students are often deal with pressures related to finding job or a potential life partner. Also the pressure to earn good grades and to earn a degree is very high [3]. Often college students are more passionate than school age students. Stress mainly comes from academic tests, interpersonal relations, relationship problems, life changes, and career exploration. Such stress may usually cause psychological, physical, and behavioral problems [4]. However, Children are dealing with the challenges of

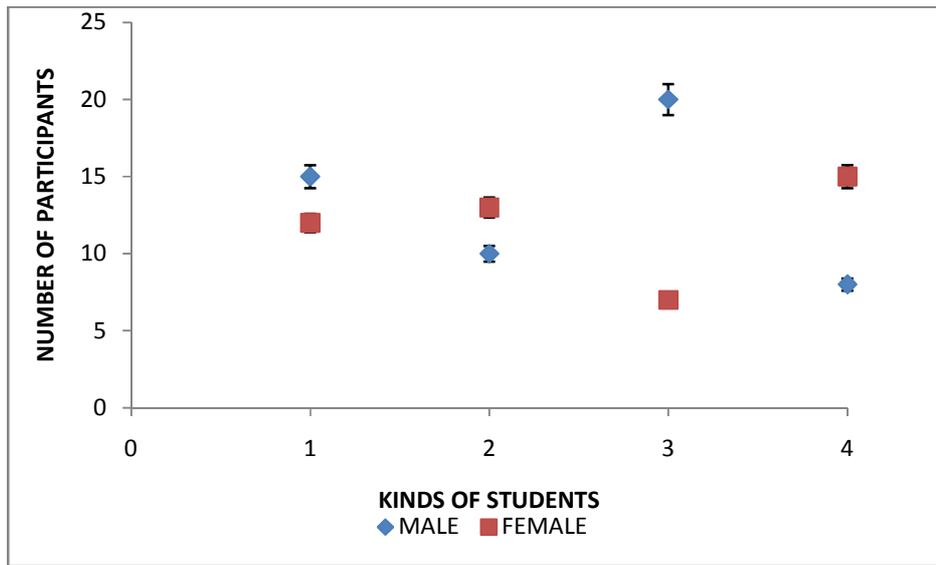
growing. They are going through puberty, meeting the changing expectations of others, and coping with feelings they might not have had before [5]. Another report suggests that earning grade is the not the alone source of stress. There were other potential source like excessive homework, unclear assignment and uncomfortable classroom [6]. By use of the Psychological Distress Inventory, that the top five sources of stress among female college students consisted of financial problems, test pressure, failing a test, being rejected by someone, and relationship break-ups [7]. Some other factors were relations with faculty members and time pressures also added as a source of stress [8]. One of the most important factors is relationship with family and friends, eating and sleeping habits and loneliness may affect students badly [9]. The stress levels are different among students and also difference between male and female. Medical education is perceived as being stressful with negative effects on student's mental health. However, few studies have addressed the influence of gender on stress in medical Students" [10]. Research findings suggested that male students feel stronger stress from family factor than female ones; students in higher grades feel more stress from physical/mental, school, and emotional factors; students who take a student loan also feel more stress from physical/mental, school, and emotional factors [4]. Antihypertensive agents Schiffbases 4'-(6-chloro-5-nitro-2-[4-(3-substituted-phenyl-acryloylamino)-phenylbenzimidazole -1-ylmethyl) -biphenyl-2-carboxylic acid and side chain of different aromatic aldehydes was synthesized from substituted compounds and tested to induce hypertensive in rats [11]. In a report it was found that a biochemical approach of the HbA1c in diabetes associated nephropathy was proposed in Chhattisgarh populations. Results shows fasting blood sugar, post prandial blood sugar and glycosylated hemoglobin was elevated [12]. Same authors also reported that role of glycosylated hemoglobin in diabetes with obesity in Chhattisgarh was studied. They have found that good glycemic control was useful tool to prevent the possibilities of development of diabetes associated obesity [13]. For reductions and neutralizations of effect of free radicals, role of antioxidants is quite important [14]. Another report suggests that the nutritional status, feeding practices and rates of exclusive breast feedings and child immunizations in some area of Nigeria was established. It was reported that adequate counseling of mothers would help and maintain the good nutritional status of children attending infant welfare clinic [15].

