



A CORRELATIONAL STUDY OF STRESS AND EMOTIONAL INTELLIGENCE OF SECONDARY SCHOOL STUDENTS IN DEHRADUN

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INTRODUCTION

Life is becoming complex day by day. In the present circumstances youth as well as children are facing difficulties which are giving rise to many psychometric problems such as anxiety, tension and emotional upsets in day to day life. Emotional pressure is increasing at an alarming rate leading to unrest and frustration which has a negative impact on the mental health. We, human beings, are constantly striving to establish a satisfactory relationship with our environment through the process of adjustment in order to live happily and function effectively.

But the process of adjustment or of attaining and enjoying mental health is not always easy. Our needs cannot always be adequately satisfied in all situations. We have to face other's attitudes that are sometimes hostile like criticism, fault finding, nagging, scolding, scorm and ridicule. So only a person who is emotionally intelligent will have a better adjustment with himself as well as others. Developing emotional skills surely can lead to better mental health leading to effective living. People who are emotionally intelligent, who know how to manage their feelings well and who can deal effectively with others feelings are at an advantage in every domain of life.

1.1 Stress

Stress is a term that is commonly used today but has become increasingly difficult to define. It shares, to some extent, common meanings in both the biological and psychological sciences. Stress typically describes a negative concept that can have an impact on one's mental and physical well-being, but it is unclear what exactly defines stress and whether or not stress is a cause, an effect, or the process connecting the two. With organisms as complex as humans, stress can take on In general, stress is related to both external and internal factors. External factors include the physical environment, including your job, your relationships with others, your home, and all the situations, challenges, difficulties, and expectations you're confronted with on a daily basis. Internal factors determine your body's ability to respond to, and deal with, the external stress-inducing factors. Internal factors which influence your ability to handle stress include your

nutritional status, overall health and fitness levels, emotional well-being, and the amount of sleep and rest you get.

Stress has driven evolutionary change (the development and natural selection of species over time). Thus, the species that adapted best to the causes of stress (stressors) have survived and evolved into the plant and animal kingdoms we now observe.

1.2 A brief history of stress

A key to the understanding of the negative aspects of stress is the concept of milieu interieur (the internal environment of the body), which was first advanced by the French physiologist Claude Bernard. In this concept, he described the principles of dynamic equilibrium. In dynamic equilibrium, constancy, a steady state (situation) in the internal bodily environment, is essential to survival. Therefore, external changes in the environment or external forces that change the internal balance must be reacted to and compensated for if the organism is to survive. Examples of such external forces include temperature, oxygen concentration in the air, the expenditure of energy, and the presence of predators. In addition, diseases were also stressors that threatened the constancy of the milieu interieur.

The neurologist Walter Cannon coined the term homeostasis to further define the dynamic equilibrium that Bernard had described. He also was the first credited with recognizing that stressors could be emotional as well as physical. Through his experiments, he demonstrated the "fight or flight" response that man and other animals share when threatened. Further, Cannon traced these reactions to the release of powerful neurotransmitters from a part of the adrenal gland, the medulla. (Neurotransmitters are the body's chemicals that carry messages to and from the nerves.) The adrenal medulla secretes two neurotransmitters, epinephrine (also called adrenaline) and norepinephrine (noradrenaline), in the response to stress. The release of these neurotransmitters leads to the physiologic effects seen in the fight or flight response, for example, a rapid heart rate, increased alertness, etc.

Hans Selye, another early scientist who is known to have studied stress, extended Cannon's observations. He included, as part of the body's stress response system, the pituitary gland, a small gland at the base of the brain. He described the control by this gland of the secretion of hormones (for example, cortisol) that are important in the physiological response to stress by the other part of the adrenal gland known as the cortex. Additionally, Selye actually introduced the term stress from physics and engineering and defined it as "mutual actions of forces that take place across any section of the body, physical or psychological."

In his experiments, Selye induced stress in rats in a variety of ways. He found typical and constant psychological and physical responses to the adverse situations that were imposed on the rats. In rats exposed to constant stress, he observed enlargement of the adrenal glands, gastrointestinal ulcers, and a wasting away (atrophy) of the immune (defense) system. He called these responses to stress the general adaptation (adjustment) or stress syndrome. He discovered that these processes, which were adaptive (healthy, appropriate adjustment) and normal for the organism in warding off stress, could become much like illnesses. That is, the adaptive

processes, if they were excessive, could damage the body. This observation, then, was the beginning of an understanding of why stress, really over stress, can be harmful, and why the word stress has earned such a bad name.

