

A Study on Anxiety and Stress among Higher Secondary Students of Udyanath Autonomous College of Science and Technology

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ABSTRACT - Higher education is a stressful period in student's life which they need to cope with due to various reasons as living away from the families, a heavy syllabus and inefficiency in higher education programs. A mentally fit student can initiate proper social relationships, enthusiastic to learn with ambition to implement his/her plans in the future. Students are at a crucial stage of development as they are more subjected to experience mental illnesses. The present empirical investigation aimed to study the effect of stress and anxiety among higher secondary student. The objective of the research was examine to study the relationship between anxiety and stress among higher secondary student , to study the effect of gender on anxiety and stress among higher secondary student and to study the effect of anxiety and stress among higher secondary student of U.N.(Auto)college of science and technology. 150 subjects were selected by using random sampling technique and further it was subdivide into 50 from each steam(arts, science and commerce have 25 male and 25 female). BAI (Burns Anxiety Inventory) and HIS (Harris Stress Inventory) was administered to the subjects. Descriptive statistics, correlation t- test and ANOVA were used to study statistically analyze the data. The result showed that there is exist a positive significant relationship between anxiety and stress among higher secondary students, there is no exist significant difference between among boy and girl with regard to their anxiety score, there is exist significant difference among boy and girl with regard to their score on stress . Higher secondary girl students are more stressed than higher secondary boys students , there is no exist difference among arts, science and commerce steam with regard to their anxiety score, there is exist significant difference among arts, science and commerce with regard to their stress score and arts steam are more stressed than science and commerce steam student .

KEYWORDS – Stress, anxiety, BAS, HIS, Higher secondary student, Descriptive statistics, t- test, correlation and ANOVA.

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I. INTRODUCTION

Higher education is a stressful period in student's life which they need to cope with due to various reasons as living away from the families, a heavy syllabus and inefficiency in higher education programs. A mentally fit student can initiate proper social relationships, enthusiastic to learn with ambition to implement his/her plans in the future. Students are at a crucial stage of development as they are more subjected to experience mental illnesses. Depression and anxiety are common, serious and debilitating mental health problems and are afflicting adolescents and student population to a large extent. The adverse effect of psychological distress among students reduces their self-esteem which might cause many problems at both personal and professional levels leading to college dropout, impaired ability to work effectively, poor academic, disturbed relationship and suicide.

Student represents the society's investment for future. Their mental health and wellbeing are important not only in its own right but also as a factor contributing to the larger society's well being. College students frequently have more complex problems today than they did over decade ago common stressors and anxiety in college include greater academic demands and new environment, changes in family relations, changes in social life, exposure to new people ideas and temptations.

College life is one of the most scintillating and memorable experience in an adolescents life. It is in college that an adolescent enjoys the vibrant environment, the company of friends, and the various academic and

co-curricular activities, which enriches, nurtures and prepares the adolescent for adulthood. College students are at a critical period where they will enter adulthood. They are expected to be the elites in the society. Thus, they should enhance their stress management abilities so as to live a healthy life after entering the society. Adolescence is a dangerous period of time where young people experience self organization and role confusion. For them, 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.

Anxiety is an emotion characterized by an unpleasant state of inner turmoil, often accompanied by nervous behavior such as pacing back and forth, somatic complaints, and rumination. It is the subjectively unpleasant feelings of dread over anticipated events, such as the feeling of imminent death. Anxiety is not the same as fear, which is a response to a real or perceived immediate threat, whereas anxiety involves the expectation of future threat. Anxiety is a feeling of uneasiness and worry, usually generalized and unfocused as an overreaction to a situation that is only subjectively seen as menacing. It is often accompanied by muscular tension, restlessness, fatigue and problems in concentration.