#### MATERIALS AND METHODS

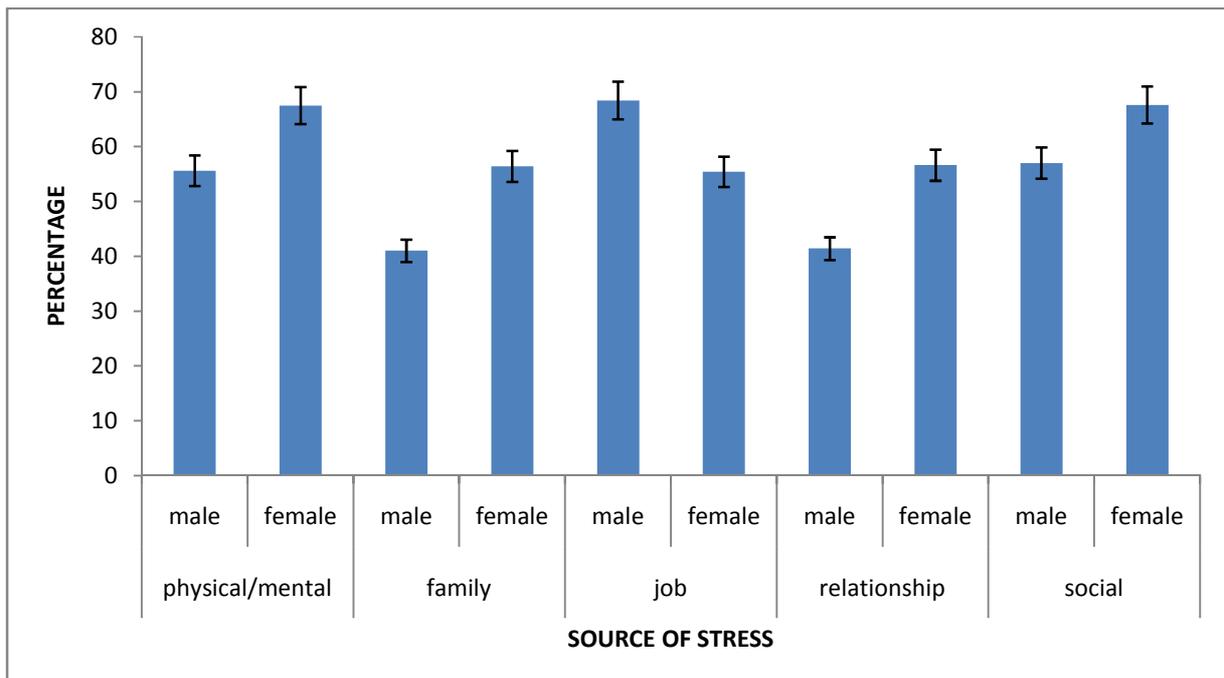
A questionnaire was prepared to study the stress among both undergraduate and post graduate students at different Government and private colleges. A number of 250 college students were involved in this research. From the total, 150 respondents were female and 100 respondents were male. The data analysis includes descriptive analysis. Tool use for the research is questionnaire set with two parts. Part A is about different stress related symptoms. Part B measures stress level in leading a student life in colleges.

#### RESULTS AND DISCUSSION

Stress is a natural phenomenon which cannot be escaped during our lifetimes. Thousands of different kinds of stress may experience throughout the lifetime of peoples. However, the level of stress could vary from very intense to minimal which depends on several factors. Regardless of the level, stress has an effect on a person's physical and emotional well-being. Reactions to stress effects us as well as people with whom we live, work, and encounter on a daily basis. It is important to learn how to recognize when your stress levels are out of control. The most dangerous thing about stress is how easily it can creep up on us. Stress is one kind of mental imbalance, low mental satisfactory condition. This study examined the students' stress during their college life. Stress disturbs the equilibrium of the body. It affects physically, emotionally, and mentally. When individuals experience stress or face demanding situation, they adopt ways of dealing with it, as they cannot remain in a continued state of tension. The signs and symptoms of stress overload can be almost anything. Stress affects the mind, body, and behavior in many ways, and everyone experiences stress differently. It has been found in our report that the various symptoms which lead to stress mostly seen in more numbers in females as compared to males. Out of 250 students, 60% of females are prone to the given symptoms whereas 40% of males are prone to these stress related symptoms. If we carefully observed we will find that the divisions of all the students were not equal, out of 250 students private college graduate includes 15% and 12% of male and female respectively. However private college post graduate includes 10% male and 13% female in this study. In government colleges graduate and post-graduate includes 20% and 8% males respectively. On other hand graduate and post-graduate includes 8% and 15% of females respectively. Stress cannot be easily removed from our lives; however we should try to minimize it. Be realistic, reducing larger tasks to manageable increments and working through one by one. We cannot control life stress, but we can control the effect of stress in us. Focusing on the positive is one of the ways to relieve stress that offers profound results that problems we are facing are easier to solve with a more output approach



