



**THE EFFECT OF LEARNING STYLE, HOME ENVIRONMENT
AND SCHOOL ENVIRONMENT ON ACADEMIC ACHIEVEMENT
OF NINTH STANDARD STUDENTS OF ENGLISH MEDIUM
SCHOOLS OF RAIPUR CITY - A STUDY**

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Abstract:

This paper focuses on learning style, school environment and home environment in relation to academic achievement. The research was carried out in Raipur city on a sample of 50 IX standard students. Learning styles of students was measured by Styles of Learning and Thinking (SOLAT) by D. Venkataraman. Home Environment and School Environment was measured by the Inventory prepared by Dr. Karuna Shankar Mishra. The research finding revealed that there is very low, negative & negligible relationship between academic achievement & home environment. Study also revealed that school environment and academic achievement have positive but very low relationship. It is also found that there is significant difference between the academic achievement of students learned by right & left hemisphere but there is no significant difference between the academic achievement of boys & girls students learned either by right hemisphere or left hemisphere.

Keywords: learning style, home environment, school environment, academic achievement

1. Introduction

Human beings are always immersed in a social environment which not only changes the very structure of the individual or just compels him to recognize it but also

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provide this with a readymade system of rigs it impose on him a series of obligations two environments, namely home & school environment, share an influential space in child's life

Family is the social biological units that exerts the greatest influence on the developments & perpetuation of the individual's behavior home environment occupies the growth and development of a child as the child from birth till he goes to school learns the things at home only

Education also plays a pivotal role in educating and talenting children. The child's personality, behavior patterns, attitude towards self and other are all the molded through education only.

2. Home environment

Home environment occupies the first & the most significant place for the growth & development of a child from birth till he goes to school learn the basic knowledge, manners & mother tongue at home only.

A favorable home environment constitutes of good parent-child relationship. Further, in the home environment, involvement & affection all affects the child's level of thinking and other kind of development. A cognitive home environment where parents are sensitive & responsive to the developmental needs of the child will help to enhance their academic achievement.

According to Dr. Karuna Shankar Mishra, home environment can be divided into ten dimensions:

- 1) Control;
- 2) Protectiveness;
- 3) Punishment;
- 4) Conformity;
- 5) Social isolation;
- 6) Reward;
- 7) Deprivation of privileges;
- 8) Nurturance;
- 9) Rejection;
- 10) Permissiveness.

3. School Environment

Next to family, the school is the most important experience in the process of child's development when the child enters the school arena; he or she is presented with new opportunities in terms of socialization and cognitive development. These opportunities are provided in different measures in different schools and may have a direct impact on the cognitive and affective behaviors of students.

According to Dr. Karuna Shankar Mishra, school environment can also be divided into six dimensions which are as follows:

- 1) Creative stimulation
- 2) Cognitive Encouragement
- 3) Permissiveness
- 4) Acceptance
- 5) Rejection
- 6) Control

4. Learning Style

Learning style are various approaches or ways of learning. They involve educating method particular to an individual to learn best. It is commonly believed that most people favor some particular method of interacting with taking in and processing stimuli or information.

According to James & Gardner:

"Learning style is the complex manner in which & conditions under which learner most efficiently & most effectively perceive, process, store and recall what they are attempting to learn"

Bennett defines learning style as:

"Learning style is that consistent pattern of behavior & performance by which an individual approaches educational experiences. It is composite of characteristics, Cognitive, affective & physiological behaviors that serve as relatively stable indicators of how a learner perceives, interacts with and responds to the learning environment. It is formed in the deep structure of neural organization & personality which moulds & is molded by human development & the cultural experience of home school & society"

Steward and Felicitti define learning style as those “*Education conditions under which a student is mostly likely to learn*”.

Thus, learning styles are not really concerned with “what” learners learn but rather “how” they prefer to learn.

5. Types of learning style

Different people approach learning differently and these are known as learning styles. There are three basic types of learning styles:

- 1) Visual (learning through seeing);
- 2) Auditory (learning through listening);
- 3) Tactic/ kinaesthetic (learning through moving, doing and touching).

