



Research Paper

The impact of academic stress on the academic performance of CBSE higher secondary students, with special reference to Ernakulam district.

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ABSTRACT:

Academic stress refers to the uncomfortable psychological conditions that arise as a result of parental, teacher, peer, and family members' scholastic expectations. Academic performance refers to extent to which a student, instructor, or institution has met their educational objectives via education and other activities. The purpose of this paper is to evaluate the evidence on how academic stress affects students' academic performance. Academic stress has been linked to worse academic performance, less motivation, and an increased likelihood of dropping out of school. The research looks at the most recent research on the impact of academic pressure on students' learning capacity and academic performance, as well as mental health concerns including depression and anxiety.

KEYWORDS: Academic stress, academic performance, students, pressure, mental health

Received 28 July, 2021; Revised: 10 August, 2021; Accepted 12 August, 2021 © The author(s) 2021.
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I. INTRODUCTION AND STATEMENT OF THE PROBLEM

Stress is largely a physical response and is described as a condition marked by symptoms of mental and physical tension or strain, such as depression or hypertension, that might arise as a reaction to a situation in which a person feels threatened or pushed, or both.

School days are the most memorable period of a person's life. This is the period where children step into the outer world, socialize with surroundings and build curiosity about the different things around them. Nowadays, education plays a key role in directing a person life and livelihood. This in fact means that students undergo a huge amount of pressure in order to accomplish each level of education and get to the next level. Students are very likely to come across various factors like making friends, heavy work load, additional tuition, parental pressure etc. which might be difficult for the students to overcome by themselves. This might lead to various small or critical issues in connection with mental well-being. This study investigates the impact of academic stress on students' academic performance. The study relates to the fourth Sustainable Development Goal, which is to provide high-quality education.

II. LITERATURE REVIEW

Education has become an important factor in every person's life. A school going student faces a lot of factors which stresses them out and in turn contributes to their low performance at school and studies. The Indian education system especially, focuses on the textbook knowledge and compels students to strive for good marks. Each student is unique and has different capacity for learning. Most of the time parents and teachers do not recognize this. As a result, most of the students are compared with their peers and asked to perform similarly.

Deb et al., (2015) in the article “Academic stress, parental pressure, anxiety and mental health among Indian high school students” investigated that Academic stress and mental health of Indian high school pupils, as well as the relationships between academic stress and different psychosocial variables. A total of 190 students in grades 11 and 12 (mean age: 16.72 years) were polled in Kolkata, India, from three government-aided and three private schools. Academic pressure caused stress to nearly two-thirds of the pupils (63.5%).

Luo et al., (2020) in the article “The influences of parental emotional warmth on the association between perceived teacher-student relationships and academic stress among middle school students in China” state that the impact of perceived teacher-student connections and parental emotional warmth on academic stress among Chinese middle school students was explored in this study. A survey questionnaire was given to a group of 1214 students in grades 7 to 9 in Xi'an, China, to collect data. The regression analysis revealed a link between parental emotional warmth and academic stress.

Pascoe et al., (2020) in the article “The impact of stress on students in secondary school and higher education” states that an Academic stress can lower academic performance, diminish motivation, and raise the chance of dropping out of school. Longer-term consequences include a lower chance of long-term employment, which costs governments billions of dollars each year. The American Psychological Association (APA) published the findings in a narrative review.

Alsulami et al., (2018) in the article “Perception of academic stress among Health Science Preparatory Program students in two Saudi universities” The Health Science Preparatory Program (HSPP) seeks to improve students' educational readiness for a career in the health sciences. Students' perceived stress was measured using the scale for evaluating academic stress (SAAS). The average SAAS score for two local institutions using competition-based HSPP learning models vs non-competition-based HSPP learning models was discovered in the study.

Saqib & Rehman, (2018) in their article “Impact of Stress on Students Academic Performance at Secondary School Level at District Vehari” mentioned that the impact of stress on a student's academic performance is significant. Data was gathered from all secondary schools in the Vehari District of Pakistan. Teachers and parents are two major sources of stress for kids. According to the findings, stress has a substantial influence on students' academic performance.