DIMENSIONS OF STRESS

Physical dimension

Physically, high levels of stress have been linked to changes in appetite and sleep patterns (either increases or decreases), weight gain or loss, and other health issues like high blood pressure and ulcers. Physical signs of stress in teens include tiredness or fatigue, headaches, constipation, nausea and dizziness, palpitations, and loss of appetite. Your child may lose interest in sports and other physical activities as well.

Behavioral Dimension

Increased levels of stress can also result in behavioral changes like alcohol and substance use and abuse, and absentee issues. It can also compromise our relationships with others. As stress increases, we become less capable of positive interactions with others. Common symptoms of stress in teens often include behavioral changes like eating or sleeping too little or too much. Your teen may also seem fidgety and display nervous habits like nail biting, restless pacing, moving around constantly and so on.

Affective Dimension

Likewise, at the affective level one's emotions can be affected by stress. Irritability, rapid mood swings, unpredictable anger, and sadness are all accentuated by increased stress levels. Teens who are stressed aren't the most excited lot. They are evidently unhappy and may seem depressed. Stressed teens may also seem agitated, anxious, aloof and irritable. They get angry and overwhelmed easily by simple things. The next time your teenager snaps at you for no reason, you could know that he is stressed.

Cognitive Dimension

The cognitive manifestations of stress have to do with our thinking and thought processes. If one's stress level is elevated and remains unchecked, concentration, focus, organization, and clarity of thought can be compromised. Elevated stress levels can also affect one's ability to remember important details, and to listen to others. Time management and organization can all suffer in the cognitive realm when stress increases. Stress in teens can also impact their cognitive abilities like memory. You may think that your teen is neglecting his chores or being careless but for all you know, he may have been stressed and forgot about it. Other cognitive symptoms include the inability to focus, negative perspective, and poor judgment.

According to **Salovey and Mayer (1990)**: "Emotional Intelligence is the ability to monitor one's

own and other's feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions."

According to **Daniel Goleman (1995)**: "Emotional Intelligence is the ability of realizing one's own feelings as well as the feelings of others in order to build up self inducement to manage personal emotions and the emotions aroused from various associations."

Cooper and Sawaf (1997) in their book 'Executive EQ' defined Emotional Intelligence as "the personal ability to perceive, understand and apply the power of knowing the mood, as the ground of forces and data to build up associations to influence people."

Singh, Dalip (2001) defined Emotional Intelligence" as knowing what feels good, what feels bad and how to get from bad to good."

1.10 STATEMENT OF THE STUDY:

A CORRELATIONAL STUDY OF STRESS AND EMOTIONAL INTELLIGENCE OF SECONDARY SCHOOL STUDENTS IN DEHRADUN

OPERATIONAL DEFINITIONS OF KEY TERMS:

➤ **Stress:** Stress is simply a fact of nature forces from the inside or outside world affecting the individual. The individual responds to stress in ways that affect the individual as well as their environment. Because of the overabundance of stress in our modern lives, we usually think of stress as a negative experience, but from a biological point of view, stress can be a neutral, negative, or positive experience. In the present study, the investigator will use stress scale by Pallavi Bhatnagar, Megha Singh, Manoj Pandey, Sandhya and Amitabh (2011) was used to measure stress in students.

➤ **Emotional intelligence:** According to Daniel Goleman (1995): "Emotional Intelligence is the ability of realizing one's own feelings as well as the feelings of others in order to build up self-inducement to manage personal emotions and the emotions aroused from various associations." In the present study, Emotional intelligence Scale by Anukool Hyde (Indore), Sanjyot Pethe (Ahmedabad) and Upender Dhar (Indore) (2001), was used.

➤ **Secondary School Students:** Secondary school level is an educational level, not beyond grade 12, at which secondary education is provided. For example, a school with grades 7-12, 8-12, 9-12, or 10-12 may be classified as secondary school. And the students studying in secondary school are secondary school students. In the present study the investigator considered students of 9th and 10th grades as secondary school students.

OBJECTIVES OF THE STUDY:

1. To study the emotional intelligence of secondary school students.

2. To study the stress in secondary school students.
3. To study the relationship between stress and Emotional intelligence of secondary school students.
4. To study the difference in the stress of students scoring high and low on Emotional intelligence.
5. To study the relationship between stress and Emotional intelligence of secondary school students gender wise.
6. To study the difference in the stress of students scoring high and low on Emotional intelligence gender wise.

HYPOTHESES OF THE STUDY:

1. There exists no relationship between stress and emotional intelligence of secondary school students.
2. There exists no significant difference in the stress of students scoring high and low on Emotional Intelligence.
3. There exists no relationship between stress and emotional intelligence of secondary school student's gender wise.
4. There exists no significant difference in the stress of students scoring high and low on Emotional intelligence gender wise.

