

Impact of School Environment on Academic Achievement of Secondary School Students at Vellore Educational District

OPEN ACCESS

S. Harinarayanan

*Ph.D. Research Scholar (Part-time), Department of Education
Tamil University, Tanjore, Tamil Nadu, India*

Volume: 7

Dr. G. Pazhanivelu

*Associate Professor, Department of Tamil Studies in Foreign Countries
Tamil University, Tanjore, Tamil Nadu, India*

Issue: 1

Month: December

Year: 2018

ISSN: 2320-2653

Received: 11.11.2018

Accepted: 15.12.2018

Published: 31.12.2018

Citation:

S, Harinarayanan, and Pazhanivelu G. "Impact of School Environment on Academic Achievement of Secondary School Students at Vellore Educational District." Shanlax International Journal of Education, vol. 7, no. 1, 2018, pp. 13–19.

DOI:

<http://doi.org/10.5281/zenodo.2529402>

Abstract

Education is a dynamic process, which involves imparting knowledge, generating interests and curiosity, inculcating desirable attitudes and values and developing essential skills required for the independent study. The environment influences the academic achievement of the students, the investigator, tries to find out the impact of school environment factors on achievement. The survey method was employed and selected the Vellore educational district for this study. The investigator has used a stratified random sampling technique for selecting a sample from the population. The sample consists of 300 students found that secondary students have a high level of the school environment. It is found out that there is a positive relationship between the school environment and academic achievement. To achieve a high level, efforts must be taken to strengthen the school environment.

Introduction

Education is a dynamic process, which involves imparting knowledge, generating interests and curiosity, inculcating desirable attitudes and values and developing essential skills required for the independent study. This is necessary for enabling students to be competent and socially useful citizens. The unique responsibility of the school is to impart and help children in the acquisition of scholastic skills of the several factors influencing academic achievement; school environment may be said to play a dominant role in the achievement of school students. Children with proper school environment have been found to be making a greater effort for academic performance.

Impact of Environment on Academic Achievement

According to Dewey (1926) 'Education is a continuous process of experiencing and of revising or not-revising experiences. It is the development of all those capacities in the individual which enables him to control his environment and fulfill his possibilities'.

The forces of the environment begin to influence the growth and development of the individual right from the womb of the mother. Educational process of development occurs in the physical, social, cultural and psychological environment.

A proper and adequate environment is very much necessary for fruitful learning of the child. Especially the home and the school should provide the necessary stimulus for the learning experience.

The child spends most of his time in school, and here his environment is exerting a different influence on performance through curricula, teaching techniques, relationship.

Significance of the Study

In this ever-growing competitive world, everyone desires a high level of achievement as the mark of one's performance. The whole system of education is centered on the academic achievement of students, making it a fertile ground for research work.

Learning takes places effectively only when a proper and congenial environment is provided for children in the classroom. Their learning environment plays an inherent role in molding the innate potentialities of the individual and school has always been regarded as an important factor in the child's education. The education of the child and his achievement is determined to a large extent by the varied and dynamic role of teachers and the facilities provided by them for the child's education.

Since the environment influences on the academic achievement of the students, the investigator tries to find out the impact of school environment factors on achievement. Hence the investigator selected the topic.

Statement of the Problem

The area of the study selected by the investigator is "IMPACT OF SCHOOL ENVIRONMENT ON ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS."

Operational Definition

Environmental factors

The teacher should try to provide a healthy environment in the school because children spent most of their time over there. Children take up the ideals and traditions of the social group in which

they live. Hence a proper social environment is a must for the development of children. It is only in a healthy social environment that children express their interest, likes, and attitudes. A proper, rational, healthy atmosphere in the class room enables the child to develop rational habits and rational attitude towards society.

Academic achievements

A measure of knowledge gained in formal education usually indicated by test scores, grade, grade points, average, and degrees. Here, the achievement level of the student is judged by the marks that the students have scored in the quarterly examinations.

Secondary school students

Students enrolled in the course of study in the school offering courses above primary level. It includes students of 9th & 10th only.

Objectives

Objectives

School Environment as perceived by Secondary School Students

1. To find whether there is any significant difference between the demographic variable of secondary school students in their perception of the school environment.

Academic Achievement of Secondary School Students

1. To find whether there is any significant difference between the demographic variable of secondary school students in their academic achievement.