Kapur, (2021) in his article “Factors Influencing the Student’s Academic Performance in Secondary Schools in India” states that the major goal of this study work is to figure out what elements impact students' academic achievement in India's secondary schools. Factors influencing a student's academic performance and other causes of low academic accomplishment are among the primary areas that have been considered.

Aafreen et al., (2021) in their article “Effect of stress on academic performance of students in different streams” mentioned that when a person's ability to cope with their circumstances is strained by a mix of internal and external forces, stress results. Students who struggle to manage with stress have a significant impact on their academics and conduct. Research can assist us in determining the reason for and causes of stress.

Mental health and academic student’s stress

Many studies have been conducted on the subject of academic stress and mental health. According to these studies, academic stress leads to decreased well-being and the development of anxiety or depression. Students who are under academic stress perform poorly in school. Many previous studies found that students who reported low levels of academic achievement also reported low levels of mental well-being and a high level of stress from their surroundings.

Academic student’s stress and substance abuse

The health and risk behaviours of young people, such as substance use and abuse, are all significant predictors of their current and future health and well-being. Academic stress can cause young individuals to use substances more frequently. Students who reported high levels of continuing stress, especially in regard to academic achievement, also reported high levels of drug and alcohol usage, according to a survey of eleventh grade students in the United States. This demonstrates that when stress levels are high, students are more likely to turn to substance abuse.

Academic stress and sleep

Academic stress leads to lack of mental well-being and this would lead to insufficient sleep, in students. Especially the students of higher secondary grades may have to stay up all night to study and to complete assignments before the deadline. Lack of coping strategies may lead to insomnia in young people.

Academic stress and physical health

High levels of academic stress put young people at risk for developing avoidable physical health issues later in life. People who were anxious, such as during test periods, were less likely to be physically active, according to a systematic analysis of prospective research. This influence is linked to a plethora of possibly interrelated negative physical health outcomes. As a result of bad lifestyle patterns and an unregulated stress system, stress may lead to the development of noncommunicable diseases such as metabolic syndrome, obesity, and impaired insulin sensitivity. Stress has also been related to an increase in hunger and weight gain. Academic-related stress can lead to the development of health problems, particularly chronic noncommunicable illnesses, as a result of decreased physical activity and increased bad lifestyle choices.

Academic stress and academic achievement

According to the World Health Organization (1996), in order to effectively engage in school, pupils must be healthy and emotionally comfortable. Academic stress decreases the student's grades, performance and involvement in the class. Studies have shown that the higher the level of stress the lower will be the academic achievement. There are also instances where the student has dropped out of school due to the inability to cope with the works and tasks expected of him/her.

Literature review shows that there are many researches which were conducted on topic of academic stress and the various aspects in which it plays a major role. This research is done to investigate the influence of academic stress on students attending higher secondary classes in CBSE schools in Ernakulam district, based on these literature and the firm foundations offered by them.

Problem Formulation and research questions

The researches reviewed shows that there is an inevitable connection between academic stress and the academic achievement of the student. The more the academic stress, the lower will be the academic achievement. The questions that need to be focused are:

- Do the students face academic stress?
- What is the impact of academic stress on the academic achievement?
- Is proper support system available for the students?

III. THEORETICAL FRAMEWORK

The Lazarus Theory of Stress

According to Lazarus, stress occurs when a person perceives that "demands exceed the individual's personal and social resources." The 'transactional model of stress and coping' describes this.

Cognitive Appraisal Theory

In 1984, Lazarus and Folkman proposed the "Theory of Cognitive Appraisal" model, which explained how stressors influence the mental process. According to Richard Lazarus, stress and depression are two-way process that includes the production of stressors by the environment and the response of an individual who is subjected to these stressors. His perspective on stress spawned the cognitive appraisal theory.

Conceptual framework

According to the theory of Stress by Lazarus, the students experience stress when the demand from their surroundings is higher than what can be done. Students undergoing higher secondary education are the ones who are more likely to experience pressure from their surroundings as it is the stage where all their efforts for the last twelve years get paid off. Most of the students in these classes are in their adolescent age. They are going through rapid physical and mental growth. It is a time when other people's ideas and judgments have a

significant impact on their thoughts and actions. They face stress due to role confusion, relationship issues, careers exploration and above all from academics.

