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A study on the relationship between academic stress and emotional intelligence among undergraduate college students

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Abstract

This paper examines the relationship between Emotional Intelligence and Academic Stress among undergraduate college students. 300 undergraduate students between the age group of 18-24 (150 boys and 150 girls) from the colleges of Balasore locality were selected randomly for the purpose. To evaluate Emotional Intelligence and Academic Stress, Shutte's Emotional Intelligence Test (SSREIT), and Students' Academic Stress Scale (SASS) of B. Rao (2008) was used respectively. For the analysis of obtained data, Pearson correlation and t-tests were employed. The result indicates that there is no significant relationship between emotional intelligence and academic stress. Similarly, the result of t-test shows that there is no statistically significant difference in emotional intelligence with respect to gender. Further, there were no statistically significant differences in academic stress with respect to gender. This study provides insight into emotional intelligence, academic stress, and gender differences for future reference.

Keywords: Academic Stress; Emotional Intelligence; Undergraduate College Students

1. Introduction

"True knowledge is the discerning of pattern and wisdom in its right interpretation"Robert Coover

Technological innovations and growing scientific advancement with international integration due to globalization have brought a distinct change in socio-cultural patterns and influenced every sector of society significantly. The educational system also underwent significant transformations, increasing demands over the future generation to be more competent and meticulous has added challenges for young children to perform well in academics. This mostly eliminated the physical activities and other diverse activities from children's lives.

Students of today have to face many academic demands, for example, formative and summative assessment, interacting well during sessions in the classrooms, working for constant progress in academic subjects, moving at a high pace in competitive exams, and fulfilling teachers and parents' academic expectations. Often these demands may tax or exceed the available resources of the students. Consequently, resulting in the development of stress and piling up of academic stress may affect the academic performance of the students. Studies have investigated factors contributing to academic performance and various factors associated with it. In those exertions, several biological, psychological, and sociocultural factors have been identified (Abisamra N.2000) [1]. The present study tried to explore the prevalence of academic stress among adolescent students and its association with emotional intelligence and gender perspectives of it. Emotional Intelligence is a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves as well as others and how we cope with daily demands and pressures (Bar-On, 2006) [2].

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Academic pressure is a significant source of stress for school students (Hashim, 2003; Olpin, 1997; Tyrrell, 1992). Common predictors for academic stress include fear of falling behind in academics, learning activities, performance in the assessments, time pressures, financial difficulties, language barriers, learning difficulties, and concern about academic ability, etc. adding to the challenges, the concern of the parents, teachers over the grades of students aggravate the student anxiety to meet academic standards in set time limits. Causes of stress on students include both positive and negative stress and the role of a support system in their life. Additionally, these stressors may exist throughout the span of students' academic careers. If prevention efforts are to be developed to assist students in dealing with minimizing academic-related stress by understanding coping strategies, expanding social support, and encouraging extracurricular activities may help young minds grow naturally. The concept of emotional intelligence is multifaceted in nature including individual skills, and insights regarding factors that influence the competency profile of a person (Mayer, Salovey, and Caruso 2004) [3], High emotional intelligence can contribute to a student in the learning process (Goldman, 1996; Elias, Ubriaco, Reese et al., 1992, Svetlana, 2007). Emotional intelligence is said to play a key role in learning interpersonal and communication skills at school and at home. In fact, it helps across life. People with high emotional quotient are expected to adopt positive approaches like optimism and a sportive attitude which increase negotiating skills of adaptation in school and life.

Adolescence is a transitional stage of life, where a young person feels like neither a child nor an adult. It is the vital stage of learning and attitude formation and development of individuality through learning and experiences. Performance at this period of life inculcates self-confidence and respect. On the other hand, low performance leads to insecurity and anxiety towards achievements. It is the time when close and dependent relationships with parents begin to give way to more intense relationships with peers and other adults. It has been regarded as a group searching for them to find some form of identity and meaning in their lives (Erickson 1968) [4]. Youth today are living in an anxiety-ridden atmosphere, said to be "an age of anxiety". Today's world drives adolescents constantly to compare themselves with peers and others. The present generation has to live in a world of competition which makes them feel vulnerable and threatened by the rising demands of academics. Accelerating academic challenges make adolescents feel suffocated and an imbalanced emotional state makes them feel lonely, impulsive, aggressive, and depressed. Being a transitional stage of life, adolescence is the most delicate period in life, hence being handled with due sensitivity and patience to teach them about emotions and how to manage their actions.