Correlation between the school environment and academic achievement

1. To find whether there is any significant correlation between school environment as perceived by secondary school students and academic achievement.

Hypotheses

School environment perception by secondary school students

- 1.1. There is no significant difference between male and female secondary school students in their perception of the school environment.

- 1.2. There is no significant difference between the secondary school students studying in rural and urban schools in their perception of the school environment.
- 1.3. There is no significant difference among the secondary school students studying in government, aided and self-financed schools in their perception on the school environment.
- 1.4. There is no significant difference among the secondary school students studying in boys, girls and co-education schools in their perception of the school environment.

Impact of academic achievement perception by secondary school students

- 1.1. There is no significant difference between male and female secondary school students in their academic achievement.
- 1.2. There is no significant difference between secondary school students studying in rural and urban schools in their academic achievement.
- 1.3. There is no significant difference among the secondary school students studying in government, aided and self-financed schools in their academic achievement.
- 1.4. There is no significant difference among the secondary school students studying in boys, girls and co-education schools in their academic achievement.

Correlation between the school environment and academic achievement

- 1.1. There is no significant correlation between school environment as perceived by secondary school students and academic achievement.

Limitations of the Study

The present study is keeping in mind the following limitations.

1. The investigation of study is limited to the students of the secondary school in Vellore district.
2. In this study, the achievement of secondary school students is measured regarding marks obtained by the students in the quarterly examination conducted by the school.
3. The present study is confined only with students of IX standard.

Method Used For The Present Study

The investigator has adopted a survey method of research to study the school environment on the academic achievement of secondary school students.

Area of Study

The investigator selected the Vellore educational district for her study.

Population For The Study

Population for survey research for the present study consists of the IX standard students of Vellore Educational District.

Sample

The investigator has used a stratified random sampling technique for selecting a sample from the population. The sample consists of 300 students from different schools in Vellore Educational District.

Hypothesis Testing

I) School environment perceived by secondary school students

Null Hypothesis – 1.1

There is no significant difference between male and female secondary school students in their perception of the school environment.

Table Difference In School Environment As Perceived By Secondary School Students About Sex

Sex	N	Mean	SD	Calculated 't' value	Table value	Remarks at 5% level
Male	145	114.95	12.03	7.22	1.96	S
Female	155	124.50	10.80			

It is inferred from the above table that the calculated 't' value is 7.22 which is greater than the table value 1.96 at 5% level of significance. Hence the null hypothesis is rejected.

Null Hypothesis –1.2

There is no significant difference between the secondary school students studying in rural and urban schools in their perception of the school environment.

Table Difference In School Environment As Perceived By Secondary School Students About Location Of School

Location of School	N	Mean	SD	Calculated 't' value	Table value	Remarks at 5% level
Rural	190	119.29	12.09	1.07	1.96	NS
Urban	110	120.90	12.79			

It is inferred from the above table that the calculated 't' value 1.07 which is lesser than table value 1.96 at 5% level of significance. Hence the null hypothesis is accepted.

Null Hypothesis – 1.3

There is no significant difference among the secondary school students studying in government, aided and self-financed schools in their perception on the school environment.

Table Difference in School Environment As Perceived By Secondary School Students About Type Of School

Type of School	Mean	SSB	SSW	df	Calculated 'F' value	Table value	Remarks at 5% level
Government	117.05	1378.73	44238.18	2,297	4.63	3.03	S
Aided	121.48						
Self-finance	121.60						

It is inferred from the above table that the calculated 'F' value 4.63 which is greater than table value 3.03 for 2,297 df at 5% level of significance. Hence the null hypothesis is rejected.

Null Hypothesis – 1.4

There is no significant difference among the secondary school students studying in boys, girls and co-education schools in their perception of the school environment.

Table Difference in School Environment as Perceived by Secondary School Students about Nature of School

Nature of School	Mean	SSB	SSW	df	Calculated 'F' value	Table value	Remarks at 5% level
Boys	115.31	10176.62	35440.30	2,297	42.64	3.03	S
Girls	127.65						
Co-educational	115.57						

It is inferred from the above table that the calculated 'F' value 42.64 which is greater than table value 3.03 for 2,297 df at 5% level of significance. Hence the null hypothesis is rejected.

Academic achievement perception by secondary school students

Null Hypothesis – 2.1

There is no significant difference between male and female secondary school students in their academic achievement.