DELIMITATIONS OF THE STUDY

1. The study will be delimited to the schools of Dehradun district only.
2. Number of students will be delimited- to 160 (80 boys and 80 girls).
3. The study will be confined to students of Class IX and X only.

METHOD

Research is a purposive, scientific and a deliberate activity. It is well-organized activity and it requires one to proceed in well-defined lines along a definite direction. Numerous are the ways by which a research study can be conducted. Hence choice of appropriate method is a necessary condition for productive research. This is to be done keeping in view the aim of the study and the nature of the problem. The present study has been conducted by employing descriptive survey method of research.

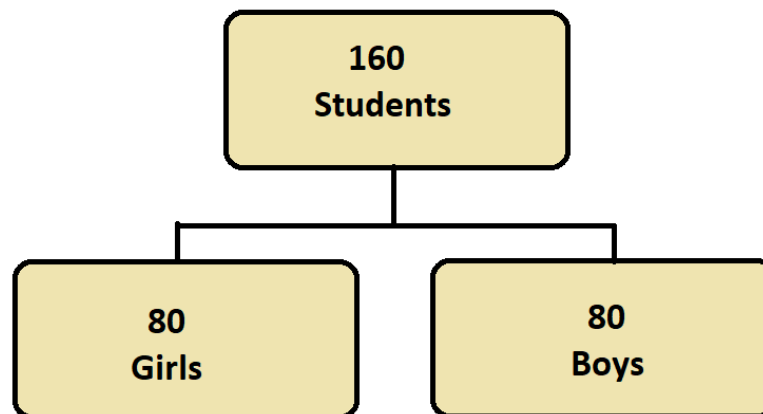
Population

The term population in research is used in broader sense than its commonplace meaning as a population of people. The entire group from which the sample has been selected is called as the population. The present study was conducted in schools of Dehradun district and all the students studying in IX and X classes in the schools of Dehradun form the population of the present study.

SAMPLE

A sample is a miniature picture of the entire group of aggregate from which it has been taken. A sample is a small representation of large whole. In studies, which involve a large population, sampling, provides an economical, more efficient and fast method of data collection. In the present study, a sample of 160 students of Class IX and X was chosen from two schools of Dehradun viz. Vivekananda school and Sanskar International School.

DESIGN OF THE STUDY



TOOLS USED

For testing the hypotheses formulated, available tools which provide relevant data are to be used. Investigator has to carefully select the tools to be used according to nature and scope of research problem. For the present study two standardized tests were used. These are -

1. **Emotional Intelligence Scale** by Anukool Hyde (Indore), Sanjyot Pethe (Ahmedabad) and Upender Dhar (Indore) (2001).
2. **Stress, Anxiety and Depression Scale** by Pallavi Bhatnagar (2011).

entirely concrete or abstract meanings with highly subjective qualities, satisfying definitions of both cause and effect in ways that can be both tangible and intangible.

Biology has progressed in this field greatly, elucidating complex biochemical mechanisms that appear to underlie diverse aspects of stress, shining a necessary light on its clinical relevance and

significance. Despite this, science still runs into the problem of not being able to settle or agree on conceptual and operational definitions of stress. Because stress is ultimately perceived as a subjective experience, it follows that its definition perhaps ought to remain fluid. For a concept so ambiguous and difficult to define, stress nevertheless plays an obvious and predominant role in the everyday lives of humans and nature alike.

Stress is simply a fact of nature forces from the inside or outside world affecting the individual. The individual responds to stress in ways that affect the individual as well as their environment. Because of the overabundance of stress in our modern lives, we usually think of stress as a negative experience, but from a biological point of view, stress can be a neutral, negative, or positive experience.

STATISTICAL TECHNIQUES USED

The data based upon Emotional Intelligence and Stress for Class IX and X students was processed statistically for its interpretation and testing the hypotheses. Following statistical techniques were used for analysis of data-

1. Co-efficient of Correlation was calculated to see the relationship between the variables.
2. t-test is used to analysis the gender difference.

ANALYSIS OF DATA

Table 1

FREQUENCY DISTRIBUTION OF EMOTIONAL INTELLIGENCE

CLASS INTERVAL	FREQUENCY
95-110	26
110-125	38
125-140	47
140-155	29
155-170	20
Mean	124.3

SD	4.85
SK	0.176
KU	- 0.251

TABLE 2**FREQUENCY DISTRIBUTION OF STRESS**

CLASS INTERVAL	FREQUENCY
2-4	26
5-7	48
8-10	57
11-14	29
Mean	8.24
SD	4.2
SK	1.21
KU	0.234

HYPOTHESES

Hypothesis 1: There exists no relationship between stress and emotional Intelligence of students.