Emotional intelligence (EI) is the ability to identify, use, understand, and manage emotions in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges, and defuse conflict. Some researchers suggest that emotional intelligence can be learned and strengthened, while others claim it is an inborn characteristic. Emotional intelligence is being able to monitor our own and others' feelings and uses this to guide our thinking, emotions, and actions (Salovey Mayer, 1990) [5]. An emotionally intelligent person manages situations and demands in a better way by applying the abilities and opportunities with optimum understanding by regulating emotions.

According to Goldman (1995) [6], emotional intelligence consists of five components: involving our emotions (Self-awareness), managing them, motivating ourselves, recognizing emotions in others (empathy), and handling relationships. The curriculum today is loading the students with knowledge and exerts tremendous pressure on them with too many tasks to be performed. In the middle of inadequate reserves, and no well-defined support systems, students experience too much pressure resulting in aggravating stress in day-to-day life. Parental expectations, teachers' and peer pressure, and societal demands towards academic achievements may aggravate their pressure. The word "Stress" is very frequently used but little understood about it and the least attended to resolve it. Stress results in physiological, emotional, physical, and psychological problems. The symptoms may be temporary or enduring and they may be aggravating as time passes if no resolution is adopted and it can negatively affect the individual.

Academic stress among students is seen high and can be predictable at the times of each semester due to academic commitments, financial pressures, and a lack of time management skills. When stress is perceived negatively or becomes excessive, it can affect both health and academic performance (Campbell & Svenson, 1998). Students may control and reduce their stress through any of the defensive mechanisms like suppression, avoidance, diversion or religious and social support, or positive reappraisal.

Children, teenagers, or adults who are going to school, college, or university and is learning something can be called a student, World Health Organization (WHO) defines 'Adolescents' as individuals of the 10-19 year age group and 'Youth' as the 15-24 year age group, Undergraduate students usually belong to the age category of 18 to 24. This is the time when the issues of emotional (if not physical) separation from parents arise. But this sense of separation can be considered an important step for the establishment of personal values. According to the American College Health Association 2006 survey of college students, one of the greatest barrier college students faces in their academic performance was academic stress. 32 percent of college students reported that academic stress had resulted in an

incompletion of courses, dropped courses, or a lower grade, emotional intelligence is the key to managing academic stress. So it's very important to teach children to develop their EQ and reduce their academic stress.

1.1. Stress

Stress is a negative emotional experience associated with biochemical, physiological, cognitive, and behavioral changes that occur when a person tries to manage or deal with the stressors. The curriculum today is loading the students with knowledge and exerts tremendous pressure on them with too many tasks to be performed. In the middle of inadequate reserves, and not well-defined support systems, students experience too much pressure resulting in aggravating stress in day-to-day life. Parental expectations, teachers' and peer pressure, and societal demands towards academic achievements may aggravate their pressure. The word "Stress" is very frequently used but little understood about it and the least attended to resolve it. Stress results in physiological, emotional, physical, and psychological problems. The symptoms may be temporary or enduring and they may be aggravating as time passes if no resolution is adopted and it can negatively affect the individual. Stress is the nonspecific response made by our body to cope with the demands made upon it. It is the way that individuals perceive and cope with environmental threats and challenges around them. Stress is normal when it is in small amounts and can facilitate individuals to be more active and productive. However, when there are high levels of stress and if it is experienced over a long period of time, it can cause severe mental and physical problems (Alsulami et al., 2018) [7].

1.2. Academic Stress

Academic stress refers to the unpleasant psychological situations that mostly occur due to environmental factors, such as educational expectations from parents, teachers, peers, and family members, pressure for academic achievement, the burden of homework, etc. Academic stress is mental distress with respect to some anticipated frustration associated with academic failure or even an awareness of the possibility of such failure. Students' interaction with academic stress can be conceptualized by interaction with environmental stressors, cognitive appraisal and coping strategies of the academic-related stressors, and psychological or physiological response to the stressors. Students face a lot of academic pressure, for example, in school examinations, showing progress in school subjects, answering questions in class, working in tuition classes to score well, competing with other classmates, and fulfilling teachers' and parents' academic expectations. Thus, for managing these demands, students are under the threat of facing stress, since the demand is to reach the goal of academic achievement. "Academic stress is defined as the body's response to academic-related demands that exceed the adaptive capabilities of students" (Wilks, 2008) [8].