According to the cognitive appraisal theory, stress is caused by the environment, which can include insufficient tutorial strategies, teacher-student relationships, significant class work, bad health room environments, incapability to maintain ones self time off with school, and disorganisation, which can include tutorial assignments and schedules, parental pressure, teacher expectations, and so on. The response to these stressors is the poor academic performance, anxiety, depression, isolation etc.

Scope of study

Education is a basic right of everyone across the world. In the modern era, it has changed from a service sector to one that makes huge profits. As a result, students are often pressurised to score high marks so as to increase the value and reputation of the institution. Parents too add to this by comparing their child with other children. This destroys the mental well-being of the child, which is ignored most of the time. It is high time we realize that academic stress has a huge impact on all the aspects of a child. Though it is given to improve the child's performance, it only hinders her/his achievements. In higher secondary education the level of stress goes higher because it is the time when child's marks influence their career opportunities. In India, most of the parents' desire for their child to opt a medical or engineering field. Extra tuitions, entrance coaching, self-study etc. take up most of the child's time and no leisure time is given.

This research is to show that there is a need to understand the academic stress factors and its impact on the students. This would help to see that training need to be given to students, teachers and parents about stress and ways to handle it efficiently. It would be helpful in understanding the significance of relaxation techniques like yoga and meditation in the curriculum of schools. It would also show the significance of support systems in the life of students.

Pilot study

Pilot study will be conducted among thirty students of higher secondary classes in order to see if the research is feasible.

General objective

The purpose of this study is to see how academic stress affected students' academic performance in Ernakulam district CBSE schools.

Specific Objectives

- To investigate the students' socio-demographic profile.
- To study the impact of academic stress on the academic performance of the students.
- To understand the support system available for the students.

Hypothesis of the study

- The higher the academic stress level, the lower the academic performance.
- The lower the academic stress level, the higher the academic performance.

Definitions of key concepts

Student

Theoretical definition: A student is a person who is enrolled in a school or other educational institution and who is pursuing knowledge, developing professions, and obtaining work in a selected field. (Wikipedia)

Operational definition: A student is someone who attends higher secondary education in a CBSE school in Ernakulam district.

Socio- demographic profile

Theoretical Definition: Socio-demographics are usually understanding about the characteristics of a population. Age, gender, ethnicity, education level, income, customer type, years of experience, and location are all socio-demographic factors that are asked in all sorts of surveys. (Dobronte).

Operational Definition: Socio-demographic profile, according to the study is the basic information of the students doing their higher secondary education in schools in the Ernakulam district. This includes name, age, class, religion, school and their family

Stress

Theoretical definition: The understanding of stress is feeling and get experience of being overwhelmed or unable to cope with emotional and mental pressure. The stress can cause the life event in many ways and also has the response of the human body. So that it has get new experience when unexpected things happen and threaten to our sense of sense. In that situation we feel self control. (Stress,2021)

Operational Definition: According to the study, stress is the mental and emotional tension undergone by the student due to various reasons and has an impact on his/her academic performance.

Academic Stress:

Theoretical definition: Academic stress is described as the body's reaction to academic demands that are beyond a student's ability to adjust. (Alsulami, S.)

Operational Definition: According to the study, it is the mental tension in a student due to the inability to cope with the needs of academics and education.

Academic performance

Theoretical definition: Academic performance refers to the information obtained as measured by a teacher's grade and/or educational goals set by students and instructors to be met over a given period of time. (Abaidoo)

Operational Definition: According to the study academic performance includes the marks obtained, participation in different activities at school etc. by the students of higher secondary classes in CBSE schools.

Support System

Theoretical definition: A support system is "a network of people who provide practical or emotional support to an individual." (From Merriam-Webster)

Operational Definition: According to the study support system means the people and activities that support the students in academics and social life, which includes family, teachers etc.

CBSE

Theoretical definition: The Union Government controls and manages the Central Board of Secondary Education (CBSE), which is India's national education board. (Wikipedia)

Operational definition: The Central Board of Secondary Education (CBSE) is one of India's national education bodies.

Research Design

The researcher plans to use quantitative method by distributing questionnaires. The research design is descriptive. It describes the influence of pupils' stress levels on their academic performance. The researcher also learns about the support structure that is accessible to pupils.