People facing anxiety may withdraw from situations which have provoked anxiety in the past. There are various types of anxiety. Existential anxiety can occur when a person faces angst, an existential crisis, or nihilistic feelings. People can also face mathematical anxiety, somatic anxiety, stage fright, or test anxiety. Social anxiety and stranger anxiety are caused when people are apprehensive around strangers or other people in general. Stress hormones released in an anxious state have an impact on bowel function and can manifest physical symptoms that may contribute to or exacerbate IBS. Anxiety is often experienced by those who have an OCD and is an acute presence in panic disorder. The first step in the management of a person with anxiety symptoms involves evaluating the possible presence of an underlying medical cause, whose recognition is essential in order to decide the correct treatment. Anxiety symptoms may mask an organic disease, or appear associated with or as a result of a medical disorder.

Stress is a many faceted process that occurs in reaction to events or situations in our environment termed stressor. An interesting feature of stress is the wide range of physical and psychological reaction that different people have to the same event; some many interpret an event as stressful, whereas others simply take it stride. Moreover, a particular person may react quite differently to the same stressor at different points in the time.

Stress is the body's reaction to any change that requires an adjustment or response. The body reacts to these changes with physical, mental, and emotional responses. Stress is a normal part of life. Experience stress from environment, body, and thoughts. Even positive life changes such as a promotion, a mortgage, or the birth of a child produce stress. Stress is a feeling of strain and pressure. Stress is a type of psychological pain. Small amounts of stress may be desired, beneficial, and even healthy. Positive stress helps improve athletic performance. It also plays a factor in motivation, adaptation, and reaction to the environment. Excessive amounts of stress, however, may lead to bodily harm. Stress can increase the risk of strokes, heart attacks, ulcers, and mental illnesses such as depression.

II. RATIONAL

Now a day the world is fully competitive. People are more conscious about their future so that the competition is in between is very high. In the area of sports, job, business and other sector is more competition between people. The life of college student as fully stressed and anxious about their future. They have interest in attending classes but they have inability to understand the subject and they have various academic stressors including exam stress. Academic stress means feeling of anxiety and stress over every performance. It leads to student being unable to perform their best on the examinations. At their college life there is a range of stressor and anxiety and they always worry about the grades and marks or carrier and they have also parental pressure competition and sports etc .many younger student have panic attack and burnout anxiety but the same student is not always stressful for all people and all student don't undergo the same feelings.

III. OBJECTIVE

1. To study the relationship between anxiety and stress among higher secondary students of UN (Auto) college of science & technology.
2. To study the effect of gender on anxiety and stress among higher secondary students of UN (Auto) college science & technology.
3. To study the effect of stream on anxiety and stress among higher secondary students of UN (Auto) college of science & technology.

IV. METHODOLOGY

The present study is descriptive study or quantitative study. In this study, the examiner study the relationship among anxiety and stress, gender difference, effect of gender and effect of stream on anxiety and stress among higher secondary students of UN (Auto) College of Science & Technology. The sample consisted of 150 higher secondary students (50 Arts, 50 Science and 50 Commerce) within the age of 16-17 years from Udynath autonomous college of science & technology, Cuttack, Odisha. The education system and standard of education of all streams were almost same. Out of 150 higher secondary students, 75 were boys and 75 were girls. The BAI (Burns Anxiety Inventory) and HSI (Haris Stress Inventory) test are used for data collection from the sample. Each participants were administered both the questionnaire individually. It takes 10 days to complete the data collection. Strict confidentiality was ensured. The study was conducted in compliance with 'Ethical' principles or moral manner.

V. RESULT

The obtained data will be analyzed statistically using MS Excel and SPSS 20 version using descriptive statistics, co relational test and one way ANOVA . correlation test is used to the study the relationship between stress and anxiety, where as One way ANOVA used to study the effect of gender on anxiety and stress and the effect of steam on anxiety and stress .

