

A STUDY OF SCHOOL ENVIRONMENT AND ITS IMPACT ON ACADEMIC ACHIEVEMENT AMONG THE SENIOR SECONDARY SCHOOL STUDENTS

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ABSTRACT

Home and school environment are the two-important factors which exerts maximum influence on student's life. In the present study we intended to investigate the impact of school environment on academic achievement of Senior Secondary School and examine the relationship between school environment and academic achievement. We adopted descriptive quantitative survey research methodology and collected data of 115 students from Senior Secondary Schools of Aligarh District. School Environment Inventory developed by Mishra (2012) and marks scored by the students in the final examination has been taken as academic achievement of the students were the tools. The data has been analysed by using t - test and Pearson's coefficient of correlation by statistical techniques. The findings of the study showed that linear but very minute positive correlation (insignificant) exist between school environment and academic achievement of the students. The study further reveals that male and female students differ regarding their school environment.

Key Words: School Environment; Impact; Academic Achievement; Senior Secondary School Students.

INTRODUCTION

Education is the prime instrument which makes an individual rational being by imparting knowledge and learning about values and morality through the process of socialization. Human being as a social animal always immersed in social set up, and both home and school environment greatly influenced education of an individual human being. Educational outcome i.e. Academic achievement or performance is the ultimate goal of formal system of education, and through-out the whole world school is the prime and foremost agency of formal education. A

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school is a formal agency or institution of imparting knowledge and learning. It is the temple of education and also the miniature of the society in which children of different class, caste, sex, community, locality, religion and ethnicity etc. study together and spend maximum time after home or family which greatly determined one's socialization process and learning through instilling values, morale in them along with subject based knowledge. School is not only the agency of imparting knowledge to the students but it also provides adequate opportunity and experience to lead their life confidently, smoothly and peacefully. School is an institution where various activities like: games, sport, events and, many cultural and social activities run side by side along with education which imbibes various behavioural characteristics i.e. cooperation, interaction, rationality, sympathy, responsibility, punctuality and discipline etc. among the students which makes it miniature of a society.

School climate or environment have direct or indirect impact on student's academic success. School climate or environment depends on certain factors like- Stimulation, supportiveness, permissiveness, discipline and agreeableness etc. and many more. The school environment has great impact on student's academic success or achievement because school environment is a complex social set up comprises of almost all factors which have direct or indirect impact on students balanced adjustment in the school as well in the family or society which further exert great impact on his/ her academic performance.

Many educationists like- Bloom (1964) and Pace (1965) emphasized the importance of environment as powerful contributing determinants of behaviour of living being. Kumar (2016) studied academic achievement of the secondary school student's relation to their academic environment of the school. Miah (2015) conducted a study on school and academic achievement of the secondary school students of Malda district. Lawrence and Vimala (2012) tried to examine the effect of school environment on student's academic achievement. Suleman and Hossain (2014) investigate the impact of class room physical environment on student's academic achievement. Sindler et al (2004) tried to explore the connection between school climate and student's academic achievement. Meers and Prathapan (2008) conducted a study to examine the effect of classroom environment and self-esteem on academic achievement. Shanmughadas (2004) conducted a study on interaction effect of learning style, approaches of studying and classroom climate on achievement in social sciences of secondary school pupils and many more noted scholars have made their contribution to this field of study.

RATIONALE OF THE STUDY

As we all know that educational outcome or academic achievement is the prime goal of educational process and programme, scholars are always trying to find out the factors contributing or determining educational outcomes.

Over the time, researchers identified many factors i.e. cognitive, non- cognitive, social, psychological and environmental etc. are as determinants of academic achievement. Among these, school comes under social and environmental factor in which formal learning of a child started. It is well known fact that schools differ in their environment is concerned based on certain variables i.e. administration style, medium of instruction, gender mood of the school and school residential area, and many more. Therefore, different school may have different learning environment and students with different ability, attitude, opinion, intelligence, aptitude and SES, and they have different view regarding their school environment subsequently. School environment have direct or indirect impact on student's academic performance. If the school or teachers are not supportive, motivating, caring, punctual, cooperative and stimulating, then it may lead to the degradation of its learning environment which further may causes damage to its academic performance or vice-versa. As we all know academic achievement is the final out-put of educational process and based on it we assess the school's performance. In the present study the investigator intended to find out the differential impact of various school environment or climate on student's academic success or achievement.

