



Academic Achievement in Relation to Examination Anxiety

Dr. T. Mahendran,

Assistant Professor, KSR College of Education, Tiruchengode.

ABSTRACT

The present study explores the examination anxiety and academic achievement of high school students in relation to selected variables like gender, medium of instruction, location of school, type of school, type of management, and annual home income. A sample of 100 students was selected using a stratified random sampling technique, and standardized tools were used to measure examination anxiety and academic achievement. Significant differences were obtained in the examination anxiety and academic achievement of students belonging to different school types and management systems, like boys', girls', and co-educational. The overall findings of the present study indicate that high school students exhibit a moderate level of both examination anxiety and academic achievement. Results emphasize the role of a congenial learning environment along with the involvement of parents and teachers to help learners overcome anxiety, which in turn will enhance their academic performance.

Keywords: Examination Anxiety, Academic Achievement

Introduction

Education is generally regarded as a systematic course of training for the acquisition of knowledge and skills intended to enhance the capacity of individuals to perform in certain areas and improve their job opportunities. The wider perception of education as a process for the perfection of personality, character, and the development of human potential has been gradually losing its emphasis. Such holistic perspectives do continue to prevail, but only within narrow contexts.

Adolescence is a critical period of development characterized by exploration and experimentation with identity and significant physical, emotional, and social change. The adolescent must navigate changing family roles, evolve peer relationships, and increase levels of independence amidst physical maturation. In comparison to adults, adolescents are more prone to stress and have fewer resources to cope with that stress. Identity development can be a particularly complex process and can result in significant psychological distress. Studies report that at least one in five children and adolescents has a mental health disorder, and



worldwide, an estimated one in ten or almost six million youths have serious emotional disturbances.

Anxiety commonly denotes a state of unease or fear often accompanied by palpitations, sweating, or tension. It can also be an unpleasant emotional state characterized by apprehension, discomfort, and dread combined with physiological responses like motor tension or autonomic hyperactivity. Anxiety can be evoked by a perceived situational or internal danger, a perception of inability to cope, or even chronic fear of anticipated events. Anxiety can also occur without any obvious cause and manifest as persistent or diffuse apprehension or hypersensitivity to uncertainty. Severe anxiety renders the sufferer unable to cope with everyday situations.

More than the rest, examination anxiety has become a grave concern and is often cited in reports on students' distress and even suicide during examination periods. Students who suffer from examination anxiety frequently experience tension, nervousness, apprehension, trembling, rapid heartbeat, and dryness of the throat. They may not be able to concentrate, marshal their ideas, or recall important concepts relevant to the exam. Misreading questions, going blank on topics with which one is familiar, remembering correct answers only after leaving the examination hall—all these are common consequences. Examination anxiety disrupts effective coping with exam-related stress and triggers intense emotional arousal that seriously interferes with clear thinking.

Examination anxiety is caused by a number of factors, such as parental and teacher expectations, concern about future careers, and scarce job opportunities. Parents often want their children to get high marks or top ranks, and teachers want perfect results in their subjects. Students, therefore, bear all these pressures, apart from the extra pressure their family members may exert. This leads to frustration, mental tension, and suicidal behaviour among students in extreme cases. Examination anxiety bears serious effects on not only their academic results but also their physical and mental health. So, it is necessary to recognize the nature and implications of examination anxiety so that parents, teachers, and educators may seek effective strategies to guide students and promote their normal development.

Objectives

- To assess the level of examination anxiety among high school students.



- To determine the level of high school academic achievement among students.
- Examining the examination anxiety and academic achievement of high school students with respect to gender.
- Analyzing the examination anxiety and academic achievement of high school students in terms of their medium of instruction.
- To study the examination anxiety and academic achievement of high school students in relation to types of school.
- To research the academic achievement and examination anxiety of students in high school concerning the type of school management.
- By location of the school, to find out the examination anxiety and academic achievement of high school students.
- To investigate the relationship between examination anxiety and academic achievement among high school students.

Review of Related Literature

Academic achievement is the degree at which learners attain established educational goals; this is usually reflected in grades, test results, and graduation outcomes. It encapsulates the knowledge and skills learned and is influenced by various personal, social, and institutional causes.

Academic achievement, according to most definitions, has been commonly assessed with tools such as standardized tests, classroom assessments, grades, degrees, and certificates, among others; it also involves recognitions such as honours and awards. Other measures include participation in academic competitions, research contributions, and high performance in standardized evaluations.