Table No-I
Descriptive statistics

DV	Higher secondary students	N	Mean	SD
Anxiety	Boy	75	27.48	10.95
	Girl	75	35.47	14.87
	Total	150	31.47	13.62
Stress	Boy	75	145.23	17.48
	Girl	75	152.61	19.66
	Total	150	148.92	18.90

Table 1 show that the anxiety scores of boy is less (27.48) as compared to the anxiety score of girl (35.47). So girls are more anxiety than boys. It also revealed that the stress score of boy is less (145.23) as compared to the stress of girl (152.61). So girls are more stress than boys. Boys show low level of anxiety and stress as compared to girls. Girls are more anxiety and stress as compared to boys.

Figure No-I

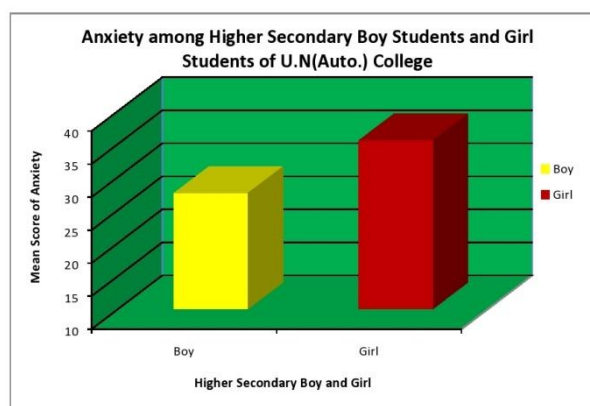


Figure I: The bar diagram showing anxiety among higher secondary boy and girl students of U.N (Auto.) College of Science & Technology. The above figure indicates that girl is more anxiety as compared to their boy counterparts.

Figure No-II

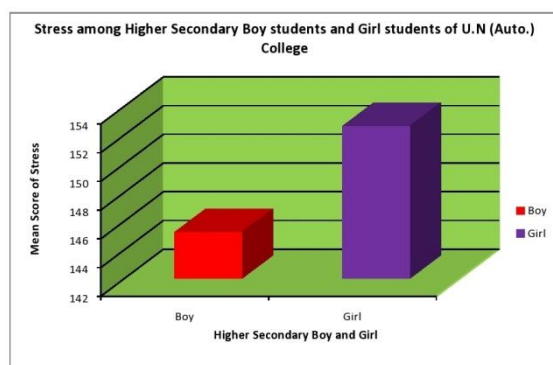


Figure II: The bar diagram showing stress among higher secondary boy and girl students of U.N (Auto.) College of Science & Technology. The above figure indicates that girl is more stressed as compared to their boy counterparts.

Table No-II
Correlation analysis

Variable	Anxiety	Stress
Anxiety	1.00	0.451**
Stress	0.451**	1.00

**correlation is significant at the 0.01 level

Table –II revealed that there exist a positive correlation between anxiety and stress. The correlation coefficient between stress and depression is 0.451. The obtained correlation of coefficient is significant at the 0.01 level of significance. So, as the level of anxiety increases the level of stress also increases among higher secondary students. High level of anxiety is related with high level of stress. A student with high level of anxiety is more stressed and vice versa.

Figure No-III

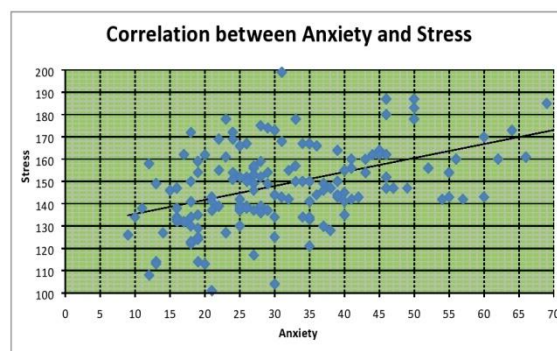


Figure-III showing the positive relationship between anxiety and stress among higher secondary students. It also revealed that when anxiety will be increase definitely stress will also be increase on higher secondary student.