REVIEW OF RELATED LITERATURE

Review of the related literature is the backbone of a study which helps the investigators to know the related research have been done already in the field and research gap and also helps him to the research and methodology which have to be apply in a particular study. Here the researchers tried to mention few review of related literature which have done previously in this field.

Reynolds et al. (2017) studied to know how does school environment influenced academic achievement of the students. Data have been collected from 340 Australian students of 7th and 9th grade level. The researchers constructed Structural Equation Modelling (SEM) and analysed the data with the help of IBM SPSS. The result of the study highlighted that there was no direct relationship between school climate and academic achievement of the students.

Al-Qahtani (2015) conducted a study to know the impact of association of approach to study, learning environment and academic achievement. The researcher adopted cross- sectional descriptive research design and data collected from 166 undergraduate applied medical students. The result showed that academic achievement of the students was positively correlated with the student's perception of learning environment.

Lawrence and Vimala (2012) conducted a study to examine the effect of school environment on student's academic achievement. The researcher has adopted survey method for the study and collected data from 400 IX

students of Thirunelveli district. The investigator developed School Environment Scale by himself and checked the validity and reliability of the scale with a value of 0.74 through test-retest method. The academic achievement has been taken as the marks scored by the students in the quarterly examination and gathered from class teacher. Data has been analysed by using t - test and Pearson's coefficient of correlation. The result showed that there was no significance difference in the school environment in terms of gender, medium of instruction but significant difference exist with regards to locality. The study revealed there exist very low positive correlation between school environment and academic achievement.

Vishwakarma (2008) tried to examine the impact of school environment on learning behaviour and academic achievement of the students of Chattarpur district. The investigator adopted psychological survey method and conducted survey on 115 govt. and private primary schools. The sample comprised of 1500 boys and 1500 girls selected randomly. The researcher used environment inventory, students learning behaviour scale and a self-made score card for gathering information from the students. Data has been analysed by using descriptive statistics like mean, S.D, and inferential statistics i.e. t - test and ANOVA. The study reveals that school environment had positive significant relationship with the academic achievement of both boys and girls of urban govt. upper primary school.

Meers and Prathapan (2008) conducted a study to examine the effect of classroom environment and self-esteem on academic achievement. The objective was to find the main and interaction effect of 'classroom learning environment' and 'self-esteem' on achievement in 'social studies' for the total sample and sub samples. The findings of the study revealed that achievement in social studies varied with regards to difference in their classroom learning environment.

Shanmughadas (2004) conducted a study with the objective to examine the main and interaction effects of learning style, approaches to studying and classroom climate on academic achievement in social sciences of secondary school students. The findings of the study revealed that achievement in social sciences was modified by learning style, achievement in social sciences also varied by classroom climate. The study also revealed that combined impact of learning style, approaches to studying and classroom climate was also significant on achievement in social sciences in govt. school only.

Though many studies have already been conducted in this field but till now, no study have been done in Murshidabad to know the effect of school environment on student's academic achievement at senior secondary level. That is why the researchers selected the area for their study.

OBJECTIVES OF THE STUDY

1. To know the difference in school environment between male and female senior secondary students.
2. To know the difference in academic achievement between male and female senior secondary school students.
3. To investigate the difference in school environment between urban and rural senior secondary school students.
4. To know the difference in academic achievement rural and urban senior secondary school students.
5. To know the relationship between school environment and academic achievement of senior secondary students.