Student stress is a significant issue of conversation in academia and society. Numerous researchers have examined the matter from different perspectives and conducted in-depth analyses, but it is clear that students continue to experience significant levels of stress, leading one to the conclusion that the subject requires further attention. Students deal with a variety of stressors that are related to all facets of their lives, such as stress from the family, stress from friends, stress from society, stress from college, stress due to interpersonal conflicts, financial stress, academic stress, etc. The sources of stress are known as stressors. The sources of stress in today's world are limitless and only get worse with the passage of time, but there are few resources accessible to students to help them manage or resist these pressures. Watching the news in print and online, where it is reported that cases of substance misuse, gender abuse, criminal activity, stress-related illness, and suicides are rising among young students every year, might help one understand the helplessness and depression among the students. Academic Stress encompasses all aspects of students' life which have the potential to jeopardize their academic performance and include all aspects relating to day-to-day activities of students like too many assignments, competition with other students, failures, lack of money, poor relationship with other students or teachers, problems at home with family (Busari, 2014) [9].

1.3. Academic Stress among College Students

Academic stress among students has long been researched, and the studies show stressors such as too many assignments, failures and poor relationships, competitiveness among students, high expectations by parents, and many more as mentioned above. Stressful events that occur in families, like divorce, intrapersonal conflicts, or maternal depression can lead to stress in adolescents which deteriorates functioning.

1.4. Parental Support on a Child Facing Academic Stress

Studies revealed that parents play a significant role in the cognitive, social, and emotional development of their children. Their role develops socialization to cultural and societal norms and the morals inherited in their children built them to combat future difficulties. Studies also revealed that parents play a positive or negative influence on a child's academic aspirations and achievements. Molnar reported that a parent's education and home environment influence a child's academic achievement and after not achieving them they are accused of being dull and lazy which induces a sense of

inferiority among adolescents and sometimes the situation worsens in the form of mental disorders, depression, stress and even suicides.

1.5. Gender Differences in Stress

The concept of stress and its perception based on gender is a fascinating undertaking because the findings of studies conducted regarding stress with references to gender are somewhat conflicting. For instance, in a study by Mishra et al. it was revealed that men and women differ in their perceptions and reactions to stress, while Jogaratanam et al. found differences between male and female students to be significant when it came to the time pressure dimension of stress. Likewise, Sulaiman et al. found in their study that “female students have different stress compared to male students because maybe female students tend to be more emotional and sensitive toward what is happening in their surroundings”.

1.6. Emotional Intelligence

Abraham Maslow first introduced the idea of emotional strength in the 1950s. The phrase emotional intelligence appears to have first been used in papers by Michael Beldoch in 1964 and B. Leuner in 1966, both of which were published in the psycho-therapeutic journal *Practice of Child Psychology and Child Psychiatry* and were titled ‘Emotional Intelligence and Emancipation’. The word “EQ” (Emotional Quotient) was originally used in a piece by Keith Beasley that appeared in the *British Mensa* magazine in 1987. The most common definition of emotional intelligence is the capacity to recognize, use, comprehend, regulate, and control emotions. People with high emotional intelligence are able to identify their own emotions as well as those of others, use emotional information to direct their behaviour and thinking, differentiate between various emotions and assign the proper labels to each one, and modify their emotions to fit their environment. Although the phrase was originally used in 1964, it became well-known because to science journalist Daniel Goleman’s best-selling book ‘Emotional Intelligence’, which was published in 1995. Emotional Intelligence, according to Goldman, is a collection of abilities and traits that influence leadership success.

Emotions can be positive or negative, but its feeling provides us with vital and potentially profitable information every minute of the day. Emotional Intelligence is defined as “the ability to monitor one’s own and other people’s emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behavior” (Salovey Mayer, 1990) [10]. Emotional intelligence will give better mental health, job performance, and leadership skills although no causal relationships have been found and such findings are more likely related to general intelligence and specific personality traits rather than emotional intelligence as a construct. Emotional Intelligence is an intelligence that talks about the important variance in an individual’s problem-solving as well as social relationships.