Table Difference In Academic Achievement of Secondary School Students about Sex

Sex	N	Mean	SD	Calculated 't' value	Table value	Remarks at 5% level
Male	145	219.96	70.81	7.25	1.96	S
Female	155	290.10	95.75			

It is inferred from the above table that the calculated 't' value 7.25 is greater than the table value 1.96 at 5% level of significance. Hence the null hypothesis is rejected.

Null Hypothesis – 2.2

There is no significant difference between secondary school students studying in rural and urban schools in their academic achievement.

Table Difference In Academic Achievement Secondary School Students About Location Of School

Location of School	N	Mean	SD	Calculated 't' value	Table value	Remarks at 5% level
Rural	190	237.15	75.59	4.50	1.96	S
Urban	110	289.10	106.43			

It is inferred from the above table that the calculated 't' value 4.50 is greater than the table value 1.96 at 5% level of significance. Hence the null hypothesis is rejected.

Null Hypothesis – 2.3

There is no significant difference among the secondary school students studying in government, aided and self-financed schools in their academic achievement.

Table Difference In Academic Achievement Secondary School Students About Type Of School

Type of School	Mean	SSB	SSW	df	Calculated 'F' value	Table value	Remarks at 5% level
Government	233.87	182051.43	2320440.57	2,297	11.65	3.30	S
Aided	259.23						
Self-finance	321.07						

It is inferred from the above table that the calculated 'F' value 11.65 is greater than table value 3.03 for 2,297 df at 5% level of significance. Hence the null hypothesis is rejected.

Null Hypothesis – 2.4

There is no significant difference among the secondary school students studying in boys, girls and Co-education schools in their academic achievement.

Table Difference In Academic Achievement Secondary School Students About Nature Of School

Nature of School	Mean	SSB	SSW	df	Calculated 'F' value	Table value	Remarks at 5% level
Boys	254.79	397057.83	2105434.17	2,297	28.01	3.03	S
Girls	302.66						
Co-ed	223.15						

It is inferred from the above table that the calculated 'F' value 28.01 is greater than table value 3.03 for 2,297 df at 5% level of significance. Hence the null hypothesis is rejected. Thus, the result is that there is a significant difference among the secondary school students studying in boys, girls, and co-

education schools in their academic achievement. The mean of Boys school students are 254.79 and Girls school students are 302.66 and co-ed students are 223.15. So the Girls are better in their academic achievement.

Correlation between the school environment and achievement

Null hypothesis - 3.1

There is no significant correlation between school environment as perceived by secondary school students and academic achievement.

Variable	N	Calculated 'γ' value	Table value	Remarks at 5% level
School Environment	300	0.178	0.114	S

It is inferred from the table 4.45 that the calculated γ value 0.178 is greater than the table value 0.114 at 5% level of significance, so the result is that there is a significant correlation between school environment as perceived by secondary school students and academic achievement.

Hypotheses Testing

School environment perception by secondary school students

- 1.1 There is a significant difference between male and female secondary school students in their perception of the school environment.
- 1.2 There is a significant difference between the secondary school students studying in rural and urban schools in their perception on School environment.
- 1.3 There is a significant difference among the secondary school students studying in government, aided and self-financed school in their perception on School environment.
- 1.4 There is a significant difference among the secondary school students studying in boys, girls and Co- education schools in their perception on School environment.

Academic achievement perception by secondary school students

- 2.1 There is no significant difference between male and female secondary school students in their academic achievement
- 2.2 There is a significant difference between the secondary school students studying in rural and urban schools in their academic achievement.
- 2.3 There is a significant difference among the

secondary school students studying in government, aided and self-financed school in their academic achievement.

- 2.4 There is a significant difference among the secondary school students studying in boys, girls, and Co- education schools in their academic achievement.

Correlation between the school environment and academic achievement

- 3.1 There is a significant correlation between school environment as perceived by secondary school students and academic achievement.

Interpretation

From the present study, 't' test reveals that female students have a better perception of the school environment than the male students. This is because female students are by nature, calm and quiet. So they feel school environment is very convenient for their studies. Female students make use of the library and the lab much better than the male students. Girl students do not hesitate to clear the doubts in the studies than the male students.

Recommendations

The investigator has studied the relationship between school and the achievement of secondary students regarding variables such as sex, the medium of instruction, locality of school, type of school, nature of the school.

From the above findings, to overcome the factors which affect the achievement of students, the following suggestions are recommended.