NULL HYPOTHESES OF THE STUDY

1. There will be no significant difference between male and female senior secondary students with regards to school environment.
2. There would be no significant difference in academic achievement between male and female senior secondary school students.
3. There will be no significant difference between urban and rural senior secondary school students on school environment.
4. There will be no significant difference in academic achievement between urban and rural senior secondary school students.
5. There will be no significant relationship between school environment and academic achievement of senior secondary school students.

DEFINITION OF THE KEY TERMS

School Environment

According to Mick (2011), school environment means the extent to which school settings promote student safety and student health, which may include topics such as the physical plant, the academic environment, available physical and mental health supports and services, and the fairness and adequacy of disciplinary procedures, as supported by relevant research and an assessment of validity.

Academic achievement

Academic achievement is the outcome of the instruction provided to the children in schools which is determined by the grades, or marks secured by the students in the examination. It generally indicates the learning outcomes of pupil which requires a series of planned and organised experiences.

Senior Secondary School

Schools which imparted knowledge to the students of XI-XII grades who have completed secondary level of education in India is known as senior secondary or higher secondary school.

RESEARCH DESIGN AND METHODOLOGY

The researchers considered use of descriptive survey methodology for the present study. For this purpose, data have been collected from 105 senior secondary school students, were selected randomly from two government school.

Tool of the Study

Predictor: In the present study, the investigators used School Environment Inventory (SEI) developed by Mishra (2012) as predictor of academic performance and aggregate or mean score was considered as student's score on school environment inventory.

Criterion: Academic achievement as criterion in the present study, the researchers considered annual marks scored by the students in the previous examination and collected from school office record book.

Statistical techniques

The researchers analysed the data by applying Pearson's coefficient of correlation to know the relationship between school environment and academic achievement and t-test to find out difference in academic achievement based on school environment.

DATA ANALYSIS AND INTERPRETATION

Table -1. Difference in School Environment between Male and Female senior secondary students.

Variables	N	Mean	S. D	Sig. (2 tailed)
Male	44	149.5227	33.257	.004*
Female	61	171.557	41.250	

*Significance at 0.01 level

The Table.1- shows that the t- value is -2.923 ($p=.004 < 0.01$) which revealed that there is significant difference in school environment between male and female senior secondary school students. Hence, null hypothesis saying that “there would no significant difference in school environment between male and female students” is rejected.

Fig.1- Difference between Male and Female Students with regards to their School Environment