Various factors account for success or failure in academics. At a personal level, individual characteristics like self-management, intrinsic motivation, and learning styles uniquely impact the performance of an individual. Social factors, like the involvement of parents and classmate relationships, further determine academic patterns. At the institutional levels, the techniques of teaching, classroom atmosphere, and finally, the availability of resources within the school help to determine learning outcomes (Lumen Learning, 2022; MDPI, 2022; Orbis School, 2023; PubMed, 2023).



It is important to note that academic achievement improves one's future opportunities in education and career, assists in the development of necessary cognitive and life skills, and builds personal growth, confidence, and lifelong learning. On a larger scale, high levels of academic achievement contribute to national development and economic progress.

Methodology

Research Method

In this investigation, the survey method was used to study the examination anxiety and academic achievement of high school students. This is the appropriate method for collecting data from the responses of a large group of people and for systematic study of their characteristics, attitudes, and behaviours.

Population

The population for this study includes all students pursuing their studies in different government, aided, and private schools both in rural and urban areas.

In the reference study, the sample consisted of undergraduate students. These subjects were mainly second-year undergraduate in education, averaging 21 years of age.

Sample and Sampling Technique

The sample for the present investigation consisted of a total number of 100 high school students. The sample consisted of students from four government schools, three government-aided schools, and two private schools, representing all types of management institutions. Students were further differentiated into subgroups of boys and girls, school-type (government, aided, private), and locality (rural and urban).

The stratified random sampling technique was used in the study. In the stratified random sampling technique, the population was divided into several strata like boys, girls, private school students, government school students, aided school students, rural students, and urban students. Samples were then randomly selected from each of these strata to ensure that there is adequate representation of all categories. According to Corewell (1960), "A good sample of a population is the one which will produce the characteristics of the population with great accuracy."



Data Collection Method

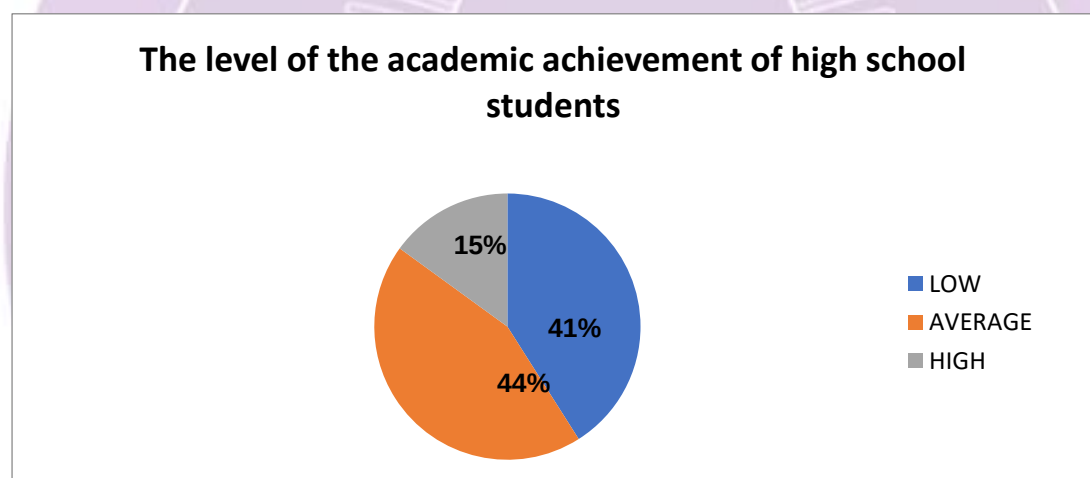
The data was collected directly from the students using standardized scales and questionnaires. Students responded to items that were designed to measure levels of examination anxiety, together with academic achievement indicators.

Methods of Data Analysis

Collected data were analyzed using appropriate statistical techniques. Descriptive statistics in terms of Mean and Standard Deviation were computed for all subgroups. Intercorrelations among the various anxiety scales were determined, along with correlations between anxiety scores and test performance. Further, Regression Analysis was conducted to examine the predictive relationship between anxiety measures and academic outcomes.