The capacity to understand, manage, and assess emotions is referred to as emotional intelligence. While some academics contend that emotional intelligence may be developed and increased, others contend that it is an innate quality. The following are indications of emotional intelligence:

- The ability to understand and express other people’s feelings.
- Understanding one’s own talents and limitations.
- Confidence in oneself and acceptance of oneself.
- The ability to overlook mistakes.
- The ability to adapt to change and a strong sense of curiosity, especially about others.
- The ability to remain emotionally in check when faced with challenging situations.

The skill to identify and articulate your own emotions while considering the emotions of others is called emotional intelligence (EI). Emotional intelligence is generally said to include at least three skills: emotional awareness, or the ability to identify and name one’s own emotions; the ability to harness those emotions and apply them to tasks like thinking and problem-solving; and emotional regulation, which is the ability to manage emotions, which includes both regulating one’s own emotions when necessary and helping others to do the same. Emotional intelligence is the ability to determine, examine and analyze your emotions, and realize how your emotions are impacting people around you. It also involves your perception of others; how other people are feeling or expressing their emotions in a particular situation and allows you to meditate for a healthy relationship. However, various researchers have engaged themselves in finding relationships between Emotional Intelligence and academic performance. Results predict a positive relationship between Emotional Intelligence and academic performance and other cognitive outcomes. Goleman’s Competency Model for Emotional Intelligence: Daniel focuses on Emotional Intelligence as a wide array of competencies and skills that drive leadership performance and consists of five areas [11]:

- **Self-awareness:** It is an important trait of Emotional Intelligence. People with high Emotional Intelligence are usually more self-aware. These people understand their own strengths and weaknesses, and their impact on others.
- **Self-regulation:** People having high Emotional Intelligence do not allow themselves to become pugnacious or petulant by others. They do not even make decisions in a hurry or careless manner but rather follow a more pragmatic way.
- **Motivation:** Highly emotionally intelligent people are more self-motivated and are not amenable to other people.
- **Empathy:** This trait shows a helping nature to other people's concerns.
- **Social skills:** People with high emotional intelligence can build trustable relationships with others. They do not possess a prevaricate behavior, rather they are shown a venerated attitude by other people in their community/society.

1.7. Impact of Emotional Intelligence on Academic Performance

Currently, the concept of Emotional Intelligence is having a considerable impact on every person's thoughts, relations, and emotions, and a very significant influence on their decision-making. Some of the studies are, Influence of Emotional Intelligence on Student's Academic Achievements; aim was to investigate a student's Emotional Intelligence level and using the dimensional approach, to what extent Emotional Intelligence influences students' academic achievements. Another study explored the relationship between Emotional Intelligence and creativity in the academic achievement of second-period high school students. This was a descriptive-correlational study. Results indicated a significant correlation between Emotional Intelligence and academic achievement. There was also a significant and positive relationship between creativity and academic achievement. Additionally, no gender difference was found considering their academic achievement.

1.8. Operational definitions of the key terms

The operational definitions of the key terms used in the present study are:

1.8.1. Emotional Intelligence

"Emotional Intelligence refers to the ability to monitor one's own as well as other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behavior" (Salovey Mayer, 1990) [10, 12].

1.8.2. Academic Stress

"Academic stress is defined as the body's response to academic-related demands that exceed the adaptive capabilities of students" (Lin Chen, 2009).

1.8.3. Undergraduate College students

In this study undergraduate college students can be operationally defined as a college or university student who's not a graduate student. They are usually belonging to the age category of 18 to 24.

2. Review of literature

Scientific investigation starts with a review of the literature related to the study. A review of related literature is one of the major steps in any research study. It allows the researcher to acquaint oneself with the current knowledge in the area where one proposes to do research.