Learning styles inventory from the memletics has the following classification to describe the styles of learners:

- 1) Logical: (learn by logic, reasoning);
- 2) Aural: (learn by listening);
- 3) Physical: (learn by sense of touch);
- 4) Social: (learn by in groups);
- 5) Solitary: (learn by alone or self);
- 6) Verbal: (learn by speech words);
- 7) Visual: (learn by seeing).

6. Need and Significance of the Study

People by and large display upward mobility which helps them to establish their identity & credibility. But due to lack of appropriate learning style and congenial home & school environment, they suffer failure; which works as barrier in achieving their goal. Such negative aspect affects the growth & development of the individual, society as well as nation. Their guidance towards appropriate learning style and awareness regarding conducive home & school environment would certainly enrich the existing human resources of the nation, there by enlarging their capabilities, resources of the nation, there by enlarging this capabilities, potentialities and enriching their academic excellence.

The study will be helpful to the teacher as it will make them aware about the styles of student in learning and thinking process and what effects these style have on

children's performance in school & that attention should be given to children's performance to assess their levels of ability.

7. Review of Related Research

A. K. Abdul Gafoor, *"Relationship of thinking style with physics achievement among Higher Secondary students of Kerala"*, Indian Educational Review, Vol. 26, Jan 2010.

The Study examined that type I thinking (legislative, judicial, global & liberal styles) favours long term but not short term achievement & type II Achievement (executive, local, monarchic, and conservative styles) favours short-term but not long-term achievement could be accepted only partially. Legislative (among girls) and judicial (among boys) Styles contributes to long term achievement and executive (boys) style is unfavourable to long-term achievement. However, local style is favourable and global style is unfavourable to achievement in science among boys only. Anarchic style has negative influence on short-term and long-term achievement of girls and long-term achievement of boys.

B. Yilmaz Soyly, Meryem, Akkoyunlu, Buket, *"The Effect of learning styles on Achievement in Different Learning Environments"*, Turkish online journal of Educational Technology (TOJET), v8 n4 (p43-50) Oct 2009.

The purpose of this study is to investigate the effect of learning styles on student's achievements in different learning environments which were designed according to principles of Generative Theory of Multimedia Learning. As a result, it has been clarified that the type of the learning styles was not significantly effective on student's achievements in different learning environments.

C. David P. Diaz & Ryan B. Cartnal (1999), *"Comparing students learning style in online distance learning-class and an equivalent on campus class"*

Finding of the study reveal that students who were taught using visual learning would do well, despite the lack of auditory clues from their teachers, and that the addition of hearing and touch would almost certainly provide further educational benefits. Students taught using just and auditory or kinesthetic approach is likely is significantly underperform in almost all subjects, apart from music and pottery.

D. Char an (2005) conducted study on learning styles in relation to students characteristics, the result reveals that:

- 1) There is a significant difference in the dependent learning style on the basis of gender;

- 2) There is no significant difference in the independent learning style on the basis of gender;
- 3) There is no significant difference in the collaborative leaning style on the basis of gender.

E. Jag Prêt Kaur, J. S. Rama and Rupinder Kaur (Department of Education, Punjabi University, Punjab, India) conducted study on home environment & academic achievement as correlates of self-concept among adolescents:

The results of the study revealed:

- 1) self-concept to be positively correlated with academic achievement, though not signification;
- 2) a significantly positive relationship of home environment components of protectiveness, conformity, reward and nurturance with self-concept was revealed;
- 3) the correlation of social isolation, deprivation of privileges and rejection components of home environment is significantly negative with self-concept among adolescents

F. Mayya S., Rao, A. Krishna (2004) conducted study on association between learning style preference and performance in the examination of medical students. The study showed significant negative correlation between tactile preference score & the percentage mark in the university examination. Traditional teaching methods favor the auditory and visual learning styles. It is the tactile learner who is at a disadvantage at the university level. In order to provide a compatible educational environment for all students, it is important that teachers understand their own teaching styles and adjust their teaching styles.

