# TO STUDY THE LEVEL OF ACADEMIC ACHIEVEMENT OF HIGH SCHOOLSTUDENTS 

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#### Abstract

The main tool for social reform, education, is currently being transformed. All educational institutions are working to improve their quality in the contemporary technologically advanced world while placing a greater emphasis on the academic prowess of the students. Performance quality has emerged as the most important variable for personal advancement in the current period of fierce competition. Parents want their kids to succeed as highly as they can on the performance ladder. There is a lot of pressure on students, instructors, schools, and the education system as a whole because of this demand for high levels of accomplishment. Students' mental health may be negatively impacted by the competitive culture and high parental expectations that exist today. Students are encouraged to compare themselves to their peers due to the pervasive competitive environment, whether it is in the classroom or in social settings. As a result, their perception of themselves is constantly changing and being redefined. A setting like this makes students anxious about their classes, and if the worry is too bad, it can cause despair and even suicide.


KEY WORDS: Emotional Intelligence, Academic Anxiety, Essential for Success.

## INTRODUCTION

The key tool for helping people realise their individual, environmental, and idealistic goals-peace, liberty, social justice, and mutual understanding-is education. Academic success is one of the most significant objectives of school among many others. Academic success has long been an important factor and the focus of educational study. The intellectual growth of the students continues to be the primary concern and the most significant goal of education, notwithstanding various assertions regarding the purposes of

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education. The fact is that academic achievement is the sole responsibility of the educational institutions established by society to foster a child's healthy scholastic growth, even while other parts of educational aims cannot be overlooked.

Murray first proposed the idea of achievement in 1938. The core of the more general word "educational growth," which denotes growth in all school disciplines, is academic achievement. Academic achievement refers to the acquired skill or level of proficiency in the academic tasks typically assessed by standardised examinations and reflected in grades or based on norms obtained from the performance of a large sample of students. Students are chosen and differentiated from one another based on how well they perform on schoolwork, and this creates opportunities for their progress. Academic achievement may also be described as the level of mastery in particular subject areas obtained within a set amount of time and assessed by outside assessments or tests created by the teacher. It has been regarded as one of the most crucial aspects of life because students' future plans for graduate school or vocational training depend on their academic performance, i.e., their grades or marks at the school level. So, academic success and its evaluation are of utmost significance in any healthy and competent educational system. Accomplishment can be characterised as the breadth of skills and talents a student has developed in their academic discipline. Each student's future success is evaluated, projected, and connected to academic accomplishment. Academic achievement is the accumulation of information and the development of skills in academic disciplines, which are evaluated by the educational authority via standardised or non-standardized assessments. Achievement is "knowledge obtained or abilities developed in school topics, commonly recognised by test scores or by marks issued by the teacher or by both,". Academic achievement, is the amount of learning in a subject or a combination of subjects as measured by the exam marks. According to current thinking, a person's ability to adapt to their environment, special skills like intelligence, aptitude, and reasoning power, which are an essential part of their personality, and the intensity of their drives and motivations, which act as the driving force behind their activities, all have an impact on how well they do in school. Academic achievement therefore refers to the degree or amount of success and skill reached in a few particular areas of academic and scholastic activity.

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The evaluation of pupils' academic performance has several uses. For instance, a student's former performance may shed light on his current situation. Very high- or low-test scores may be a sign of peculiar characteristics. It serves as the foundation for both advancement to higher classes and entrance to a variety of courses. It exposes a person's assets and liabilities in particular categories. As a result, the focal point of our educational system is academic accomplishment. So, every educational institution, especially at the school level, has a fundamental responsibility to set the stage for pupils to achieve higher academic success. The significance of academic accomplishment has prompted key concerns for educational experts, such as:

- What variables encourage students' academic achievement?
- To what extent do the various factors influence academic success?

Many factors have been proposed and investigated in an effort to provide answers to these issues. Researchers have produced a variety of findings, sometimes supporting one another and other times running counter to one another. The researchers still don't seem to have a clear picture of academic accomplishment as a whole. The following discussion includes a number of elements that affect pupils' academic performance:

## FACTORS AFFECTING ACADEMIC SUCCESS

A student's academic success is influenced by a number of elements in one way or another. These elements include the socioeconomic position of the students, their sociopersonal qualities, the organisational climate of the school, their course offerings, etc. These variables can be broadly divided into two groups: objective factors and subjective elements.