Verification

Figure 1



Interpretation of Findings

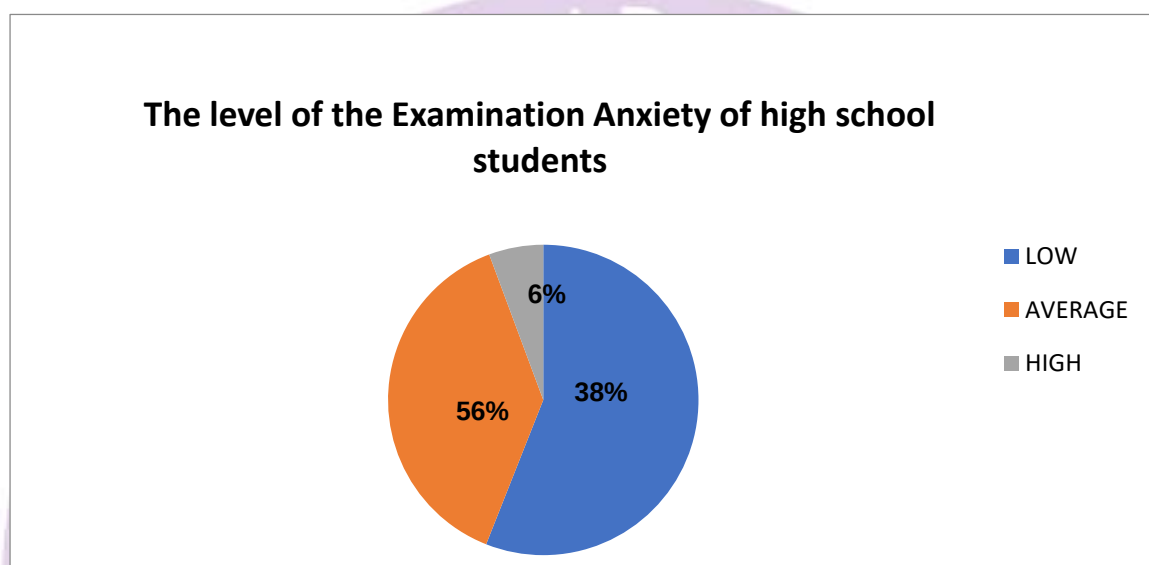
Results show that the general level of academic achievement of the high school students can be rated as moderate. In the score distribution, 41% are in the low achievement category, while 44% of the students fall under average achievement. Only 15% have high academic achievement.

Since the highest number of students are within the average range, with 44%, and a large group also falls within the low range, at 41%, the overall pattern indicates that academic achievement is neither too high nor too low; it remains at moderate levels. This clearly supports the hypothesis formulated for the study.

Conclusion

Thus, it is accepted that, “The level of academic achievement of high school students is moderate”. Because the empirical data support the hypothesis by revealing that the academic performance of most of the high school students falls within the range of moderation.

Figure 2



Interpretation of Findings

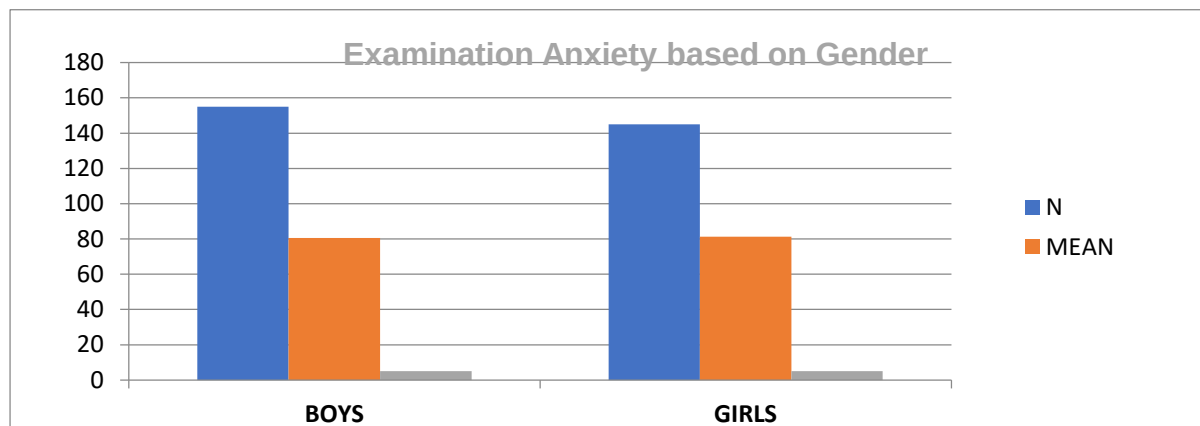
From this examination anxiety analysis among high school students, it is observed that the overall level of examination anxiety is not moderate, which goes against the hypothesis. The distribution of anxiety levels in this regard shows that 56% of students fall into the low anxiety category, while 38% of students experience a moderate level of anxiety. Only 6% of the students reveal a high level of anxiety.