Table No-IV
ANOVA showing the effect of Gender on anxiety and stress

DV	Source of Variance	Sum of square	Df	Mean square	F	Sig.
Anxiety	Between groups	73.500	1	73.500	0.395	0.531
	Within groups	27557.893	148	186.22		
	Total	27631.393	149			
Stress	Between groups	2782.107	1	2782.107	8.159	0.005
	Within groups	50466.933	148	340.993		
	Total	53249.040	149			

Table-III showed that the effect of gender upon anxiety is not significant, $F(1, 148) = 0.395, p = 0.531$. So there is no difference between higher secondary student of boy and girls with regard to their score on anxiety. Higher secondary students of UN (Auto) college are experience same level of anxiety. The effect of gender upon stress is significant, $F(1, 148) = 8.159, p = 0.005$. There exists a significant difference between higher secondary boy and girl students with regard to their scores on stress. Higher secondary girl students are more stressed ($M = 152.61$) than higher secondary boy students ($M = 145.23$).

Table No-V

DV	Stream	N	Mean	SD
Anxiety	Arts	50	30.22	9.73
	Science	50	33.94	16.359
	Commerce	50	30.26	13.868
	Total	150	31.47	13.618
Stress	Arts	50	159.22	13.225
	Science	50	145.08	19.480
	Commerce	50	142.46	19.143
	Total	150	148.92	18.904

Table V show that the anxiety scores of science stream students are higher (33.94) as compared to the anxiety score of art (30.22) and commerce stream (30.26) students. So science stream students are more anxiety than arts and commerce stream students. It also revealed that the stress score of art stream students are higher (159.22) as compared to the stress score of science (145.08) and commerce stream (142.46) students. So arts stream students are more stress than science and commerce stream students. Arts & commerce stream students show low level of anxiety and science & commerce stream students show low level of stress. Science stream students show more anxiety and art stream students show more stress.

Figure No-IV

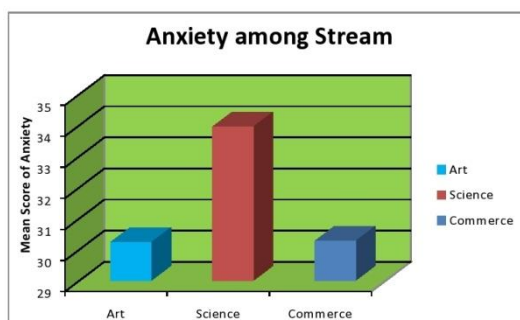


Figure IV: The bar diagram showing anxiety among stream of U.N (Auto.) College of Science & Technology. The above figure indicates that science stream students are more anxiety as compared to art & commerce stream students.

Figure No-V

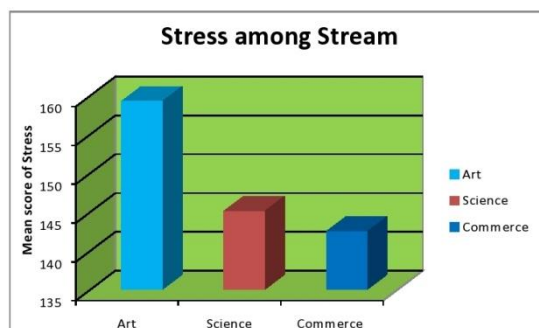


Figure V: The bar diagram showing stress among stream of U.N (Auto.) College of Science & Technology. The above figure indicates that art stream students are more stressed as compared to science & commerce stream students.

Table No-VI
Anova showing the effect of stream on anxiety and stress

DV	Source of Variance	Sum of square	DF	Mean square	F	Sig.
Anxiety	Between groups	456.373	2	228.187	1.234	.294
	Within groups	27175.020	147	184.864		
	Total	27631.393	149			
Stress	Between groups	8128.360	2	4064.180	13.241	.000
	Within groups	45120.680	147	306.943		
	Total	53249.040	149			

Table VI showed that the effect of stream upon anxiety is not significant, $F(2, 147) = 1.234, p = 0.294$. So there is no difference between stream with regard to their score on anxiety. Stream of UN (Auto) college are experience same level of anxiety. The effect of stream upon stress is significant, $F(2, 147) = 13.241, p = 0.000$. There exists a significant difference between stream with regard to their scores on stress. Art stream student of UN (Auto) college are more stressed ($M = 159.22$) than science (145.08) & commerce stream students ($M = 142.46$).

