

To Study the Level of Scholastic Achievement of Higher Secondary School Students of Haryana

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ABSTRACT

According to Krech and Crutchfield (1968), if the sample size is 500, the findings will be rather excellent and the error will be less than 5%. In light of the above, the researcher in Haryana State chose to use a sample size of 500 students drawn from 20 different higher secondary schools in the public and private sectors. In order to acquire a representative sample from a population that is not homogenous, the stratified sampling approach is often used (Kothari, 1998, p.62). The research subjects are high school seniors from six different districts in the Indian state of Haryana: Faridabad, Gurugram, Hisar, Bhiwani, Ambala, and Jhajjar, all of which are under the jurisdiction of the Directorate of Higher Secondary Education. Thus, a total of 1087 students were used to compile the data. After excluding participants with missing or partial answers, 500 people made it into the study's final sample. An examination of the connection between academic stress and learning achievement among students in their last year of high school is the primary goal of this research. One thousand students from Class XII were studied by administering a variety of tests, including an Academic Stress Scale, a Non-scholastic Activities Inventory, and a Questionnaire for upper secondary school students. With respect to gender, school location, parental education, administration, and academic track, appropriate representation was maintained throughout data collection.

KEYWORD: *Sample, Population, Students, Gender, School Location, Parental Education*

INTRODUCTION

It wasn't until 1896 that Walter B. Cannon (1871-1945) began studying stress. In order to learn more about dogs' digestive systems, Cannon employed an X-ray device known as a fluoroscope. When the dog was anxious, he found that its digestive system stopped working. When we're under stress, our bodies release adrenal chemicals, which throw everything out of whack. These results inspired Cannon to keep conducting experiments, and the word "homeostasis," meaning "a state of equilibrium in the body," was born.

Hans Selye, a Canadian scientist who lived from 1907 to 1982, found that those with chronic illnesses had some of the same symptoms seen when individuals were stressed. Selye started to test his theory after associating it with stress. Heat, noise, poison, and shock were among the physical stressors that he subjected the rats to. Gastritis, lymph nodes, swollen glands, and reduced thymus glands were also seen in the rats. The Three-Stage Model of Stress Response was subsequently created by Selye. It was a paradigm that included warning, opposition, and weariness. Additionally, he demonstrated that the secreted hormone cortisol mediates the effects of stress.

The topic of stress has been covered extensively in the scholarly literature. We still don't fully understand what stress is. An individual's mental or emotional condition may be described as "distress" according to one definition. The general public and this definition both agree that stress is bad and causes problems. Selye is correct in pointing out that stress has both beneficial and harmful aspects. We tend to see stress negatively due to the amount of it in our contemporary lives. However, stress may have either a beneficial or harmful effect on a living thing's biology.

The body's response, according to Selye (1956), may be both good and negative; nevertheless, according to the majority of people, the physical and mental aspects are what really cause the body to respond, and this is often thought of as a bad thing. The "stressor" refers to the causes that cause stress, whereas "stress" or the "stress response" describes the physiological reaction.

Tension, pressure, irritation, conflict, and anxiety are all ways to think about stress. There is a physical definition of tension that goes something like, "a force tending to produce elongation." An example of illogical reasoning may be shown in the fact that the biological word "tension" returned to its original meaning of "stress" after it was adopted. Think about this

biologics definition: Any pressure on the mind, emotions, or nerve system is called tension. To rephrase, although tension is the driving force in physics, it is the body's response in biology.

We will not take into consideration the phrases pressure, frustration, worry, and tension since they are employed mistakenly as biological ones. Even if the words stress, as used by physicists, are accurate. Therefore, following Seley's lead, we shall refer to the elements that cause stress as "stressors" and either "stress" or the "stress response" to describe the physiological outcome.

REVIEW OF LITERATURE

Dr. Ranjit Kaur et.al (2018) This research aims to examine the gender and school type effects on students' emotional intelligence in high school. A total of 640 students from Haryana's senior secondary schools were chosen at random for this work. The research sample included all male and female secondary school students from public and private schools in the state of Haryana. The researchers A. K. P. Sinha and R. P. Singh used an emotional intelligence and adjustment scale that they had devised themselves to gather data. The results showed that senior high school students' emotional intelligence and adjustment differ significantly depending on the school's nature, but show no such difference depending on the students' gender. It was shown that there is a significant association between emotional intelligence and adjustment among students in senior high school.