This distribution clearly shows that most students have low examination anxiety, and only a minority fall into the high or moderate categories. Since the largest proportion of students, 56%, belongs to the low anxiety group, the overall level cannot be classified as moderate.

Conclusion

Therefore, it is rejected that “The level of Examination Anxiety of high school students is moderate”. The data illustrates that the examination anxiety among high school students is mainly low, not moderate.

Figure 3



Interpretation

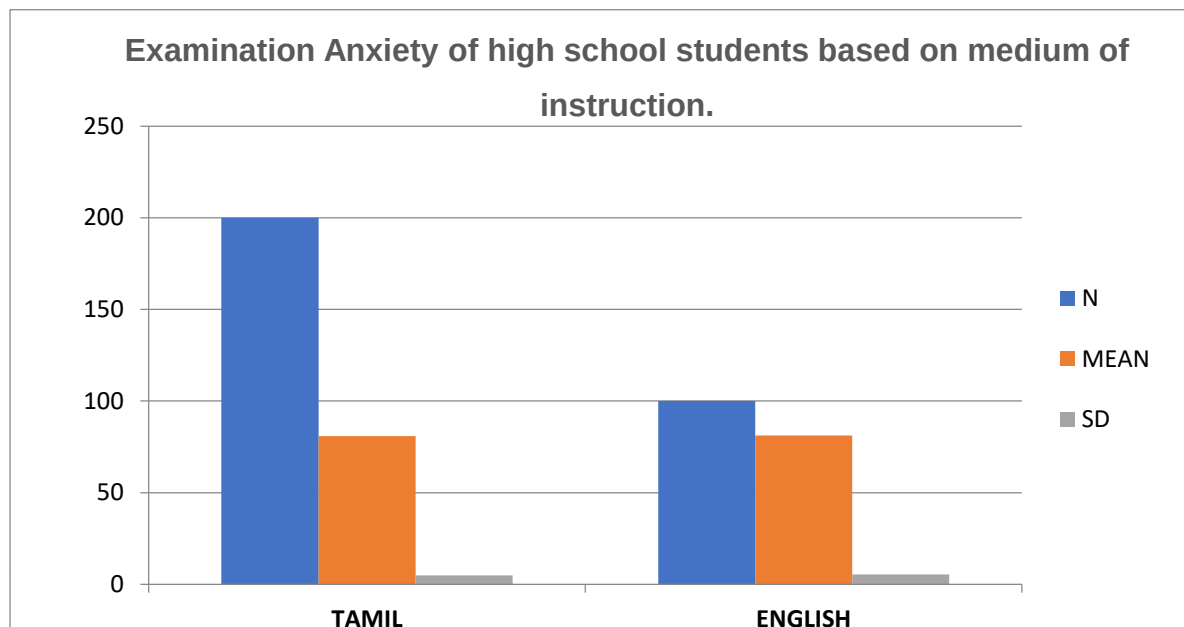
The gender comparison of examination anxiety of the high school students shows that the value calculated is less than the tabulated value at the adopted level of significance, depicting that the difference in mean anxiety scores among male and female students is not significant.

In other words, gender does not have a significant role when it comes to the examination anxiety levels of high school students; male and female students show similar levels of anxiety, and small differences found are due to chance rather than being a real effect.

Conclusion

Therefore, "There is no significant difference between the Examination Anxiety of high school students with respect to gender", is accepted. The findings confirm that examination anxiety remains consistent across genders.