There is exist a positive significant relationship between anxiety and stress among higher secondary students of UN (Auto) college of science & technology.

There is no exist significant difference among boy and girl with regard to their anxiety score.

There is exist significant difference among boy and girl with regard to their score on stress.

Higher secondary girl students are more stressed than higher secondary boy students of UN (Auto) college of science & technology.

There is no exist significant difference among arts, science & commerce stream with regard to their anxiety score.

There is exist significant difference among arts, science & commerce stream with regard to their stress score.

Arts stream students are more stressed than science & commerce stream students.

VI. CONCLUSION

From the above analysis, girls are more anxious and stressed than boys in the Udayanath autonomous college of science and technology because girls are more facing problem for communication. The Udayanath autonomous college is situated in the rural area due to longer time they feel hesitate to travel in the bus around one hour they used to travel. There is a major cause that the girls are more stressed and anxious in comparison to boys in our culture boys are free to travel rather than girls.

Another factor is sociocultural factors considered to be major causes of stress and anxiety. Girls are more stressed and anxious because our things have been rooted in the society that boys are focused in their study than girls. However now a day we are leaving in a modern society but it has been rooted deeply in our society that girls are burden for their parents. So, girls are having limited time to complete their study and after that they get married at younger age. So it is a major cause that girls are more venerable to stress and anxiety.

India is being called as a poverty country. so, many of families belong to middle class family .so parents are giving more opportunities to boys rather than girls they want that in these less amount of salary boy s should study rather than girls, it's a great myth of Indian parents that boys can take more responsibility of the family member and can solve family problems like finical burden rather than girls.

Health and hygienic is an important factor that girls are venerable to stress and anxiety. During menstruation girls are more venerable towards mood swings, stomach pain, back pain, vomiting and headache. Girls are became anaemic .so , in those days girls need more rest but due to longer distance of college they used to travel for a longer period that's why they feel more stressed and anxious .

Performance pressure is also a major cause that girls are stress and anxious .girls are facing challenges including family members and siblings that they can also sussed in their life and their ambition through study , so performance can also lead to anxiety and stress.

Another one is in our Indian culture girls take more responsibility to do work in home like cooking managing family problems taking care of elder and other .family pressure can also lead to anxiety and stress.

Early Child marriage is also a major factor of creating anxiety and stress among girls now a days. After passing matriculation girls are getting married due to family pressure, the girls who were continuing their study after marriage, they have lot of family burdens, work pressure, they also become mother with other family burdens during study, they don't able to concentrate on their study which create stress and anxiety.

From the result table 2 it was found that there is exist a positive significant relationship between anxiety and stress among higher secondary students of U.N college of Sc. &Tech. Academic stressor include the student perception of the extensive knowledge base required and the perception of an inadequate time to develop it. Student report experiencing academic stress at predictable time each semester with the greatest source of academic stress resulting from taking and studying from exams, grade comparison and large amount of time. From the results indicate that students with high level of stress create high level of anxiety.

From the study there is existing significant difference among boys and girls. It was found that there is no exist significant difference between boys and girls regarding anxiety (i.e. 31.47). But there is significant difference among boys and girls regarding stress (i.e.141.92).From the result table 1 students are more stressed.

From the result table 3 it was found that there is no significant difference among arts, science and commerce regarding anxiety (i.e. 31.47) but there is existing difference among arts science and commerce regarding stress (141.92) and from the data analysis it was found that arts students are more stresses than science & commerce students.

According to the study, it was found that arts students were more *stressed*. It is clear that it may be related to the uncertainty regarding future job option for arts students. Unfortunately arts are still considered secondary to science and commerce which provides better employment opportunities. Often students who are unable to get science resort to taking arts again will. Its affect their mind's frame.