Dr. Pratibha Sagar et.al (2017) For many students, academic pressure is the biggest cause of stress in their lives. The degree to which pupils at upper-level secondary schools experience academic stress is the focus of this research. Stratified random sampling was used in the study, which followed a descriptive research methodology. A total of 180 students from 10 different high schools in the Bareilly region were surveyed for this research. Academic Stress Scale, which was self-designed, was used to gather the data. The t-test and analysis of variance (ANOVA) were used for data analysis. While the research did not find a statistically significant difference in academic stress between students majoring in arts, sciences, or commerce, it did find a very significant difference between male and female participants in upper secondary school. Additionally, there was no discernible difference in the levels of academic stress experienced by pupils from rural and metropolitan areas compared to those from schools that received government funding or were funded independently.

Dr. Poonam et.al (2019) Dehradun secondary school students' levels of academic stress and methods of coping were the subjects of this research. A total of one hundred fifty high school students made up the sample. We utilised a non-probability purposive sampling strategy to choose our samples. The data collecting instrument was composed of three parts: demographic data, an academic stress scale to measure the amount of stress among teenage students, and an academic coping strategy scale to gather information about their coping mechanisms. Participating in this research were mostly females (58.7%). No student was found to be completely free from stress; rather, the results indicated that 50.7% of students were experiencing mild stress, 30.7% minor stress, and 18.6% significant stress. The levels of stress among the adolescents might be varied. Conversely, 1.3% of students had excellent coping mechanisms, while 86% had intermediate coping techniques and 12.6% had poor coping. Academic stress and coping mechanisms do not have a strong link. It was shown that most students have minor academic stress; no one has high stress, and no one is free from it. As a whole, pupils' coping mechanisms are rather average. Managing stress is an important skill for kids to have. The cognitive growth and academic achievement of teenagers may be impacted. Institutions should create and implement stress management programmes to help students deal with stress and improve their performance.

Objectives of the Study

1. To find out the level of scholastic achievement of Higher Secondary School Students of Haryana
2. To find out the level of participation of Higher Secondary School Students in the various non-scholastic activities.

RESEARCH METHODOLOGY

Higher secondary school students in Haryana were the subjects of this research, which aimed to determine if there was a correlation between academic stress and academic performance. The 'Normative Survey Method' was chosen by the investigator for this investigation. Class XII students from Haryana's Higher Secondary Schools made up the study's population. The "Stratified random sampling technique" was used to pick an optimal sample that meets the needs of the population due to the vast size of the population. Gender, academic major, parental education, geographic region, and managerial style were all carefully considered throughout the sampling process.

Researchers in Haryana State gave out the Academic Stress Scale and other measures to pupils in various schools across six distinct districts. In order to gather information on the pupils and their parents, a personal data sheet was sent. Additionally, students were asked to fill out a non-scholastic interest inventory that asked about their extracurricular interests both in and out of class. Gathering information on stress, academic performance, and extracurricular activities was the primary goal of the researcher. Since the total marks for the scientific, business, and humanities tracks of study varied, the percentage of marks was relied upon as a measure of academic success.

Along with the specialists, we designed the instructions for administration, the time restriction, and the grading methodologies. Every every pupil received their own unique tool. Creating an appropriate testing environment and maintaining rapport with the students were prerequisites to administering the exam. The items were meant to be self-explanatory, but further explanations were included as needed. We got 500 answer sheets after we rejected the ones that weren't complete. Proper encoding and tabulation of the obtained schedules was performed.

RESULTS AND DATA INTERPRETATION

Comparison Of Academic Stress Experienced By Higher Secondary School Students Based On Subsamples

Based on an analysis of data, which measured academic stress, the majority of students in higher secondary school reported moderate levels of stress across all dimensions: personal, familial, school-related, social, and academic. If there is a statistically significant difference in the academic stress experienced by students in upper secondary school based on subsamples, then this phase of the study will examine it. Gender, location, management type, academic major, and parental education were the criteria used to categorise the whole sample of high school seniors. Statistically sound methods were used to compare the academic stress scores that each group had acquired. Analysis of Variance (ANOVA) was used for comparisons involving more than two groups, and a test of significance of difference between means was conducted for comparisons involving two groups. In order to identify the specific pairings that vary substantially, the Scheffe test of post hoc comparison was used whenever ANOVA was shown to be significant. Following this goal is a comprehensive summary of the data analysis that was conducted.

Comparison Of Academic Stress Experienced By Higher Secondary School Students Based On Gender

Subjects were categorised as either male or female and then their academic stress levels were compared to see whether there was a statistically significant difference. I utilised the test of significance of difference between means to get the t-values for this purpose. The findings may be seen in Table.