**Fig 1: Comparative analysis between male and female participants of different level groups (1- Private college graduate, 2- Private college post graduate, 3- Government graduate and 4- Government Post graduate).**



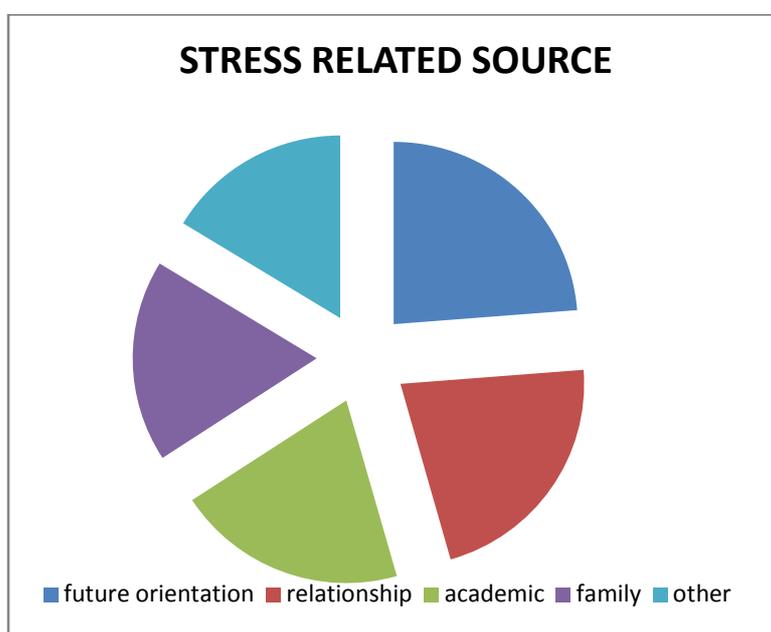
**Fig 2: Different sources of stress among male and female students.**

From these studies, it can be found that college students were highly affected by the stressful condition. Post graduate students were more susceptible to stress due to the increase in the responsibility than the graduate students. Gender wise analyses of the results shown that experience of stress of female is more than male. From this study it is clear that most of stress comes from future orientation. The research pattern being used is descriptive survey research comparing chosen government and private colleges; post graduate and graduate students; male and female. The survey focused on the categories of source of stress which are frustration, anxiousness, irritation, overtired,

depression, anger. In this research, students' perception towards their stress are level as often, sometimes and never based on the answer given in every item in the SSI questionnaire.

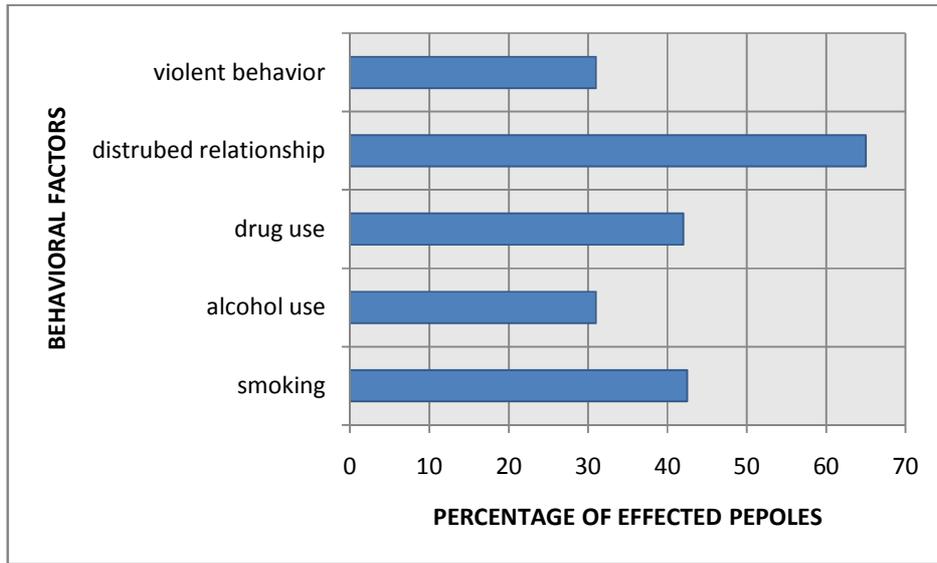
As a whole, this research has produced important information about stress according to factors such as gender and location of students. It is proposed that information is to be looked by students in facing anything that are considered to them as stress. This information shall also give benefit for parents and teachers in helping students to manage stress in the right way.