## GOAL ELEMENTS

These elements are connected to the environment that an individual grows up in. The following are some of the primary, independent variables that affect pupils' academic achievement:
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## SOCIAL AND ECONOMIC STANDING

The socioeconomic position of the family takes into account a number of variables, including the family's educational level, employment status, income, type of family (nuclear or joint), educational support given by family members, place of residence, caste and religion, etc. Studies has shown that each of these variables has an impact on a person's academic performance in one way or another.

## - ACADEMIC ENVIRONMENT

The most significant element that primarily determines whether pupils attain greater or lower academic standards is the school environment. Academic achievement will be higher for children attending such institutions and vice versa if the learning atmosphere is positive, where academic ideals are respected and a feeling of self-discipline is instilled in both students and teachers. The majority of the school environment is made up of various elements, such as the organisation of various extracurricular and curricular activities, the type of discipline used, the classroom environment, the relationship between teachers and students, the relationship between staff members, the dedication of teachers to their jobs, the administration style, the involvement of students in various extracurricular and curricular activities, the nature of the curriculum, etc.

## - TEACHERS' EFFECTIVENESS

The core of the teaching-learning process is the teacher. Students will inevitably achieve more if the teaching-learning process goes smoothly and the teacher is successful in imparting what has to be taught to the students. As a result, one of the most important factors affecting pupils' academic progress is their teachers' effectiveness. The effectiveness of teachers depends on a variety of factors, including their subject-matter expertise, the methods and strategies they use to teach, their knowledge of and application of different teaching techniques, how they ensure student participation in the teaching-learning process, their preparation and use of teaching aids, etc.

Along with these key objective variables, there are additional elements that have a big

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impact on a child's academic success, such as the type of educational system that is popular at the moment, the child's peers and their customs and hobbies, etc.

## RESEARCH METHODOLOGY

Research is a methodical endeavour to learn new information and comprehend the subject being studied. An investigation needs to be conducted in a methodical and precise manner to provide the intended results. Planning is a necessity for anything to be done correctly. This enables the researcher to move forward without getting sidetracked by concurrent happenings. A carefully thought-out action plan that is carried out in a methodical manner produces positive outcomes. This was taken into consideration as the current investigation was conducted using the right research methods and approaches. If an inquiry is to be carried out methodically, a plan and procedure are crucial components. The major goal of the current analysis was to analyse high school students' academic accomplishment, academic anxiety, and emotional intelligence in relation to their learning and thinking styles and specific demographic factors.

The researcher personally gathered the data. In order to gather the necessary information from the concerned pupils, the investigator first visited the sampling schools and requested permission from the administrators. The researcher introduced herself, struck up a quick conversation to build rapport, and explained the aim of the test to the students. The investigator assured the youngsters that their answers would be kept private and not even shared with their teachers. The investigator introduced himself to the pupils and then gave them the Mangal Emotional Intelligence Scale to measure their emotional intelligence. The pupils were instructed to carefully read the directions before filling out their general information on the inventory answer sheet. The students were instructed to check the box next to the category that they felt best fit each object. The investigator provided clarifications in case there were any questions. The responders were then instructed to begin responding. The Mangal Emotional Intelligence Inventory booklets and response papers were collected from the students after they had completed the test. The students completed MEII in 35 to 37 minutes on average.

The researcher then gave the academic anxiety scale to each student. Before answering on

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the scale, the investigator instructed the students to carefully read the instructions. The researcher gave the pupils the information they needed to fill out the general information on the scale. The students were told that they may take as much time as they needed to complete the academic anxiety scale and that there was no time limit. They were also promised that the answers they provided would remain private. The pupils were then instructed to check one of the options, "Yes" or "No," next to each sentence on the scale, depending on their personal opinions. The pupils needed between 12 and 15 minutes to finish the scale. The investigator gathered the students' completed copies of the AASC.

The kids were once more instructed to gather in their classroom after a brief 15 -minute break. With them, the investigator had a casual conversation that helped them unwind. They were then given access to the SOLAT tool. The investigator provided the SOLAT tool with the appropriate instructions for filling out the general information. The pupils were told that they may take as much time as they needed to fill out this instrument and that there was no time limit. The students were instructed to maintain silence while completing the SOLAT tool since distractions could influence their ability to select the suitable statement that best represents them. They were also instructed to enter their responses in the appropriate blank spaces on the test sheet. After carefully reading each statement and selecting the best response, the students were instructed to place a tick mark () in the corresponding box. This allowed for an accurate assessment of their hemisphere dominance. Copies of the SOLAT tool were returned to the students when it was finished. The SOLAT replies were completed by the students in an average of 35 to 40 minutes.