Table 5.1 Test of Significance of Difference Between Means of The Academic Stress Experience By Male And Female Higher Secondary School Students

Academic Stress	Gender	N	Mean	Std. Deviation	t-value
Personal Stress	Male	254.5	35.2004	9.22163	1.47
	Female	245.5	34.3585	8.90757	
Familial Stress	Male	254.5	38.4106	9.70015	1.34
	Female	245.5	37.5621	10.37450	
School-related Stress	Male	254.5	55.7839	13.23666	0.03
	Female	245.5	55.8086	12.55437	
Social Stress	Male	254.5	36.1061	9.63061	3.24**
	Female	245.5	34.0896	10.04094	
Academic Stress (total)	Male	254.5	165.5010	35.56195	1.62
	Female	245.5	161.8187	36.40108	

**Significant at 0.01 level

Table shows that, with the exception of social stress, there is no statistically significant difference in the academic stress that male and female students in upper secondary school face. When it comes to social stress, young men and women students vary significantly ($t = 3.24$; $p < 0.01$).

Male students seem to be under more social stress than their female counterparts, as shown by their higher mean social stress score.

Since only social stress was shown to be significantly different between male and female students, we accept the null hypothesis that high school students' levels of academic stress are not significantly different.

Comparison of Academic Stress Experienced By Higher Secondary School Students Based On Locale

To further investigate the possibility of a difference in academic stress, we also compared the results of kids attending secondary schools in urban and rural areas. Table 4.7 provides the analysis's specifics.

Table 5.2 Test of Significance of Difference Between Means of The Academic Stress Experience By Rural And Urban Higher Secondary School Students

Academic Stress	Locale	N	Mean	Std. Deviation	t-value
Personal Stress	Rural	264	35.2727	9.03566	2.30*
	Urban	236	33.8889	9.08919	
Familial Stress	Rural	264	38.4284	9.82838	1.83
	Urban	236	37.1909	10.38876	
School-related Stress	Rural	264	56.5732	12.71851	2.57*
	Urban	236	54.3590	13.12563	
Social Stress	Rural	264	35.2928	9.86439	0.77
	Urban	236	34.7892	9.91714	
Academic Stress (total)	Rural	264	165.5670	35.55910	2.22*
	Urban	236	160.2279	36.61552	

*Significant at 0.05 level ** Significant at 0.01 level

Based on the data in Table, there is a notable disparity in the levels of personal stress ($t = 2.30$; $p < 0.05$), school-related stress ($t = 2.57$; $p < 0.05$), and overall academic stress ($t = 2.22$; $p < 0.05$) experienced by students in rural and urban areas. Due to higher mean scores in all three categories of stress—personal, school-related, and academic (total)—students from rural areas benefit. This could be because, in comparison to their rural counterparts, children living in metropolitan areas tend to enjoy more modern conveniences at home. As a result, we reject the null hypothesis that states no significant difference in academic stress levels amongst high school students by location. Instead, we find that students' levels of personal stress, stress related to school, and academic stress as a whole vary significantly across locations.

Comparison of Academic Stress Experienced By Higher Secondary School Students Based On Nature Of Management

In order to determine whether there is a notable difference in the academic stress experienced by students from government and aided schools, the academic stress ratings of upper secondary school students from both groups were compared. You can find all the information about the analysis in Table.

Table 5.3 Test of Significance of Difference Between Means of The Academic Stress Experience By Government And Aided Higher Secondary School Students

Academic Stress	Locale	N	Mean	Std. Deviation	t-value
Personal Stress	Government	240.5	33.6590	8.47926	2.97**
	Aided	259.5	35.3917	9.32764	
Familial Stress	Government	240.5	36.6504	9.82130	3.14**
	Aided	259.5	38.7143	10.09058	
School-related Stress	Government	240.5	57.5415	12.31444	3.21**
	Aided	259.5	54.8602	13.11665	
Social Stress	Government	240.5	33.5358	8.76723	3.92**
	Aided	259.5	35.9631	10.33643	
Academic Stress (total)	Government	240.5	161.3868	33.34945	2.14*
	Aided	259.5	164.9293	37.31794	

**Significant at 0.01 level

Table shows that when it comes to the personal stress that children in government and aided schools suffer, there is a significant difference ($t = 2.97$; < 0.01). Aided school students seem to be under greater personal stress than their government school counterparts, as shown by their higher mean personal stress score.

A t-value of 3.14 was achieved, which is significant at the 0.01 level, when comparing government and aided school pupils' family stress. This demonstrates that the amount of family stress endured by children receiving government and non-

government funding to attend school is significantly different. kids receiving financial assistance are more likely to experience family stress, as shown by their higher mean familial stress score, when contrasted with kids attending public schools.

There was also a significant difference ($t = 3.21$; $p < 0.01$) when comparing the school-related stress levels of kids from government and aided schools. Government school students report higher levels of school-related stress compared to aided school pupils, according to the mean scores.