Usha and Solomon (2022) [13] investigated students' views of academic stress in modern online education, as well as their emotional intelligence-based coping mechanisms. A total of 77 students from a private college in Coimbatore were chosen at random from the 18–19 age range (30 males and 47 females). The emotional intelligence scale developed by Sharma (2007) and the student's academic stress scale designed by Rajendran and Kaliappan (1990) were used. The data were analyzed using the t-test and Karl Pearson test. The study's results showed no connection between age, parents' monthly income, the number of hours respondents spent in school, academic stress, and emotional intelligence. Although there was no statistically significant difference between respondents' genders in terms of their overall academic stress, female respondents' mean scores across all dimensions were marginally higher than those of male respondents. Additionally, there was no statistically significant difference between respondents' genders in terms of their overall emotional intelligence; however, male respondents had higher managing emotion skills, while female

respondents had slightly higher levels of self-awareness, managing emotion, empathy, handling relationships, and emotional intelligence, with the exception of self-motivation. The level of self-motivation among female respondents was somewhat greater. Academic stress and respondents' residential location differed in a statistically meaningful way. Academic stress and respondents' residences differed statistically significantly, but respondents in rural areas had slightly higher scores on the emotional intelligence scale's various dimensions, including controlling emotions, empathetic behaviour, motivating oneself, handling relationships, and emotional intelligence, while respondents in urban areas had slightly higher scores on self-awareness.

Roy, Thomas, and Joy (2021) [14] examined the relationship between emotional intelligence and academic stress among undergraduate students. 119 undergraduate students (18-24 years old; 63 females; 56 males) from various colleges in Kerala were chosen at random. Data gathering methods included Shutte's Emotional Intelligence Test (SSREIT) and the Academic Stress Inventory by Lin Chen (1997). Mann-Whitney U test and Spearman rank order correlation were used to assess the data that had been collected. The findings of the current study show a strong connection between emotional intelligence and academic stress. The findings showed that there was a considerable gender difference in emotional intelligence, with men scoring higher than women. Additionally, there was no statistically significant gender difference in academic stress.

Sen et al., (2020) [15] studied emotional intelligence and perceived stress among undergraduate students of Arts and Science colleges, the sample included 720 students who were aged 18 years and above from four colleges in Puducherry. The study showed that there was no significant association between emotional intelligence and perceived stress, and a weak significant correlation existed between emotional intelligence and academic performance. It was also found that gender, year of study, volunteering with youth organizations, and mother's occupations were significantly associated with emotional intelligence.

Rezvani, A., Barrett, R., Khosravi, P. (2019) [16] described that emotional intelligence refers to regulating and identifying emotions. It exhibits an aptitude to manage emotions and harness emotions. Harness emotions refer to expressing and controlling impulses, but understanding, responding, and interpreting others' emotions is also essential. People with high emotional intelligence may visualize, understand and realize things effectively as compared to others. Individuals with such competencies are known to be constructive, dynamic, successful, and innovative. Goldman introduced the mixed model of emotional intelligence. Emotional Intelligence focuses on self-management, self-awareness, social awareness, and relationship management. Self-management is concerned with controlling one's emotions and adapting to circumstances, which is not constant in nature. Self-awareness is the ability to be aware of one's own emotions and recognizes the feelings of other individuals.

Stevens, Schneider, Bederman-Miller, and Arcangelo (2019) [17] explored the relationship between total-trait emotional intelligence and academic stress among college students at a small, private college. University stress levels and student total-trait emotional intelligence (TTEI) scores were significantly correlated. TTEI and ASS measures are helpful for student intervention to affect problems like attrition. Small private colleges can greatly benefit from knowing their students' levels of academic stress and emotional intelligence in order to improve retention. It is possible for the universities to offer more services to students by identifying particular elements and minimizing their negative consequences.

Espinosa A. (2016) [18] found that the results showed self-confidence mediated such a relation. Using moderated mediation SEM, the study also generalizes the results over summer versus regular semester students. The results suggest the inclusion of the trait of Emotional Intelligence within any mathematics curriculum will result in higher self-confidence among students.

Kauts (2016) [19] designed the study of academic stress and emotional intelligence among college students. Six degree-granting institutions in the city of Jalandhar were randomly selected to participate in the study. 300 students at these six colleges were chosen at random to participate in the study. The chosen sample was given the Bisht Battery of Stress Scale (BBSS) by Abha Rani Bisht (Almora) and the Emotional Intelligence Scale (EIS) by Anukool Hyde, Sanjyot Pethe, and Upinder Char (2001). Descriptive statistics were used to analyze the data when they were received. To get the conclusions, pertinent means, S.D.s, t values, and 3x2 ANOVA were computed. When compared to students in the humanities and business streams, students in the science stream were shown to be much more stressed, according to the data analysis. Additionally, it was discovered that students' emotional intelligence significantly influences how stressed they feel about their academics. Comparatively speaking, pupils with high emotional intelligence did not experience the same level of academic stress as those with low emotional intelligence.