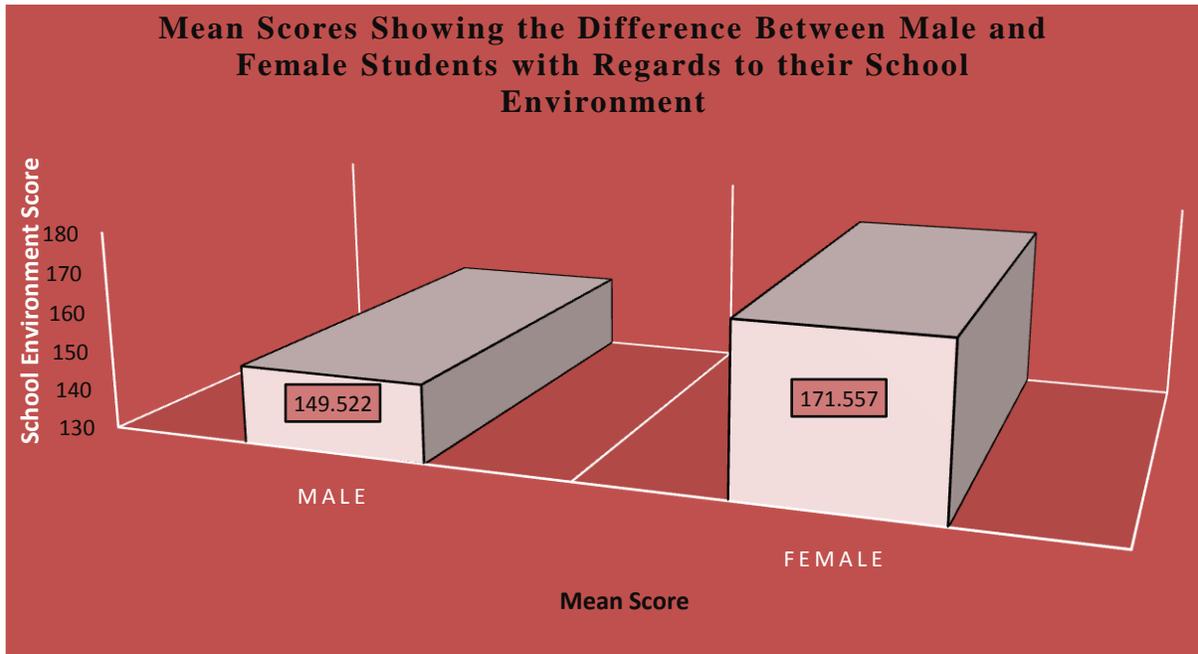


Table -2. Difference in academic achievement between Male and Female senior secondary students

Variables	N	Mean	S. D	Sig. (2 tailed)
Male	44	52.932	11.136	.16*
Female	61	58.115	10.286	

*Significance at 0.01 level

The Table.2- shows that the t- value is -2.461 ($p=0.16 > 0.01$) which revealed that there is no significant difference in academic achievement between male and female senior secondary school students. Hence, null hypothesis saying that “there would no significant difference in academic achievement between male and female students” is accepted.

Fig.2- Difference in academic achievement between Male and Female senior secondary students

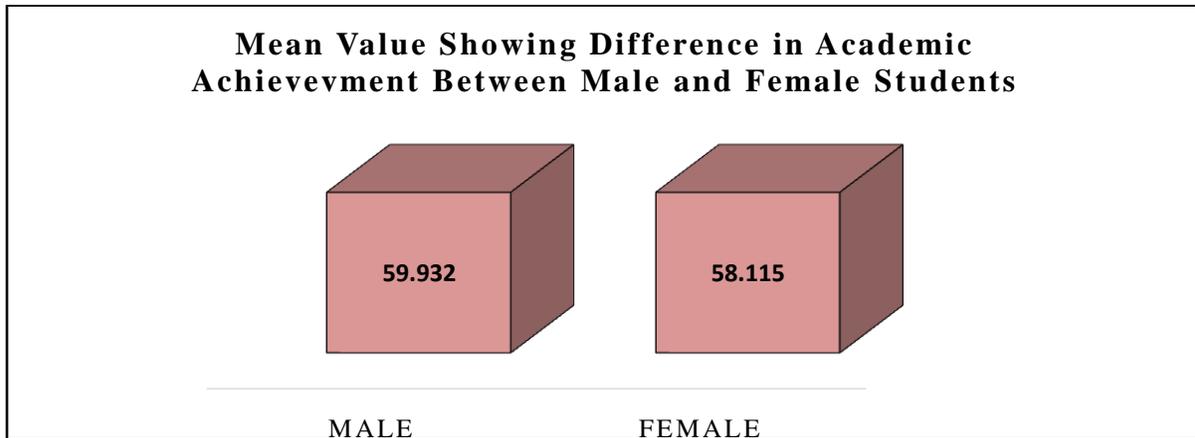


Table -3. Difference in School Environment between Rural and Urban senior secondary students

Variables	N	Mean	S. D	Sig. (2 tailed)
Rural	54	164.926	45.338	.49*
Urban	51	159.568	32.364	

*Significance at 0.01 level

The Table.3- shows that the t- value is 0.693 ($p=.49 > 0.01$) which revealed that there is no significant difference between rural and urban senior secondary school students regarding their school environment. Hence, null hypothesis saying that “there would no significant difference in school environment between rural and urban students” is accepted.