Universe

All the students studying in higher secondary classes (eleventh and twelfth) in CBSE schools in Ernakulam

district

Unit of study

The unit of study is a student studying in higher secondary classes (eleventh and twelfth) in CBSE schools in Ernakulam district.

Sampling Technique

The sampling technique adopted is convenient sampling where units are picked according to convenience and availability.

Include and Exclude Criteria

Include: All the students in the higher secondary classes in CBSE schools in Ernakulam District are included.

Exclude: All the students in who are not in a CBSE school and students who are in CBSE schools but not in higher secondary classes are excluded.

Research Instruments/ Tools for data collection

● **Questionnaire which includes questions about:**

- Socio demographic profile of the students: It includes the name, age, class, school, religion.
- Academic performance: Questions covers information on the participation of student in class discussions, regularity in attendance, attentiveness to lectures, participation in extracurricular activities, punctuality, submission of assignments, marks scored for examinations etc.
- Dalia Bedewy and Adel Gabriel's Perception of Academic Stress Scale: It is an 18-item scale with three subdivisions: Stresses linked to academic expectations, Stresses related to faculty work and tests, and Stresses related to students' academic self-perceptions. 1 = Strongly Agree, 2 = Agree, 3 = Neither Agree nor Disagree, 4 = Disagree, and 5 = Strongly Disagree
- Support system: This part includes questions like frequency of help obtained from home to do works, attending tuition centres, group study with peers, parents' attendance in PTA meetings, Parental pressure, support from teachers, remedial classes etc

IV. RESULT AND ANALYSIS

Thirty samples were collected by the researcher from students who are doing their higher secondary education in the CBSE schools in Ernakulam district. Among them, the majority of the respondents were female which was 19 and 11 of them were male. One of the respondents was fifteen years of age, 14, 10 and 5 of the respondents were of 16, 17 and 18 years respectively. 16 of the respondents were in twelfth and 14 were in eleventh. 21 of the respondents were Christians, 6 were Hindus and 3 were Muslims. The respondents were from middle class families with annual income between twenty-five thousand to five lakh rupees.

Frequency tables
Perception of Academic Stress Scale

Item	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I am confident that I will be a successful student	10(33.3%)	11(36.7%)	6 (20%)	1 (3.3%)	2 (6.7%)
I am confident in my ability to succeed in my future endeavours.	11(36.7%)	10(33.3%)	6 (20%)	2 (6.7%)	1(3.3%)
I can make academic decisions easily	5(16.7%)	11(36.7%)	7(23.3%)	6(20%)	1(3.3%)
There is adequate time set up for classes and academic work.	5(16.7%)	10(33.3%)	3 (10%)	9 (30%)	3 (10%)
I have enough time to relax after work	8(26.7%)	7(23.3%)	8(26.7%)	2(6.7%)	5(16.7%)
My teachers are critical of my academic performance	4(13.3%)	7(23.3%)	11(36.7%)	6(20%)	2(6.7%)
I fear failing courses this year	5(16.7%)	3(10%)	8(26.7%)	6(20%)	8(26.7%)
I believe that my anxiety regarding exams stems from a character flaw.	4(13.3%)	3(10%)	9(30%)	5(16.7%)	9(30%)
Teachers have unrealistic expectations of me	3(10%)	7(23.3%)	9(30%)	8(26.7%)	3(10%)
The size of the curriculum (workload) is excessive	2(6.7%)	8(26.7%)	7(23.3%)	4(13.3%)	9(30%)
I feel the quantity of work assigned is excessive	2(6.7%)	5(16.7%)	7(23.3%)	10(33.3%)	6(20%)
If I get behind on my work, I won't be able to catch up.	2(6.7%)	5(16.7%)	11(36.7%)	6(20%)	6(20%)
The unrealistic expectations of my parents stress me out	5(16.7%)	5(16.7%)	9(30%)	5(16.7%)	6(20%)
competition with my peers for grades is quite intense	3(10%)	2(6.7%)	9(30%)	10(33.3%)	6(20%)
The examination questions are usually difficult	2(6.7%)	5(16.7%)	13(43.3%)	4(13.3%)	6(20%)
Examination time is short to complete the answers	6(20%)	5(16.7%)	7(23.3%)	8(26.7%)	4(13.3%)
Examination times are very stressful to me	4(13.3%)	6(20%)	6(20%)	6(20%)	8(26.7%)
I'm scared about obtaining a job even if I pass my tests.	3(10%)	5(16.7%)	11(36.7%)	5(16.7%)	6(20%)

Majority of the respondents do not face a lot of academic stress. They are quite sure that they will become successful in their careers and are able to handle their academic pressures satisfactorily. Some of the are unsure about their situations.