This paper classified the stress sources among college students. Stress source is significantly differed across different level groups. The result showed that post graduate students felt much more stress in physical/mental factor than the graduate students. College students feel relatively more stressors in the career aspect due to different reasons. If we carefully observed than we will find that physical and mental effect is much higher in females than males by nearly 12% due to over stress. However, only one factor shows more dominant in male than female i.e job while others factors stress factors such as family, relationship and social were more found in females than males.



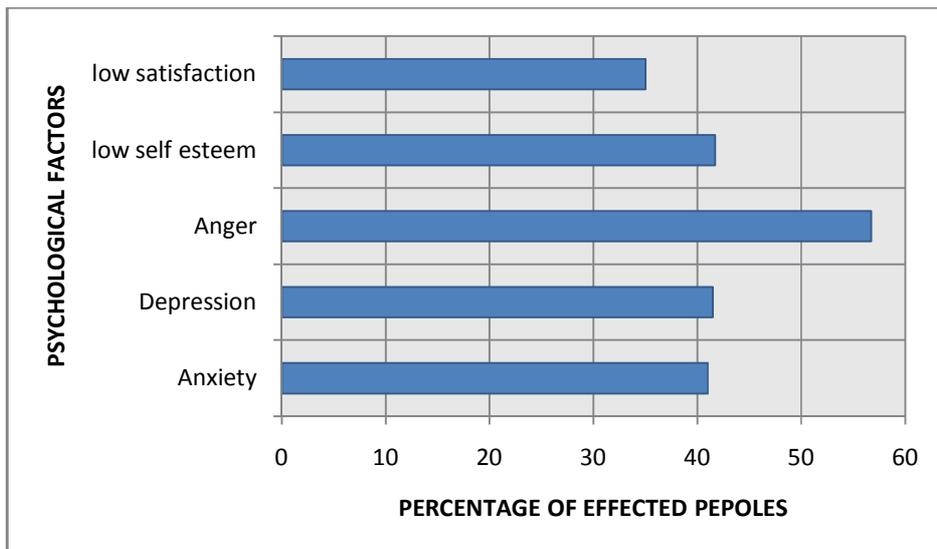
**Fig 3-Stress related source among college students**

The above data analysis showed that out 250 participants 24% are felt much more stress by thinking upon the future aspects, 22% relationship stress, 20% academics, 18% family and 16% other problem. There were some other symptoms which can contribute to stress; these were Behavioral, psychological and psychosomatic factors. By the survey we found following kind of data and by plotting this data on a graph we get the following graphic presentation. If we carefully observed than we found that under behavioral aspects, disturbed relationship contribute more percentages of effected peoples than others. Drugs used are next to the relationship factors which contribute about 42%. While violent behavior and smoking shares same percentages in behavioral aspects. Alcohol used was the lowest percentages added to the behavioral factors. A psychiatrist, psychologist, social workers or qualified counselors may give us better idea for dealing with stress that what we have tried of our owns. A mentor is someone who is skilled at dealing with stress in their lives.