Figure 4



Interpretations

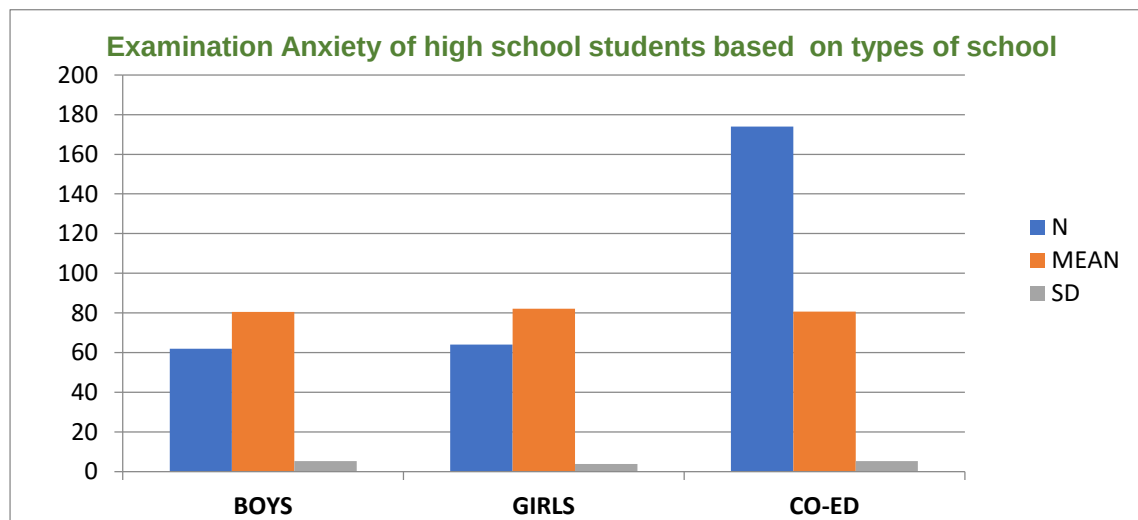
A comparison of Tamil-medium and English-medium high school students in terms of examination anxiety indicates the calculated value is less than the tabular value at the accepted level of significance. Consequently, it could be inferred that the differences in examination anxiety among the two groups are not statistically significant.

This means that the medium of instruction, Tamil or English, does not have a meaningful influence on students' examination anxiety. Both groups reveal similar levels of anxiety, and any observed minor differences are due to chance rather than an actual effect of the medium of instruction.

Conclusion

Thus, "There is no significant difference in the Examination Anxiety of high school students based on medium of instruction", is accepted. The results conclude that examination anxiety is consistent among students regardless of whether they study in the Tamil medium or English medium.

Figure 5



Interpretation

The above figure presents the mean, standard deviation, and 't' values relating to the examination anxiety of high school students according to the types of school, namely boys' schools, girls' schools, and co-educational schools.

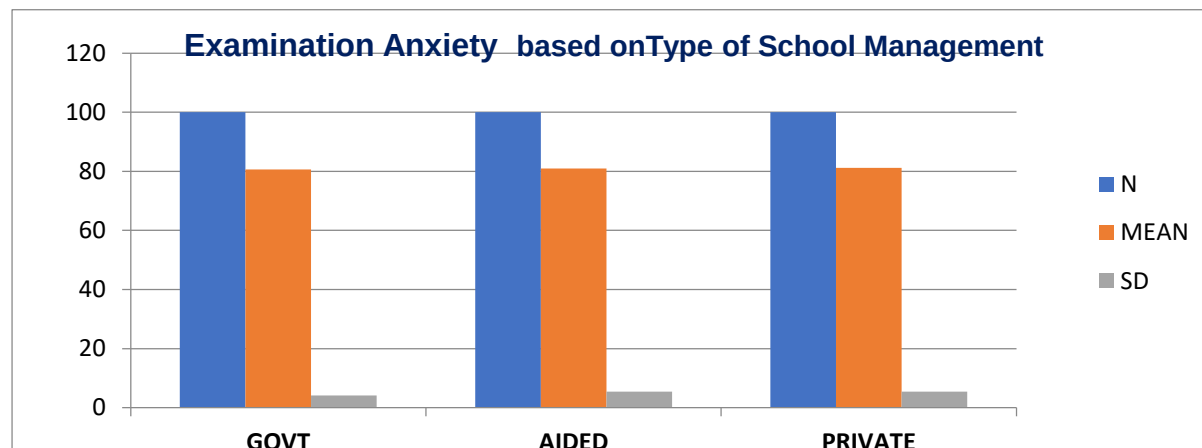
It is observed that the calculated value is larger than the tabular value at 0.01 level of significance. This indicates that the differences in examination anxiety among the three types of schools are statistically significant.

This means that school type does make a difference in examination anxiety. There is much variation in anxiety among school going students pursuing their studies in boys', girls', and co-educational schools, and these differences are all real and cannot be explained by random variation alone. Therefore, the assumption of homogeneous examination anxiety across school types is not supported by the data.