Table -3
The coefficient of correlation between Stress and Emotional Intelligence

Variable	N	Df	Person's Coefficient of Correlation
Stress	160	318	- 0.314(**)
Emotional Intelligence	160		

(**)Correlation is significant at 0.01 levels.

Interpretation

Table 4.5 shows that the coefficient of correlation between stress and emotional intelligence is - 0.314. The calculated value of correlation is more than the table value at 0.01 level of significance. Hence null hypothesis is rejected. Therefore, the relationship between stress and emotional intelligence is negative and significant. This means that high emotional intelligence leads to less stress

Table -4

Significance of difference between mean scores on stress of students scoring high and low on Emotional intelligence.

Group	N	Mean	SD	SED	t ratio	Level of Significance
High	48	10.6	4.2	1.38	3.19	0.01
Low	42	6.2	2.3			

$$\begin{aligned} \text{Degree of freedom value} &= 48 + 42 - 2 \\ &= 88 \end{aligned}$$

$$\text{Tabular value of 't'} = \{ 1.96 \text{ at } 0.05 \text{ level } \}$$

= { 2.62 at 0.01 level }

Interpretation

Table 4.8 shows that the t-ratio of stress of students scoring high and low on emotional intelligence is 3.19 at 88 degree of freedom. This score is found to be significant at 0.05 level of significance. Hence null hypothesis which states that there exists no significant difference between the stress of students scoring high and low on emotional intelligence is rejected.

Table 5

The coefficient of correlation between stress and emotional secondary school boys

Variable	N	Df	Person's Coefficient of Correlation
Stress	80	159	- 0.219(**)
Emotional Intelligence	80		

(**)Correlation is significant at 0.01 levels.

Interpretation

Above table shows that the coefficient of correlation between stress and emotional intelligence is -0.219. The calculated value of correlation more than the table value at 0.01 level of significance. Hence null hypothesis is rejected. Therefore, the relationship between stress and emotional intelligence is negative and significant. This means that high emotional intelligence in boys leads to less stress in them.

Table 6

The coefficient of correlation between stress and emotional intelligence of secondary school girls

Variable	N	Df	Person's Coefficient of Correlation
Stress	80	159	- 0.234(**)
Emotional Intelligence	80		

(**)Correlation is significant at 0.01 levels.

Interpretation

Above table shows that the coefficient of correlation between stress and emotional intelligence is -0.234. The calculated value of correlation is more than the table value at 0.01 level of significance. Hence null hypothesis is rejected. Therefore, The relationship between stress and emotional intelligence is negative and significant. This means that high emotional intelligence leads to less stress in girls

Hypothesis 4

Table 7

Significance of difference between mean scores on stress of boys and girls scoring high and low on emotional intelligence

Group	N	Mean	SD	SED	t ratio	Level of Significance
Boys	48	9.4	3.5	1.21	1.5	0.01
Girls	42	8.2	2.8			

Degree of freedom=48+42-2-88

Tabular value of "t" = 1.96 at 0.05 level

= 2.62 at 0.01 level.

Interpretation

Above table shows that the t-ratio of stress between boys and girls is 1.5 which is found to be insignificant at both the levels of significance. Hence there exists no significant difference between stress of boys and girl

5.2 Educational Implications

The most outstanding characteristics of any research are that it must contribute something new to the development of the area concerned. So, The investigator has to given the educational implications of the study.

- Adolescent is an age where child needs more concentration and affection from the family. Therefore parents should treat children as a friend so as adolescents get an open environment to express him/her.
- School environment should be encouraging for adolescents. They should be counselled for their career ahead as teenage is a stage of choosing next upcoming career. This counselling may help a child to get serious for their future.
- Parents should allow children to go for excursion so as they may be become more expressive and responsible. Adolescents should not be burdened for extra classes other

than studies to face competition as this may make a child lack behind others.

- Parents should not compare child's performance with other as every child has an ability which can be harnessed properly if given direction. A teenager should be given open family environment where he can think for himself/herself. This may help a child.

5.3 Suggestions for further study

- A similar study can be done with students of higher age group.
- A study of stress, anxiety and depression in relation to school environment can be conducted.
- A study of stress, anxiety and depression in relation to social environment can be done.
- A comparative study of stress, anxiety and depression of students of arts and science can be done.

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