Academic Performance scale

Item	Never	Rarely	sometimes	Often	Always
I listen to the lectures attentively	1(3.3%)	5(16.7%)	8(26.7%)	11(36.7%)	5(16.7%)
I actively participate in discussions and can answer the questions asked	3(10%)	5(16.7%)	5(16.7%)	10(33.3%)	7(23.3%)
I get good grades on tests, quizzes, assignments etc.	3(10%)	2(6.7%)	12(40%)	10(33.3%)	3(10%)
When I receive poor grades, I study harder to better my performance	3(10%)	3(10%)	4(13.3%)	7(23.3%)	13(43.3%)
I do my homework regularly	5(16.7%)	2(6.7%)	6(20%)	8(26.7%)	9(30%)
I submit my assignments on time.	3(10%)	2(6.7%)	3(10%)	6(20%)	16(53.3%)
I do my assignments on my own.	3(10%)	1(3.3%)	5(16.7%)	6(20%)	15(50%)
I am actively involved in extracurricular activities	3(10%)	4(13.3%)	5(16.7%)	6(20%)	12(40%)
I make sure that my extracurricular activities do not interfere with my academics.	5(16.7%)	2(6.7%)	9(30%)	5(16.7%)	9(30%)
I do not take leave unnecessarily	3(10%)	4(13.3%)	5(16.7%)	6(20%)	12(40%)

Majority of the respondents perform well in their academics. They listen attentively to the lectures and participate in the class activities. They study harder and achieve good marks. They are also involving in extracurricular activities and are punctual.

Support system

Item	Never	Rarely	Sometimes	Often	Always
My parents do not scold me unnecessarily	10(33.3%)	2(6.7%)	5(16.7%)	4(13.3%)	9(30%)
My parents help me with my schoolwork	3(10%)	8(26.7%)	11(36.7%)	2(6.7%)	6(20%)
My parents never miss PTA meetings	12(40%)	3(10%)	2(6.7%)	0	13(43.3%)
My parents do not pester me to study	6(20%)	1(3.3%)	12(40%)	5(16.7%)	6(20%)
I get enough time for my studies at home	1(3.3%)	2(6.7%)	6(20%)	8(26.7%)	13(43.3%)
I have the opportunity to avail tuition classes if required	5(16.7%)	3(10%)	4(13.3%)	5(16.7%)	13(43.3%)
My peers help me with schoolwork	3(10%)	4(13.3%)	5(16.7%)	7(23.3%)	11(36.7%)
My teachers are always ready to help me	2(6.7%)	3(10%)	3(10%)	4(13.3%)	18(60%)
Teachers do not show partiality	7(23.3%)	2(6.7%)	5(16.7%)	4(13.3%)	12(40%)
Remedial classes are available at my disposal	3(10%)	1(3.3%)	6(20%)	6(20%)	14(46.7%)

The respondents who have participated in the survey have a satisfactory support system. Majority of the respondents get good support from their parents, teachers and peers.

V. MAJOR FINDINGS AND CONCLUSIONS

The survey was conducted among the students of higher secondary classes in CBSE schools in Ernakulam district. The total 30 samples were collected and among them the respondents were female student and male student. The researcher found out that majority of the respondents did not face academic stress to an extreme level. Majority of the respondents were active participants in class and hard working. They are attentive and score good marks in quizzes etc.

The respondents also have a good support system. Most of the respondents have a very good support from their parents, teachers and peers. They have the opportunity to avail help from their close ones.

The research hypothesis was that if academic stress levels are high, academic performance would be poor, and if academic stress levels are low, academic performance will be high. From the samples collected and the frequency table, the research thinks that the hypothesis is true. Majority of the respondents experienced a low level of academic stress and had a high level of academic performance. As a result, the researcher has concluded that the hypothesis is correct. The researcher also believes that they do not experience a high level of academic stress because they have an excellent support system.

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