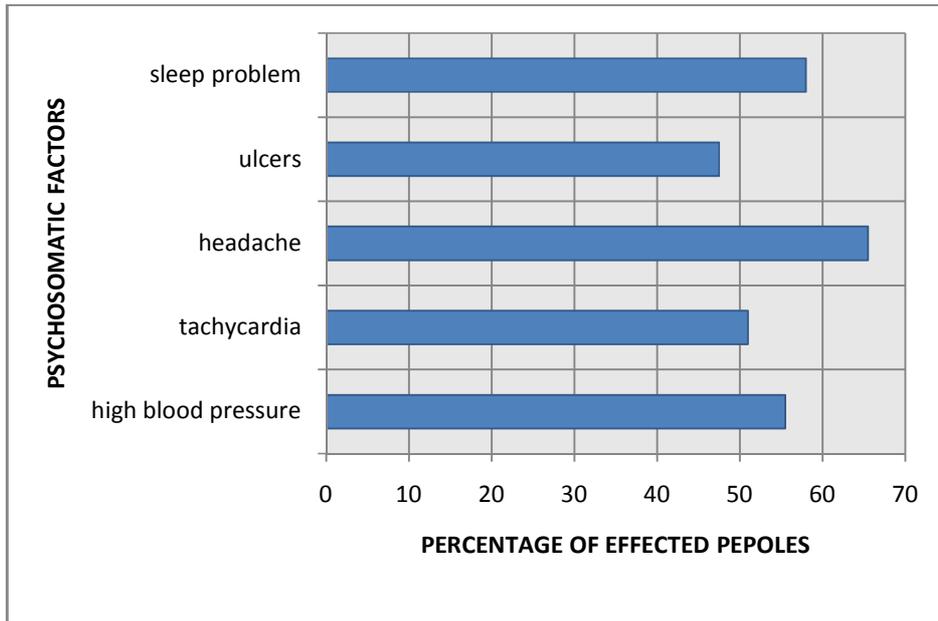
**Fig 4 - Percentage of effected peoples having different Behavioral factors.**

This showed the behavioral condition when stress occur such as violent behavior, disturbed relationship, drug use, alcohol use, smoking etc. Here it is shown that relationship disturbances are mainly affected by the stress.