All of the participants were praised by the researcher for their cooperation. To gather the necessary information, the identical process was carried out repeatedly at each sampled school. It is important to note that the researcher was not present when the data were gathered from the students, which aided in obtaining trustworthy and precise information.

In addition, the researcher herself, with the help of the responsible teacher in charge, recorded the academic achievement scores obtained by the sampled 9th class students in their end-term examination in the preceding class (i.e., 8th) under the Continuous and Comprehensive Evaluation pattern followed by schools. By using the scoring method

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described in the manuals of the appropriate research equipment, the data that were so collected were scored.

## RESULTS AND DISCUSSION

Table-1, provides the distribution of high school students' academic achievement scores as well as the estimated descriptive statistics values.

## TABLE-1: FREQUENCY DISTRIBUTION AND DESCRIPTIVE STATISTICS RELATED TOACADEMIC ACHIEVEMENT SCORES OF HIGH SCHOOL STUDENTS

| Class Interval | Frequency | Cumulative <br> Frequency | Cumulative Frequency <br> Percentage |
| :--- | :--- | :--- | :--- |
| $650-675$ | 4 | 2518 | 100.00 |
| $625-650$ | 26 | 2514 | 99.84 |
| $600-625$ | 24 | 2488 | 98.80 |
| $575-600$ | 94 | 2460 | 97.64 |
| $550-575$ | 88 | 2366 | 93.96 |
| $525-550$ | 98 | 2278 | 90.47 |
| $500-525$ | 174 | 2180 | 86.58 |
| $475-500$ | 202 | 2006 | 79.64 |
| $450-475$ | 232 | 1804 | 71.64 |
| $425-450$ | 308 | 1572 | 62.43 |
| $400-425$ | 290 | 1296 | 51.47 |
| $375-400$ | 282 | 698 | 39.24 |
| $350-375$ | 156 | 416 | 27.72 |
| $325-350$ | 164 | 260 | 16.52 |
| $300-325$ | 54 | 96 | 10.33 |
| $275-300$ | 34 | 48 | 1.67 |
| $250-275$ |  |  |  |

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| $225-250$ | 8 | 8 | 0.32 |
| :--- | :--- | :--- | :--- |
| Total (N) | 2518 |  |  |
| Descriptive <br> Statistics | Values | Descriptive <br> Statistics | Values |
| Range of Scores | $1330-472=858$ | Skewness | +0.335 |
| Mean (M) | 427.54 |  |  |
| Median (Md) | 420.00 | Standard Error | 0.069 |
| Mode (MO ) | 420.00 | Kurtosis | +0.347 |
| Standard Deviation | 82.34 | Standard Error | 0.138 |
| (SD) |  | of Kurtosis |  |

The academic accomplishment scores of high school pupils ranged from 236 to 665, or a range of 429, as shown in Table-1. The mean academic achievement score was determined to be 427.54 with a standard deviation of 82.34 . As the raw data was analysed, it became clear that $68.30 \%$ of high school students earned grades between 346 and 509 (out of 700) and might be regarded as average performers. High performers were identified as the $13.89 \%$ of pupils who received marks between 510 and 592 . Only $1.91 \%$ of high school students achieved 593 or more marks, which is considered to be very good achievement. On the other hand, a minuscule proportion of pupils ( $0.32 \%$ ) who received 262 or below scores can be regarded as very poor achievers. Moreover, $15.56 \%$ of students-who could be categorised as low achievers-obtained marks between 263 and 345 .

More evidence may be seen in Table, which shows that the calculated value of skewness was +0.335 , indicating positive skewness in the distribution of academic performance scores. The distribution of academic success scores was found to have a kurtosis value of +0.347 , which suggests that it is platykurtic in character. Kurtosis and standard error of skewness were found to have values of 0.138 and 0.069 , respectively. The distribution of academic achievement scores of high school students does not follow the principles of the normal probability curve because the value of skewness (+0.335) lies outside the range of

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0.138 ( 2 times the value of standard error of skewness), and the value of kurtosis $(+0.347$ ) also lies outside the interval of 0.276 ( 2 times the value of standard error of kurtosis). To put it another way, it may be said that the distribution of academic accomplishment ratings is not typical. The mean (427.54) and median (420.00) values, which are very different from one another, serve as more evidence of this. Notwithstanding the fact that the distribution of test scores is not normal, Eden and Yates (Johnson, 1961) and Norton (Guilford, 1965) found that "even with a population straying significantly from normality, the effectiveness of normalcy Distribution remained stable. In other words, the "F" test is rather insensitive to changes in the population distribution's shape. The decision was made to proceed with using the statistical approach known as "Analysis of Variance" to the academic success scores of high school pupils in light of these findings.