Conclusion

Therefore, "There is no significant difference between the Examination Anxiety of high school students based on types of school", is rejected. The findings indicate that the type of school has a significant impact on the examination anxiety of high school students.

Figure 6



Interpretation

This figure has shown the mean, standard deviation, and 't' values relating to the examination anxiety of high school students as per the type of school management into Government, Aided, and Private schools.

From the table, it is observed that the calculated value is greater than the table value at a 0.01 level of significance. This clearly indicates that the differences in examination anxiety among students of different school management types are statistically significant.

This means that school management is indeed a factor in examination anxiety. Students from Government, Aided, and Private schools have marked variations in anxiety, which are not due to chance.

Conclusion

Therefore, "There is no significant difference in the Examination Anxiety of high school students based on types of school management", is rejected. This result confirms that school management types significantly influence the examination anxiety levels of high school students.



Correlation of Influence of Examination Anxiety and Academic Achievement

Table-1

S.No	Variables	No. of. Sample	'r' Value	Correlation
1	Examination Anxiety Vs Academic Achievement	100	0.320	Weak Positive Correlated

Interpretation

The correlation analysis between Examination Anxiety and Academic Achievement of high school students reveals that the computed value of 'r' is 0.320 with a sample size of 100. This value falls within the range of a weak positive correlation between two variables.

The weak positive correlation means that as examination anxiety increases, academic achievement tends to increase slightly, but the relationship is not strong. The variables are related but not closely linked, and changes in examination anxiety explain only a small portion of variation in academic achievement.

Conclusion

Thus, the results indicate that Examination Anxiety and Academic Achievement of high school students are weakly and positively correlated, which suggests that although there is some sort of relationship between the two factors, it is small and is not strong enough to infer an outstanding association.

Findings

- There were 41% low, 44% average, and 15% high achievers among the students.
- 56% were in the low category, 38% in the moderate, and 6% in the high category.
- There is no significant difference in examination anxiety in relation to gender.
- There is no significant difference in examination anxiety based on the medium of instruction.
- There is a significant difference in examination anxiety according to the location of the school at the 0.05 level of significance.



- There is a significant difference in examination anxiety based on the type of school at the 0.01 level of significance.
- There is a significant difference in examination anxiety based on type of school management at 0.01 level of significance.
- There is a weak positive correlation between examination anxiety and academic achievement.

Educational Implications

- **Guidance Cells:** Every school should establish a guidance and counselling cell in order to help students at different junctures of their academic journey. It will help address problems related to examination anxiety and academic achievement.
- **Understanding Students' Backgrounds:** With an acquired understanding of the students' home background and general school environment, educators can further support academics and emotional needs to increase students' achievement.
- **Supportive Environment:** The teachers and parents can provide a very encouraging environment. Such an atmosphere given to the students can prove to be really helpful for them to uplift their academic performance along with maintaining stress associated with examinations.

Suggestions

- The current study focused on high school students. Further studies can also cover students at both higher and lower levels of education.
- Further research may target only higher secondary students to investigate their examination anxiety and academic achievement compared to that of high school learners.
- The research may be conducted along all class groups to understand the developmental variations in examination anxiety and academic achievement.
- The present study may be scaled up to the secondary level for a wider perspective on student behaviour and performance.
- Further studies can be done to establish the relationship between emotional intelligence, school environment, and academic achievement based on how such factors interact.



- A similar survey could be done for parents and teachers to assess their perceptions and how the support impacts students in terms of examination anxiety and academic achievement.

Conclusion

The present study aims at examining high school students' examination anxiety and academic achievement in relation to selected variables like gender, medium of instruction, location of the school, type of management, type of school, and annual home income. The findings of the study show that there is a significant difference in examination anxiety and academic achievement among students from schools with different types of management, namely, boys' schools, girls' schools, and co-educational institutions. In general, the findings of the study indicate that high school students manifest average levels of examination anxiety and academic achievement.