Bartwal Raj (2014) [20] conducted research on “Academic stress among school-going adolescents in relation to their social intelligence”. The results of the study revealed that male and female students experienced the same amount of academic stress. The high social intelligence level would have a better degree of coping with academic stress. Social intelligence plays a vital role in reducing academic stress.

Xiao (2013) [21] worked on “Academic Stress, Test Anxiety, and Performance in a Chinese High School Sample: The Moderating Effects of Coping Strategies and Perceived Social Support”. The results indicated that academic stress was positively related to students’ test anxiety and negatively related to their academic test performance. Test anxiety had a negative relationship with test performance. While active coping was not found to moderate the relationships among academic stress, test anxiety, and academic performance, perceived parent support and perceived other support moderated the relationships between test anxiety and test performance as well as between academic stress and test anxiety.

Anvita G. (2011) [22] explored the relationship between wellness, emotional intelligence, and job stress-a psycho-management perspective. The results indicated that organizational health depends on the health and well-being of the people working in it. The study also revealed that emotional intelligence, which represents the wellness of an individual, can help in overcoming job/ occupational stress. The strategy to enhance emotional intelligence by identifying the areas of individuals and groups such as communication, self-awareness, and interpersonal relationship can assuage stress and make people more healthy and organizations more productive.

Leung, Yeung and Wong (2009) [23] examined the role of paternal support in the relationship between academic stress and the mental health of primary school children in Hong Kong. The results indicated that academic stress was a risk factor that heightened student anxiety levels and that parental emotional support was a protective factor that contributed to better mental health among children. However, parental informational support delivered to children during times so high academic stress appeared to heighten student anxiety levels.

2.1. Rationale of the study

Emotional changes among young people have strong feelings and intense emotions at different times, Moods may be unpredictable which can lead to increased conflict. During adolescence and teenage, the regions of the brain that control emotions develop and mature (Johnson et al., 2009). This stage is characterized by problems that can be difficult for parents and teachers who undergo this situation. Gradually they suppress thoughts that are inappropriate and replace actions with goal-oriented behaviors. When these emotional changes occur, it can affect students’ academics, so developing a high EQ can help students to achieve success, and manage their emotions, it will have an impact on their relationships with classmates and or their performance in the classroom. Students with higher levels of emotional intelligence are able to understand and control their emotions better and this may facilitate them to develop self-motivation, effective communication skills, and better personal and social adaptation which is an essential skill that helps students to become confident learners, it will improve the process of learning and likelihood of success (Vandervoort, 2006) [26] . If students lack emotional intelligence, it will make them less connected to school and will have a negative impact on their performance in the classroom. Thus, emotional intelligence plays a major role to help a student for academic achievement by reducing stress. In today’s highly competitive world, students face various problems related to academics. We consider this study as an opportunity to create awareness among parents and teachers to help their children develop an ability to control and understand emotions better.

The present study will give insights to teachers in planning educational programmes according to the important factors. It will also help parents to deal effectively with their children and to develop an understanding of the importance of emotional intelligence and academic stress. This understanding will promote the teachers and parents to create a more affectionate, harmonious, warm, and democratic emotional atmosphere in inculcating good study habits at school. And also proper training and guidance may be given to the children accordingly.

Moreover, on the basis of the findings of the study, teachers may help and counsel students to deal effectively with academic stress. The present study is thus envisaged to serve a multidimensional cause in the vast field of educational psychology.

3. Material and method

Objectives

The aim of this study is to Study the relationship between Academic Stress and Emotional Intelligence among Undergraduate College Students;

- To find out the level of emotional intelligence and academic stress among undergraduate college students.
- To find out the relationship between emotional intelligence and academic stress.
- To find the gender influence on emotional intelligence and academic Stress.