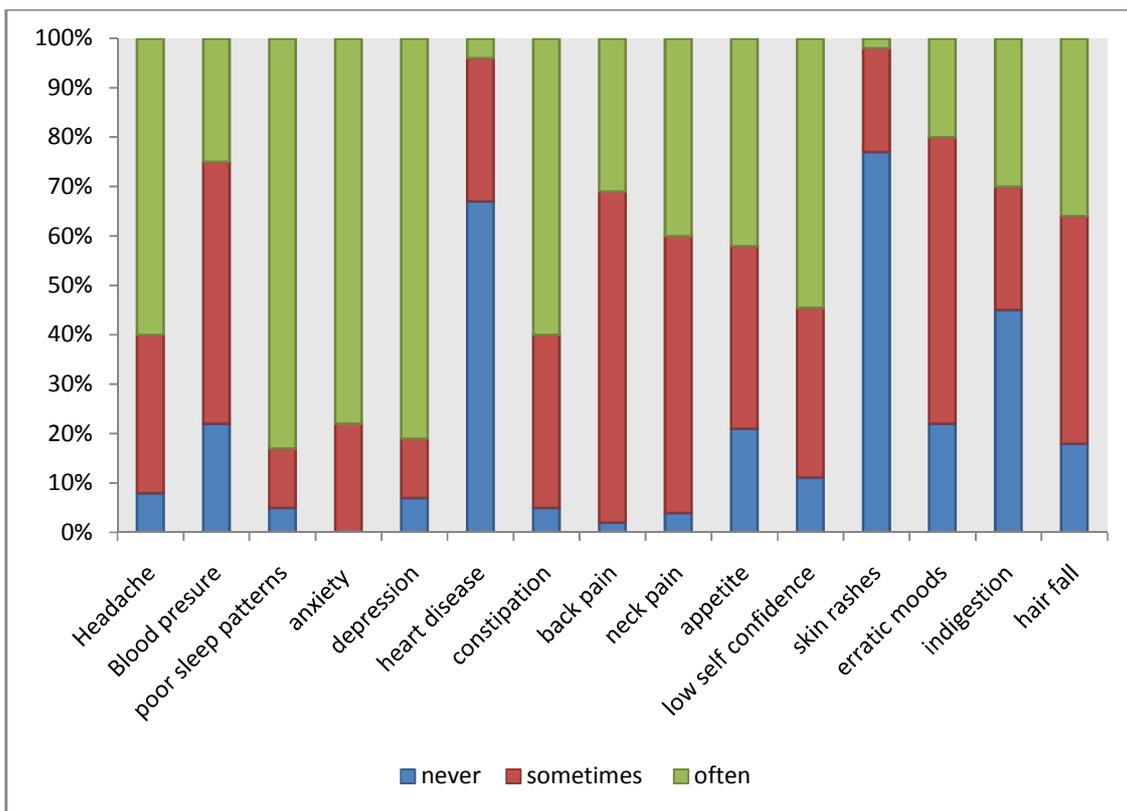


**Fig 5 - Percentage of effected peoples having different Psychological factors.**

Regarding psychological factors, Anger and lower satisfactions levels contribute highest and lowest percentages for the effected peoples. The above is the psychological problem when someone felt in stress. People are must more anger when they trouble in stress. Depressions, Anxiety and Low self esteem were the other factors which contribute stress among the students.



**Fig 6- Percentage of effected peoples having different psychosomatic analysis of the participants.**

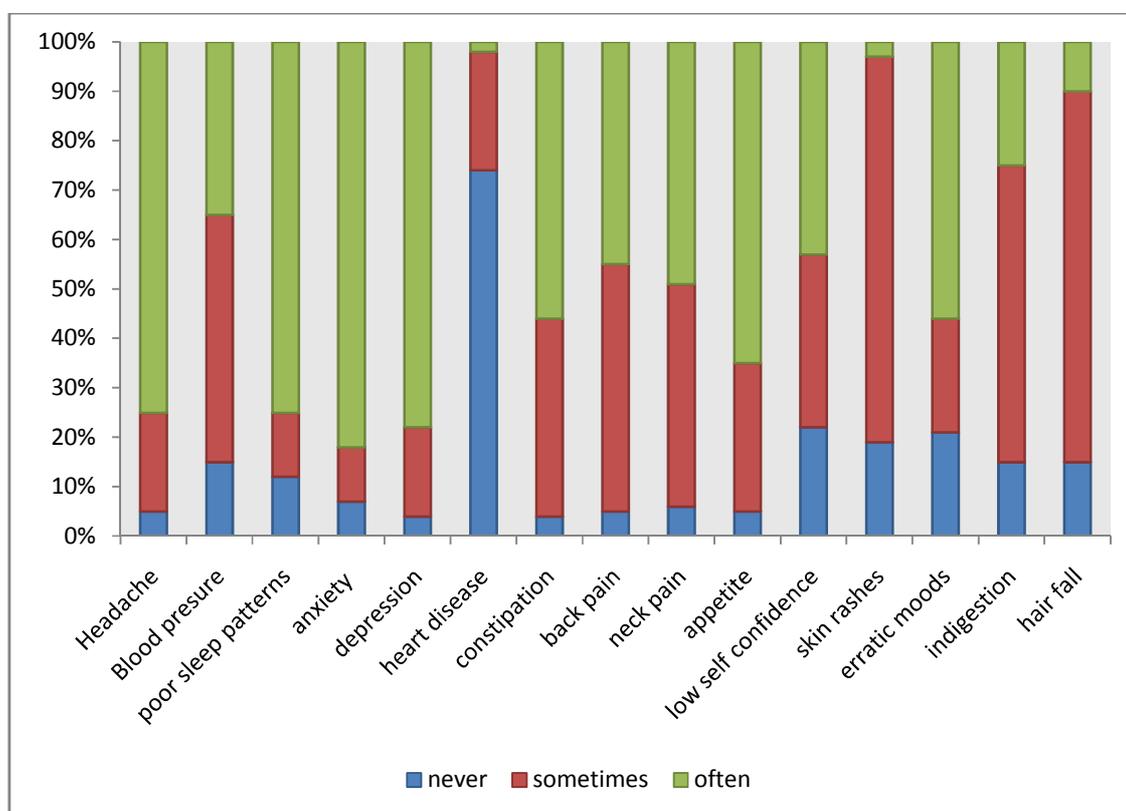


**Fig 7- Different factors of Stress which variably occurs among male.**

There were different symptoms regarding psychosomatic factors. Headache was found in more percentages which lead to major stress among the students. Some more problems are also observed along with these students such as

ulcers, tachycardia, high blood pressures and sleep problem. These all factors lead to stress symptoms which affect all the participants. High blood pressure, headache and sleep problems were mainly observed during exam days. Students were scare about the study during exam days which results in serious stresses among them.