Another factor is discrimination is a major cause s of creating stress in arts stress though it is a social factor that is framed in peoples mind arts students has no knowledge in comparison to science and commerce students. Arts students are facing more complications than other stream. They became shameful for participating in different activities. They feel anxious and hesitate to speak in English in front of everyone. So speaking English also creates stress.

We all know college time is an imperative part of our lives. It is the fundamental towards unravelling ones exact possibilities to lead a highly proficient life. At same time, college life is a period of various biological, emotional, social ups and downs. In today's time of extraordinary struggle and loads of interference, it is difficult for any student to stand well balanced. College student and one of the most exposed sets of people who could be inclined to mental health matters.

The present study indicates that the female higher secondary students are more anxious and stressed in comparison to male of U.N (Auto) college of Sc. and Tech. Students are one of the most common victims of stress and anxiety. Factors such as financial expenses, over commitment, family expectations, deadlines and workload all include stress in students. While a mild amount of stress in students is very useful and acts as a motivation for students. Too much stress can interfere with their daily lives. When built over time, stress can give rise to a host of serious problems such as depression and anxiety..Managing stress and anxiety in its early stages can help maximize the college experience and opportunities for students.

Women have closed the gender gap in college enrolment, but another gap has widened: College women are working harder and feeling more stress while their male counterparts are having a good time. First year students reported more chronic stressors than other students, perhaps an indication that the initial adjustment period for new students presents unique challenges that potentially tax their coping capabilities. Other research has shown that first-generation college students experience more somatic symptoms associated with stress and lower academic self-efficacy than other students.

During interaction with them they reported various factors causes stress among them. Stressful issues among female are the financial, academic problems, parental pressure, academic burden, competition among peer groups, long hour duration of each period, unexpected fear for career achievement. Stress effects on the female more especially in academic career. It was also interesting to highlight that significant difference in the perception male and female students regarding the stressors. These various perceptions can be attributed to the male and female attitude.

From the co relational study it was revealed that there exist a positive correlation between anxiety and stress. The correlation coefficient between stress and depression is 0.451. The obtained correlation of coefficient is significant at the 0.01 level of significance. So, as the level of anxiety increases the level of stress also increases among higher secondary students. High level of anxiety is related with high level of stress. A student with high level of anxiety is more stressed and vice versa.

Compared to those studies, this research has shown a higher incidence of high anxiety and stress levels, and a higher anxiety score. At professions from the field of health, anxiety and stress among professionals are prevailing, as they are in direct and unceasing contact with pain, academic pressure, parental conflict, anguish, fear, loss which may unleash physical, emotional consequences, besides interfering with the quality of care. This

may extend to students, who are still unprepared psychologically for dealing with such issues. However, other reasons may underlie the elevated anxiety and stress levels in college students. Most of the students from this particular school present a high workload, being forced to divide their time between study, work, and caring for their family and home.

Another study with the same kind of population has concluded that one of the most stress related factors are of psychosocial nature, derived from college context and their difficulty in combining studies with their personal lives. This point out a necessity of creating alternatives to prevent these stress factors perceived by students. However, the positive correlations between anxiety and stress resulting in the present study accept the hypothesis that when there is increase in stress level, anxiety levels are also increased.

The finding also indicates that arts students are more stressed than science and commerce and science students are more anxious than arts and commerce students.

Students who were studying arts they had a greater stress level regarding various factors. According Indian society system, arts stream does not appreciated by them, it was deeply grounded that only lower grade students only take arts, which highly misinterpreted by the parents also. So it is a major factor which caused stress among them. They became internally bullied by the society .Though the students who secured more marks they also goes to science stream instead of arts and commerce by fear and took admission. In Science there is vast course, unwillingly they get anxious about the exam, about the right path they will choose after passing which leads them to do suicide also. Because they get confused about the right path and became frustrated which creates depression also?

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