There is a significant disparity in the level of social stress experienced by kids attending government and aided schools ($t = 3.92$; $p < 0.01$). Students receiving financial assistance are more likely to report high levels of social stress, as measured by the mean social stress, as compared to their counterparts in public schools.

A statistically significant difference was seen in academic stress (total) between students enrolled in publicly funded schools and those receiving financial help ($t = 2.14$; $p > 0.05$). Students in assisted education settings report more academic stress than their urban peers, as seen by their higher mean score.

Therefore, we reject the null hypothesis that states "There is no significant difference in the level of Academic Stress experienced by Higher Secondary School Students based on nature of management." This is because we find that students' levels of academic stress, as well as their levels of personal, familial, school-related, social, and overall stress, vary significantly depending on the nature of management.

CONCLUSION

Students in the commerce stream reported lower levels of personal stress than those in the arts and sciences streams. One possible explanation is that kids majoring in science in high school are under constant personal pressure from both their peers and the high expectations of their families and teachers. More personal stress may have contributed to the underachievement of students majoring in the arts and humanities. Contrarily to the more cutthroat environment in the scientific streams, the business streams tend to produce ordinary pupils. Consequently, individuals experience less personal pressure associated with academic success.

Those majoring in the arts and social sciences are more likely to suffer from family stress than those majoring in science or business. One possible explanation is that kids in the humanities stream may have received parental intervention due to their poor academic performance. Students in the scientific and business streams may feel less familial pressure to succeed academically since they tend to be above-average or moderate achievers in these areas.

Compared to commerce stream students, humanities stream students are more likely to feel school-related stress. Social stress is also higher among students majoring in the arts and social sciences than among students majoring in business and science. Their social and academic pressures can be stemming from the aforementioned issues.

REFERENCES

- [1]. Shrutika Dodke et.al "Impact Of Co-Curricular Activities On Academic Performance And Personality Development Of College Students" JETIR September 2022, Volume 9, Issue 9
- [2]. Shaikh Rezwan_Rahman et.al "Effects of co-curricular activities on student's academic performance by machine learning" Current Research in Behavioral Sciences Volume 2, November 2021, 100057
- [3]. Kravchenko, Z., Nygård, O. (2023) Extracurricular activities and educational outcomes: evidence from high-performing schools in St Petersburg, Russia International Studies in Sociology of Education, 32(4): 1106-1125 <https://doi.org/10.1080/09620214.2021.2014933>
- [4]. Kashif Rathore et.al "Relationship between Co-curricular Activities and Exam Performance: Mediating Role of Attendance" Bulletin of Education and Research April 2018, Vol. 40, No. 1 pp. 183-196
- [5]. Sangeeta Naithani "Role of Co-Curricular Activities in Secondary Schools" JANUARY-MARCH 2020, YEAR-5, VOLUME-1
- [6]. Dr. Ajay Joshi et.al "Co-Curricular Involvement And Academic Achievement Of Secondary School Students In Relation To Some Demographic Variables: A Comparative Study" Volume 7, Issue II, March 2018, ISSN: 2277-1255
- [7]. Rao, Bandala Vani. (2023). Do Students Who Participate In Extracurricular Activities.docx (1).

- [8]. Thingujam Sharatchandra Singh et .al “A Study on the Role of the Teachers in Academic Achievement of Secondary School Students in Dimapur District, Nagaland” ALOCHANA JOURNAL (ISSN NO:2231-6329) VOLUME 13 ISSUE 1 2024
- [9]. Dr. Rajesh E. Bellur “A Study On Scholastic Achievement Of Secondary School Students In Relation To Their Human Values” DOI: <http://ijmer.in.doi./2022/11.12.103>
- [10]. Sourav Kumar Roy “A Study On Academic Achievement Of Higher Secondary School Students In Relation To Achievement Motivation And Emotional Intelligence” JETIR August 2018, Volume 5, Issue 8
- [11]. Nisar, Ahmad & Kumar, Nisar. (2023). Academic Achievement of Higher Secondary School Students in Relation to their Family Relationship. International Journal of Science and Research (IJSR). 12. 876-878. 10.21275/MR23214150618.
- [12]. Sharma, P. ., & Sharma, D. . (2021). Predictors of Scholastic Achievement of Secondary School Students. *MIER Journal of Educational Studies Trends and Practices*, 11(1), 67–84. <https://doi.org/10.52634/mier/2021/v11/i1/1779>
- [13]. Sonali Panda et.al “The Effect of Locus of Control on Academic Procrastination Among Undergraduate Students” International Journal of Education and Psychological Research (IJEPR) Print - ISSN: 2349 - 0853, e-ISSN: 2279 - 0179 Volume 11, Issue 3, September 2022