The different factors shows variable results which contribute to stress. However, it was found that there were variable in results of stress among male and females. Headache was found to be often occurs in male but its percentage is found to be higher in females. Increased of about 15 % is noted among the female students is noted than males. Similarly, blood pressures are also occurs in much higher in females than males by 10 %. In case of males very often we found, poor sleep pattern, depression, heart diseases, constipations, low self confidence, indigestions and hair falls symptoms as they found difficult to adjust with stress. Some people would not consider this challenge a type of stress because, having met the challenge, we are satisfied and happy. However, as with most things, too much stress can have negative impacts. When the feeling of satisfaction turns into exhaustions, frustrations or dissatisfaction, or when the challenges at work become too demanding, we begin to see negative sign of stress. Stress can have an impact on our overall health. Our bodies are designed, pre-programmed if we wish, with a set of automatic response to deal with stress.



**Fig 8. Different factors of Stress which variably occurs among female.**

In respect to males, females show often more symptoms in anxiety, back pain, neck pain, appetite and skin rashes. However there is different in the symptoms which rarely and sometimes occur to them. Studies suggest that the inability to adapt to stress is associated with the onset of depression or anxiety. In one study, two-thirds of subjects who experienced a stressful situation had nearly six times the risk of developing depression within a month of stressful events. Some evidence suggests that repeated release of stress hormone produce hyperactivity in the hypothalamus-pituitary-adrenal gain and disrupts normal level of serotonin, the nerve chemical that is critical for feeling of well being. Certainly, stress diminishes quality of life reducing feeling of pleasure and accomplishment and relationship are often threatened.

**Acknowledgments**

The authors thank to all the people who encourages in collecting data and supports to do research. We were also grateful to Dr. H. Baruah Retd. Professor of the Department of Commerce, Gauhati University for his valuable guidance during the investigation.

**REFERENCES**

- [1] Rose, S.E, Neibling, Bradley C and Heckart, Teresa M, *College Student Journal*, **1999**, pp: 2- 6.
- [2] Sulaiman, T, Hassan A, Sopian V.M and Abdullah S.K, *European journal of social sciences*, **2009**, 10(2), pp: 179-184.
- [3] Hirsch, J. K., & Ellis, J. B, *College Student Journal*, **1996**, 30, pp: 377-384.
- [4] Cheng K. W, *Journal of Academic and Business Ethics*, **2009**, 2, pp: 1-8
- [5] Aaron T. E, *School-age connections*, **1994**, 4(2), pp. 1-3
- [6] Kohn J.P and Frazer G.H, *Psychological reports*, **1986**, 59, pp: 415-426.
- [7] Jennifer B. G, *Undergraduate Journal of Psychology*, **2001**, 14, pp: 5-9.
- [8] Sgan-Cohen H.D and Lowental U, *The Journal of the American College Health Associations*, **1988**, 36, pp: 317-321.
- [9] Wright J.J, *Journal of Counseling Psychology*, **1964**, 12 (5), pp: 325-336.
- [10] Mostafa A, Abdel H. E. G and Aly E.H, *Med Educ Online*, **2008**, 13: 12, doi;10.3885/meo.2008.Res00273.
- [11] Sharma M. C, Kohli D. V, Sharma S and Sharma A. D, *Advances in Applied Science Research*, **2010**, 1 (1),pp: 120-132.
- [12] Murugan K, Shrivastava D.K, Patil S.K.B, Sweety L, Debapriya G, Bharti A and Kumar L. S, *Advances in Applied Science Research*, **2010**, 1 (2), pp: 106-113.
- [13] Murugan K, Shrivastava D.K, Patil S.K.B, Sweety L, Debapriya G, Bharti A and Kumar L. S, *Advances in Applied Science Research*, **2010**, 1 (3), pp: 112-117.
- [14] Kumar S, *Advances in Applied Science Research*, **2011**, 2 (1), pp: 129-135.
- [15] Alamu T.O, Atawodi S.E.and Edokpayi J.N, *Advances in Applied Science Research*, **2011**, 2 (4), pp:58-64.