1. The government should take the initiative to improve libraries and laboratories in all institutions.
2. A full-time librarian and lab assistance should be appointed in all schools.
3. Co-curricular activities like discussion, seminar, exhibitions should be organized in schools.
4. The students from the rural area may be given better opportunity in the school to develop better study habits.
5. Adequate and relevant practical works should be given.

6. Guidance and counseling centers should be started in schools so that the students can be helped to solve their educational problems.
7. Teachers should adopt effective methods of teaching so that the students may develop an interest in the subject.

Suggestions

1. A study of achievement about school factors can be conducted in branches of science like chemistry, physics, biology, etc.
2. The present study is conducted on secondary school students. A study can be done with higher secondary students.
3. Scholastic achievement of students to the relation in the participation of students in co-curricular and extra-curricular activities can be conducted.
4. Impact of mass media on the academic performance of school students can be explored.

Conclusion

From the present study, it is found that secondary students have a high level of the school environment. It is found out that there is a positive relationship between the school environment and academic achievement. To achieve a high level, efforts must be taken to strengthen the school environment.

References

Annie Ward; Howard W. Stoker; Mildred Murray-Ward. *"Achievement and Ability Tests - Definition of the Domain,"* Educational Measurement, 2, University Press of America, pp. 2–5, ISBN 978-0-7618-0385-0. 1996.

Ziedner, Mosche. *Test anxiety: The state of the art.* New York: New York: Plenum Press. p. 259. ISBN 9780306471452. OCLC 757106093. 1998.

Von Stumm, Sophie; Hell, Benedikt; Chamorro-Premuzic, Tomas. *"The Hungry Mind: Intellectual Curiosity Is the Third Pillar of Academic Performance."* Perspectives on Psychological Science. 6 (6): 574–588. doi:10.1177/1745691611421204. Retrieved February 11, 2012. 2011.

Bossaert, G; S. Doumen; E. Buyse; K. Verschueren *"Predicting Students' Academic Achievement After the Transition to First Grade: A Two-*

Year Longitudinal Study." Journal of Applied Developmental Psychology. 32: 47–57. 2011. doi:10.1016/j.appdev.2010.12.002.

Magnuson, Katherine. *"Maternal Education and Children's Academic Achievement During Middle Childhood."* Developmental Psychology. 43: 1497–1512. November 2007 doi:10.1037/0012-1649.43.6.1497.

Fam, J. Y.; Yaacob, S. N. "4". In Salmah, A.; Azizah, Z. A.; Shaifol Yazam, M.; Russia, S.; Khairil Ridzuan, K.; Najah, M. A.; Noor Serafini, Z.; Mohd Dasuki, S.; Sazali, I.; Nurhaznita, M. *The mediating role of academic self-efficacy in the relation between parent-adolescent relationship and academic performance.* Malaysia: Perpustakaan Sultan Abdul Samad, Universiti Putra Malaysia. 2016. Pp. 51–63.

Lassiter, Kerry. *"The Relationship Between Young Children's Academic Achievement and Measures of Intelligence."* Psychology in the Schools. 32: July 1995. 170–177. doi:10.1002/1520-6807(199507)32:3<170::aid-pits2310320303>3.0.co;2-k.

Tompsonowski, Phillip; Catherin Davis; Patricia Miller; Jack Naglieri. *"Exercise and Children's Intelligence, Cognition and Academic Achievement."* Educational Psychology. 20 (2): 2008. 111–131. doi:10.1007/s10648-007-9057-0. PMC 2748863.

Gutman, Leslie; Schoon, Ingrid. "The Impact of non-cognitive skills on outcomes for young people" (PDF). Education Endowment Foundation: 59. 2013.

Web Sources

<http://www.allresearchjournal.com/archives/2017/vol3issue5/PartK/3-5-138-510.pdf>

<https://www.coursehero.com/file/24116637/The-Practical-and-Theoreticalpdf/>

<https://files.eric.ed.gov/fulltext/ED542331.pdf>

https://raijmronlineresearch.files.wordpress.com/2017/07/8_37-39-meghnaben-j-modi.pdf

<https://plus.google.com/+DavidGonzalezUT>

<http://rdmodernresearch.org/wp-content/uploads/2015/12/109.pdf>

<http://iosrjournals.org/iosr-jdms/papers/Vol13-issue11/Version-2/K0131125762.pdf>

<http://ierj.in/journal/index.php/ierj/article/view/930>