## STYLES OF LEARNING AND THINKING (SOLAT) OF HIGH

## SCHOOL STUDENTS

Based on their SOLAT tool scores, the sampled high school pupils were divided into three groups. Table-2, lists the proportion of pupils in each of these three groups.

## TABLE-2: PERCENTAGE OF HIGH SCHOOL STUDENTS WITH DIFFERENT BRAINHEMISPHERIC FUNCTIONING

| Sr. | Functioning of Brain Hemispheres | Number of <br> Students | Percentage |
| :--- | :--- | :--- | :--- |
| No. |  | 1874 | 74.42 |
| 1. | Right Hemispheric Dominance | 374 | 14.85 |
| 2. | Left Hemispheric Dominance | 270 | 10.73 |
| 3. | Integrated Hemispheric Functioning | 2518 | 100.00 |
| 4. | Total Students |  |  |

According to Table-2, the majority of high school students ( $74.42 \%$ ) were found to utilise their right hemisphere of the brain to the fullest, while only a small number of students ( $14.85 \%$ ) did the same for their left hemisphere. Also, $10.73 \%$ of high school students had integrated functioning, which is defined as using both hemispheres of the brain to process

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different types of information.

Also, the chi-square test was used against the null hypothesis to examine the importance of variations in learning and thinking styles among high school students (based on brain hemisphere functioning). Table-3 displays the outcomes that were thus achieved.

## TABLE-3: SUMMARY OF RESULTS OF CHI-SQUARE TEST WITH <br> RESPECT TODIFFERENCES IN STYLES OF LEARNING AND <br> THINKING

| Sr. <br> No. | Group of High <br> School Students | fe | (fo-fe) | $(f \mathbf{f o - f e})^{2}$ | (fo-fe)2 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1. | Right <br> Hemispheric <br> Dominance | 1874 | 419.66 | 517.34 | 267640.68 | 637.76 |
|  | Left <br> Hemispheric <br> Dominance | 374 | 419.66 | -232.66 | 54130.68 | 128.92 |
| 2. | Integrated <br> Hemispheric <br> Functioning | 270 | 419.66 | -284.66 | 81031.32 | 193.09 |
| 3. |  |  |  |  |  |  |
| 4. | Total (N) | $\mathbf{2 5 1 8}$ | Total $\square^{2}$ |  |  |  |

** Significant at 0.01 level of significance, df 2.

Table-3, shows that even at the 0.01 level of significance, for df 2 , the calculated value of chi-square (959.77) is significantly higher than the table value of chi-square (9.210). As a result, the null hypothesis, or the hypothesis of equal probability, is rejected, and it may be deduced that there are significant differences in how each region of the brain functions among high school pupils. This proves that differences in how each high school student's hemisphere portion of the brain functions actually exist among high school students rather of being the result of sampling or non-sampling variations. Accordingly, it can be deduced that

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a sizable portion of high school students used their right hemisphere of the brain to a greater extent for processing various types of information, while only a small number of students either used their left hemisphere of the brain to a greater extent (14.85\%) or possessed integrated hemispheric functioning ( $10.73 \%$ ) for processing various types of information.

## CONCLUSION

Preoccupations, preferences, and motivations are examples of what are referred to as interests. An individual's interests might be thought of as variables that draw him to or drive him away from certain things, people, and activities. Consequently, it would help to improve students' academic performance if the school curriculum and extracurricular activities provided in the schools are arranged in a way that will aid in creating students' interests in them and attracting them. Study habits are a person's recognisable method for learning about things and other people. While some types of study habits tend to be detrimental to academic development, others seem to be useful in particular situations. An individual can learn about a subject by certain behaviour patterns and learning styles, particularly from books and other information sources. It is frequently seen that students have and use a variety of learning tools when learning a new idea. The kids exhibit a preference for particular cognitive functioning modalities over others. For instance, some kids learn better by listening than by writing or using any other method. Similar to how various teachers teach different ways to think, different pupils arrive at different conclusions regarding an idea. They favour utilising various techniques to process data gathered from the environment and draw conclusions as a result. These ways of thinking and learning have a significant impact on both people's non-cognitive traits and academic success.

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