Fig.3- Difference between Rural and Urban Students with regards to their School Environment

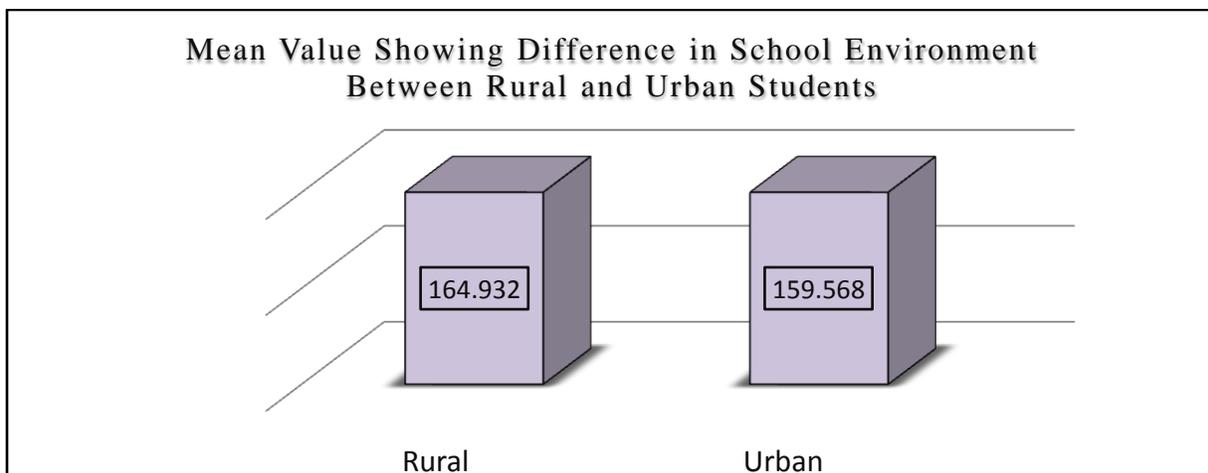


Table-4. Difference in academic achievement between Rural and Urban senior secondary students

Variables	N	Mean	S. D	Sig. (2 tailed)
Rural	54	56.83	10.420	.392*
Urban	51	55.00	11.423	

*Significance at 0.01 level

The Table.4- shows that the t- value is 0.860($p=0.392 > 0.01$) which revealed that there is no significant difference in academic achievement between rural and urban senior secondary school students. Hence, null hypothesis saying that “there would no significant difference in academic achievement between rural and urban students” is accepted.

Fig.4- Difference in Academic Achievement between Rural and Urban Students

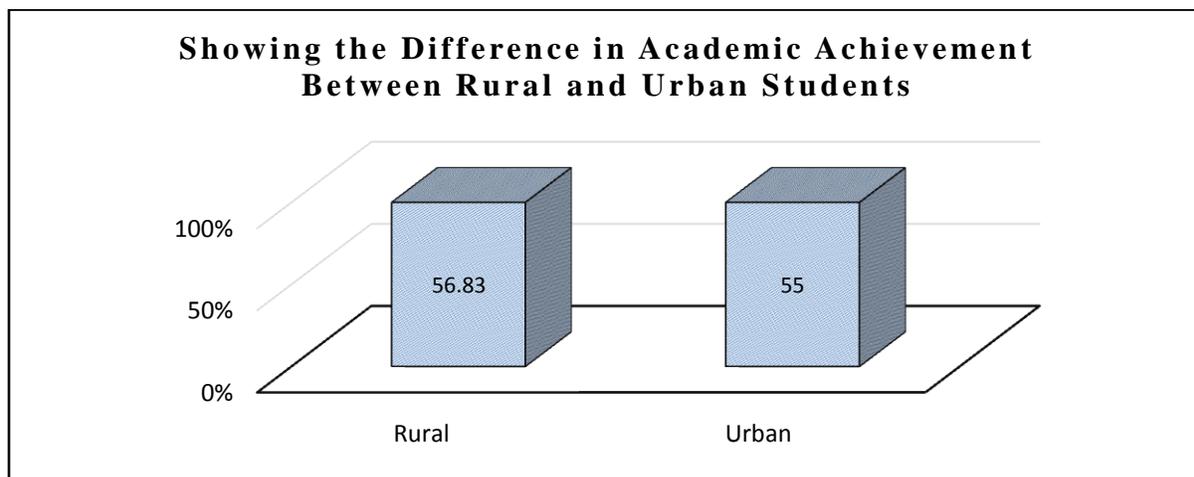


Table-5. Relationship between school environment and academic achievement of senior secondary students