Hypotheses:

- H1: There is no significant difference in emotional intelligence among undergraduate college students based on their gender.
- H2: There is no significant difference in academic stress among undergraduate college students based on their gender.
- H3: There is no significant relationship between emotional intelligence and the academic stress of undergraduate college students.

3.1. Sample

The target population in the present study was all the undergraduate college students of Balasore district of Odisha state. A sample of 300 students (150 Boys and 150 Girls) was taken up by using a random sampling technique for the purpose.

3.2. Design

In the present investigation, a correlational design with a quantitative approach was used. Emotional Intelligence, Academic Stress, and Gender were the variables under study.

3.3. Measures:

3.3.1. Socio-demographic data sheet

The Demographic Information Schedule describes the general characteristics of the sample. The information sheet will be developed by the researcher to collect background information from the respondents. It encloses items to seek personal information like name, gender, age, address qualification, caste, religion, etc.

3.3.2. Emotional Intelligence Scale

To evaluate Emotional Intelligence Shutte's self-report Emotional Intelligence test (SSREIT) has been used. The scores will range between 33 and 165, in which higher scores will indicate higher characteristics of emotional intelligence, the sub-scales include assessment and expression of emotional intelligence, Assessment of management and adjustment, and Assessment of utilization of Emotional Intelligence. Studies on this scale have shown that the reliability is above 90 percent.

3.3.3. Academic Stress Scale

B. Rao's Academic Stress Scale (2008) was used to measure the academic frustration, conflict, pressure, and anxiety of undergraduate college students. The scale consists of 40 items in the form of statements that are to be responded to by the students. On the scale, there are 12 items to measure academic frustration, 8 items to measure academic conflict, 12 items to measure academic pressure, and 8 items to measure academic anxiety. Relating to each statement, the student is required to give a response as 'No Stress' (NS), 'Slight Stress' (SS), 'Moderate Stress' (MS), 'High Stress' (HS), or 'Extreme Stress' (ES) depending on whether he/ she feels about the statement. The value of the responses is '0', '1', '2', '3', and '4' for NS, SS, MS, HS, and ES respectively. A student's academic stress score on each attribute is found by adding the scores in that attribute and finally, the total score is obtained by adding the scores of the attributes. The maximum score on this scale is 160. Higher scores indicate higher academic stress.

3.4. Procedure

A Pilot study was conducted before the main study, the purpose of the pilot study was to rectify the shortcomings in the survey and the data collection process. This pilot study enables the main study to have maximum control over minimizing the possible biases and conflicts. It also helps to identify possible sources of non-sampling errors, which might occur in the process of communication, establishing a good rapport with the subjects, purpose of investigation, clarification of statements, etc. It can empirically determine, the time factor for responding to the questionnaire, and we can get acquainted with the time factor because time is one of the important aspects of research work. Thus, the time schedule for the main study could be drawn with precision and accuracy. The pilot study was done mainly to find out the reliability of the research tools used in the study. This ensures that the data to be collected for investigation is free from errors and worthy enough to use for testing the set of hypotheses with much confidence.

3.5. Data Analysis

To analyze the collected data the following descriptive and inferential statistics were used:

- *Descriptive statistics:* Mean and standard deviation.
- *Inferential statistics:* Pearson’s Product moment correlation was used to find out the relationship between emotional intelligence and academic stress.
- t-test was used to determine the significance of the difference between means and standard deviation of gender groups in their emotional intelligence and academic stress.

4. Result

Table 1 Mean and Standard Deviation of Emotional Intelligence and Academic Stress among Undergraduate College Students. (N=300)

	N	Mean	Std. Dev.
Emotional Intelligence	300	113.6767	14.8247
Academic Stress	300	61.6033	22.1153

The above table shows the Mean and Standard Deviation of Emotional Intelligence and Academic Stress among undergraduate college students. The Mean and Standard Deviation of Emotional Intelligence were 113.6767 and 14.8247 respectively which indicates a moderate level of emotional intelligence. On the other hand, the Mean and Standard Deviation of Academic Stress were 61.6033 and 22.1153 respectively, which indicates a low level of academic stress. Academic Stress has a higher Standard Deviation and Emotional Intelligence has a higher Mean.