References

- Ahmed, I., Banu, H., Al-Faqeer, R., & Al-Suwaidi, R. (2009). Cognitive emotions: Depression and anxiety in medical students and staff. *Journal of Critical Care*, 24(3), 1–7.
- Anna, Z., Scott, M. L., & Thomas, J. E. (2005). Anxiety, self-efficacy, stress, and academic success in college. *Research in Higher Education*, 46(6), 677–706.
- Anuradha, & Bharti. (2001). Effect of T.V. viewing on academic achievement of elementary school children. *Perspectives in Education*, 18(2).
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28, 117–148.
- Benipal, A. S., & Singh, J. (2014). A study of academic achievement of adolescents in relation to their perception of classroom environment in Punjab. *Educationia Confab*, 3(7), 18–26.
- Bhasin, S. K., Sharma, R., & Saini, N. K. (2010). Depression, anxiety, and stress among adolescent students belonging to affluent families: A school-based study. *Indian Journal of Pediatrics*, 71(2), 161–165.
- Bong, M., & Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: How different are they really? *Educational Psychology Review*, 15(1), 1–40.



- Eric, S. (2005). The role of supportive school environment in promoting success. *Developing Safe and Healthy Kids: Getting Results*. Development Studies Centre.
- Ganesan, P. (2012). A study on test anxiety of higher secondary students in relation to self-actualization. *International Journal of Teacher Educational Research*, 1(4), 38–43.
- Garrett, H. E. (2007). *Statistics in psychology and education*. Paragon International Publishers.
- Good, C. V. (Ed.). (1959). *Dictionary of education*. McGraw–Hill.
- Haseen, T. (1999). Academic achievement as a function of social class, parent–child interaction, dependency behaviour, and social management. *Psycholinguistics*, 29.
- Helpful Professor. (2023). *Examples of academic achievement*.
<https://helpfulprofessor.com/academic-achievement-examples/>
- Jain, M., & Jain, J. (2007). Academic anxiety among adolescents: Role of coaching and parental encouragement. *National Academy of Psychology*, 52(2), 140–146.
- Kiran, U. (1983). *Anxiety, task complexity and sex as related to verbally expressed preferences and problem-solving performance* (Unpublished doctoral dissertation). Agra University.
- Kumar, S. (2016). Academic achievement in relation to anxiety and depression among high school students. *International Journal of Applied Research*, 2(3), 25–27.
- Lumen Learning. (2022). *Academic achievement*.
<https://courses.lumenlearning.com/adolescent/chapter/academic-achievement/>
- MDPI. (2022). Academic performance and cognitive factors. *Journal of Intelligence*, 10(3).
<https://www.mdpi.com/2079-3200/10/3/55>
- Mohanty, C. (1985). *Effects of state–trait anxiety on classroom learning and personal adjustment of elementary school pupils* (Unpublished doctoral dissertation). Utkal University.
- Murthy, V. C. G., & Kulshreshtha, R. (1999). Academic anxiety and academic achievement: Comparison of two management schools. *Journal of Indian Education*, 25(2), 29–37.
- Oxford Bibliographies. (2017). *Academic achievement*.
<https://www.oxfordbibliographies.com/abstract/document/obo-9780199756810/obo-9780199756810-0108.xml>



- PubMed. (2023). *Factors associated with academic achievement*.
<https://pubmed.ncbi.nlm.nih.gov/37983225/>
- Purandare, V. M. (1984). *Anxiety and strategies in serial verbal learning* (Unpublished doctoral dissertation). Poona University.
- ResearchGate. (2021). *Academic achievement*.
https://www.researchgate.net/publication/351870823_Academic_Achievement
- Shakir, M. (2016). Academic anxiety as a correlate of academic achievement. *Journal of Education and Practice*, 5(10), 29–36.
- Simplicable. (2023). *Academic achievements*. <https://simplicable.com/edu/academic-achievements>
- Study.com. (2024a). *Academic achievement: Overview & factors*.
<https://study.com/learn/lesson/academic-achievement-overview-factors.html>
- Study.com. (2024b). *Academic achievement: Overview & factors (video)*.
<https://study.com/learn/lesson/video/academic-achievement-overview-factors.html>
- Suresh, K. (2016). A study on anxiety level and academic achievement of XI standard students of Thanjavur district. *International Journal of Indian Psychology*, 3(4), 57.
- The Orbis School. (2023). *Why academic achievement matters*.
<https://www.theorbisschool.com/blog/why-does-academic-achievement-matter>
- Wordvice. (2023). *Academic CV examples*. <https://blog.wordvice.com/academic-cv-examples-format/>
- Yildirim, I., & Ergene, T. (2003). Test anxiety, submissive behaviour, and social support as predictors of academic achievement. *Hacettepe University Journal of Education*, 25, 224–234.