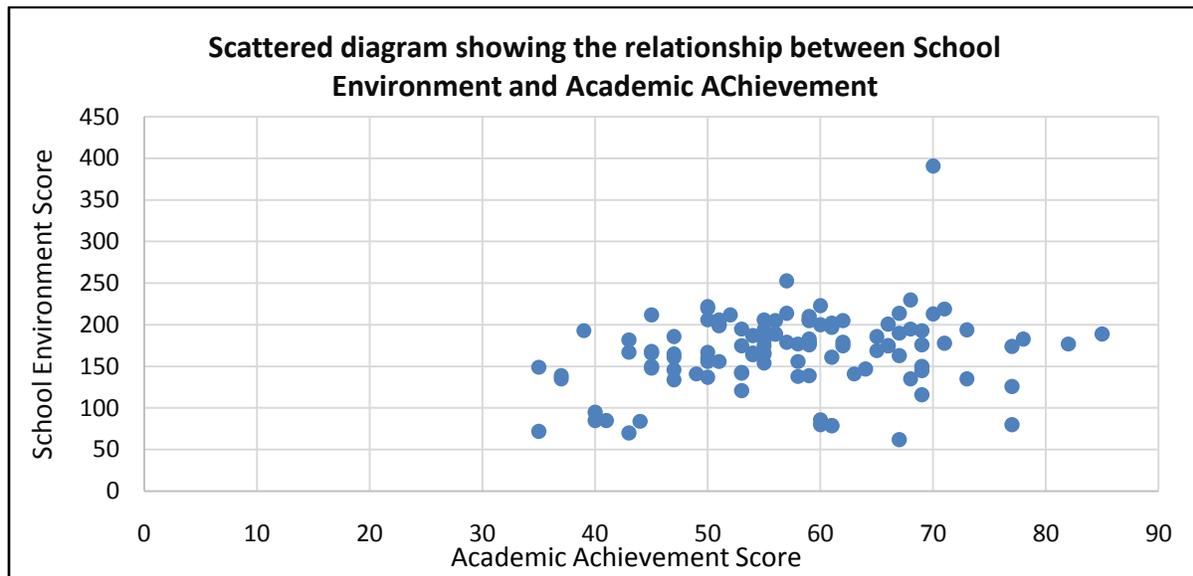
Variables	N	Mean	S. D	r -value	Sig. (2 tailed)
School Environment Score	105	162.324	39.475	0.123	.213*
Academic Achievement Score	105	55.94	10.905		

*Significance at 0.01 level

In Table.5- the Pearson’s coefficient of correlation “r” is found 0.123 ($P=.000 < .001$) which shows that a positive but minute correlation exists between School Environment and academic achievement, hence null hypothesis

No.5 saying that “there will be no significant relationship between School Environment and academic achievement of senior secondary school students” is not accepted. The following fig.5- shows the relationship between school environment and academic achievement clearly.

Fig.5- Relationship between School Environment and Academic Achievement of Senior Secondary Students



FINDINGS OF THE STUDY

1. The study shows that significance difference exists between male and female senior secondary students regarding their school environment. The mean score obtained by the male (149.5227) and female (171.557) students in school environment further indicates that there is difference among the male and female students regarding their school environment. The result of the study is against the findings of Miah (2015), Lawrence and Vimala (2012) which showed that there was no significance difference in school environment in terms of gender.
2. The study reveals that there is no significance difference in academic achievement between male and female senior secondary students. This study gain support from the findings of Ahmar and Anwar (2013); Mlambo (2011) which shows no significance difference in academic achievement between male and female students.
3. The results also show that no significance difference exist with regards to school environment between rural and urban senior secondary students.