Table 2 Comparison of Academic Stress among Undergraduate Boys and Girls college students

Gender	N	Mean	S.D.	df	t-value	Level of Significance
Boys	150	61.28	22.0705	298	-0.25	Not significant
Girls	150	61.93	22.1552			

Table – 2 shows that the calculated t- value with df-298 is -0.25 which is less than the critical t-value at both .05 and .01 levels of significance. Thus, we conclude that there is no significant difference between the mean scores of boys and girls with respect to academic stress.

Table 3 Comparison of Emotional Intelligence among Undergraduate Boys and Girls college students

Gender	N	Mean	S.D.	df	t-value	Level of Significance
Boys	150	113.50	15.24	298	-0.21	Not significant
Girls	150	113.85	14.3441			

Table – 3 shows the calculated t-value with df- 298 is -0.21 which is less than the critical t-value at both .05 and .01 levels of significance. Thus, we conclude that there is no significant difference between the mean scores of boys and girls with respect to emotional intelligence.

Table 4 Relationship between Academic Stress and Emotional Intelligence among Undergraduate college students

Variables	N	Coefficient of Correlation
Academic Stress	300	-0.0688
Emotional Intelligence		

Table-4 shows that the value of the coefficient of correlation between academic stress and emotional intelligence of undergraduate college students was -0.0688, which indicates a negative correlation between the two. Thus, the findings support our H3, that there was no significant relationship between academic stress and emotional intelligence, and was accepted.

5. Discussion

- The result showed that there was no significant difference in academic stress among boys and girls undergraduate college students.
- The result showed that there was no significant difference in emotional intelligence among boys and girls undergraduate college students.
- The result showed that there was no significant relationship between academic stress and emotional intelligence.

The above findings showed that there exists a strong relationship between EI and academic stress experienced by a college student. We observed an inverse relationship showing that the level of EI is inversely proportional to the academic stress of a college student. For example, if a student has high EI, that means s/he might have low academic stress. The study also explored gender differences, but results showed there were no significant differences between male and female students' EI scores or academic stress scores.

Limitations

The results should be viewed cautiously as our population sample is limited to only colleges in Balasore district of Odisha state. The second limitation is the cross-sectional research design because the data was collected from many different students at the same period of time. Thirdly, the sample collected was also limited and covered only college students which consist of students from undergraduate classes. Thus, the study's result is restricted to a specified sample and not reviewed on a general population. Finally, the questionnaires were very lengthy and took a long time to be filled by the respondents. In our study, the response rate was good. Every student had fully marked the answers, but when coming to the end it became tedious.

5.1. Educational Implications

The following steps should be taken by the College authorities, Family, and Educationist for the better adjustment of the undergraduate students:

- Programms at colleges should start being modified to better suit the needs of young adults.
- Peers and teachers should be accessible to students in a welcoming, liberated, open, and upbeat setting.
- To assist students find their buried talents, physical and social activities should be provided.
- Teachers should provide welcoming environments for student's social and academic integration in their classrooms and at colleges.
- Parents and instructors should support their kids in cultivating positive attitudes in their students.
- Colleges should offer counselling services to aid in the development of positive attitudes in students.

5.2. Suggestion for Future Research

In this research study cross sectional design was used, therefore future research needs to observe the long-term effects or longitudinal effects of emotional and social competency on academic success. Further research should also observe other factors that influence academic stress taking EI as an independent variable, such as single child and child-rearing

are the factors that might influence EI and academic stress. Future research can also observe how much respondents are aware of their EI and how many colleges do provide educational awareness about it.

6. Conclusion

The practical utility of this study for academia is numerous. For preparing students to cope with stress, several stress management techniques can be used. Therefore, every college should take some stress management classes for students. These sessions can help students to learn the cognitive, social, and emotional competencies, because such competencies are not developed through lectures and discussion. So, everybody should have to put prime emphasis on theory-based knowledge. Students should know some basic knowledge and skills that will help them to become outstanding or achievable academic performers and comfortable in adapting effective leadership skills. The finding of the current study indicated that there was no significant difference in academic stress among boys and girls undergraduate college students and also no significant difference in emotional intelligence too. Further, there was no significant relationship between academic stress and emotional intelligence. However, even though the result shows no significant relationship, still it clearly calls for action from families, academicians, policymakers, and stakeholders; all should take necessary measures to facilitate better adjustment skills among undergraduate college students.

Compliance with ethical standards

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Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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