4. There is no significance difference in academic achievement between rural and urban senior secondary students. This study is in consonance with the findings of Rather and Sharma (2015); Borland and Howsen (1999).
5. There is linear positive relationship exist between school environment and academic achievement of the students but very minute in nature. The $r = .123$ which further indicates that almost insignificant relationship exists between school environment and academic achievement of senior secondary school students in Murshidabad district. The study is on the line of scholars like, Reynolds et al. (2017); Gilavand (2017); Miah (2015); Kumar (2014); Lawrence and Vimala (2012); which shows low positive or insignificant relationship between school environment and academic achievement.

CONCLUSION

The researchers found that though there are large number of factors, it may be personal, cognitive, non- cognitive affecting academic achievement or performance of the students but school environment or climate is an important determinant of academic performance of the students or schools. The studies of Oselumese et al (2016); Kekare (2015); Suleman and Hassan (2014); Sousa (2012); Meers and Prathapan (2008); Tubbs and Garner (2008); Shanmughadas (2004) supports the notion that school environment or climate influenced the academic outcome of the students as well as schools. Therefore, for better performance of the government school students, the school environment should be made conducive and congenial to the students for appropriate teaching-learning process.

REFERENCES

1. Al-Qahtani, M.F (2015) Associations between approaches to study, the learning environment, and academic achievement. *Journal of Taibah University Medical Sciences*,10(1), 56-65.
2. Gilavand, A (2017) The Impact of Schools Environment Health on the Learning and Academic Achievement of Elementary School Students. *Indo American Journal of Pharmaceutical Sciences*, 4 (07), 1867-1872.
3. Kumar, A. MB. P (2014) A Study of Learner Characteristics, School Environment, Achievement and Placement of Scheduled Caste Students of Madhya Pradesh. *Indian Educational Review*, Volume 52, Number 1, P.P.59-80.
4. Kumar, M (2016) Academic achievement secondary school students' relation to academic environment of the school. *International Research Journal of Management Sociology & Humanity*, Vol. 7, Issue. 8, P.P.231-232.
5. Lawrence, A.S. A and Vimala, A (2012) School environment and academic achievement of standard ix students. *Journal of Educational and Instructional Studies in the World*, Volume: 2, Issue: 3, pp.210-215.

6. Meers, K.P. and Prathapan P. (2008) Classroom learning Environment and Self Esteem as Correlates of Achievement in Social Studies. *Journal of educational Research and Extension*, Vol.45 (4): 39-50.
7. Miah, A.S (2015) Influence of school environment in relation to the academic achievement of secondary school students of Malda district. *Abhinav National Monthly Refereed Journal of Research in Arts & Education*, Volume 4, Issue 7, P.P. 6-10.
8. Mishra, K.S (2012) School Environment Inventory. *National Psychological Corporation*, Agra, U.P, India.
9. Mlambo, V (2011) An analysis of some factors affecting student academic performance in an introductory biochemistry course at the University of the West Indies. *Caribbean Teaching Scholar*, Vol. 1, No. 2, 79–92.
10. Nsa, O. S et al (2014) School Environmental Variables and Students Academic Performance in Agricultural Science. *International Journal of Business and Social Science*, Vol. 5, No.8(1), pp. 163-167.
11. Reynolds et al. (2017) How does school climate impact academic achievement? An examination of social identity processes. Australian National University, Canberra, Australia. Retrieved from [http#www.google.com](http://www.google.com).
12. Shindler, et al. (2004) Exploring the School Climate-Student Achievement Connection: And Making Sense of Why the First Precedes the Second. *Alliance for the Study of School Climate*, California State University, Los Angeles.
13. Suleman, Q and Hussain, I (2014) Effects of Classroom Physical Environment on the Academic Achievement Scores of Secondary School Students in Kohat Division, Pakistan. *International Journal of Learning & Development*, Vol. 4, No.1, P.P.71-82.
14. Tubbs, J.E and Garner, M (2008) The Impact of School Climate on School Outcomes. *Journal of College Teaching & Learning*, Volume 5, Number 9, P.P.17-26.