8. Objectives

1. To study the home environment in relation to academic achievement of ninth standard students of Aurangabad city.
2. To study the school environment in relation to academic achievement of ninth standard students of Aurangabad city.
3. To study the styles of learning in right hemisphere and left hemisphere dominant children.
4. To study the difference in the styles of learning in right hemisphere and left hemisphere dominant boys and girls.

9. Hypothesis

1. There is positive and high correlation between the scores of home environment and academic achievement of ninth standard students of Aurangabad city.
2. There is positive and high correlation between scores of school environment and scores of academic achievement of ninth standard students of Aurangabad city.
3. There is no significant difference between the achievement of IX standard students of English medium schools of Raipur city having learning style by right hemisphere and by left hemisphere.
4. There is no significant difference between the achievement of male and female IX standard student of English medium schools of Raipur city having learning style by right hemisphere.
5. There is no significant difference between the achievement of male and female IX standard students of English medium schools of Raipur city having learning style by left hemisphere

10. Variables

In the present study learning style, home environment and school environment would be taken to study their influence in determining the academic achievement of the ninth standard students.

a. Independent variable

- 1) Home environment
- 2) School Environment
- 3) Learning Style
- 4) Types of school
- 5) Sex

b. Dependent variable

- 1) Academic achievement

11. Population

Population is all IX standard students of all English medium schools running in Raipur city.

11.1 Sample

A sample is a portion of people drawn from a larger population. The sample for the present study is taken from all English medium schools running in Raipur city. Ninth

standard students are randomly selected from various schools situated in Raipur city. The total number of sample is around 50 out of which 25 are boys and 25 girls.

12. Method

Survey method was used for the study.

12.1 Tools

The following standardized test was applied for assessing the variables under consideration:

A. SOLAT (Styles of learning & thinking):

Developed by Venkataraman (1994) is used in the present study. It is a modified version of the tool developed by Torrance. It identifies by hemisphericity dominance by way of studying the hemisphere functions. It indicates the learning and thinking styles and brain hemisphere preference.

B. H E I (Home Environment Inventory)

Developed by Dr. Karuna Shankar Mishra is an instrument designed to measure the psycho-social climate of home as perceived by children. It provides a measure of the quality and quantity of the cognitive, emotional and social support that has been available to the child within the home. H E I have 100 items belonging to ten dimensions of home environment.

- Control
- Protectiveness
- Punishment
- Conformity
- Social isolation
- Reward
- Deprivation of privileges
- Nurturance
- Rejection
- Permissiveness

C. S E I (School Environment Inventory)

Developed by Dr. Karuna Shankar Mishra is an instrument designed to measure the psycho-social climate of schools as perceived by the pupils. It provides measures of the quality & quantity of the cognitive, emotional & social support that has been available to

the students during their school life in terms of teacher - pupil interactions. S E I have 70 items belonging to six dimensions of the school environment which are as follows:

- 1) Creative stimulation
- 2) Cognitive encouragement
- 3) Permissiveness
- 4) Acceptance
- 5) Rejection
- 6) Control

12.2 Analysis and Interpretation

The data was collected and coefficient of correlation was found between:

1. School Environment and Academic achievement.
2. Home Environment and Academic achievement.
3. Mean, Standard Deviation, t-value is also calculated to measure the level of significance in achievement and learning style.
4. Mean, Standard Deviation, t-value is also calculated to measure the level of significance in achievement of male and female students and learning style by right hemisphere.
5. Mean, Standard Deviation, t-value is also calculated to measure the level of significance in achievement of male and female students and learning style by left hemisphere.

Table1: Home Environment and Academic Achievement

Sr.no.	Variables	Coefficient of correlation
1	Home Environment	-0.1381
2	Academic Achievement	

Table 2: School Environment and Academic Achievement

Sr.no.	Variables	Coefficient of correlation
1	School Environment	0.509
2	Academic Achievement	

Table 3: Table showing Mean, S. D., t-value of the scores of achievement on learning style by right and left hemisphere of IX standard students of Raipur city

Sr. no.	Hemispheres	N	M	S.D.	t-value	Table value		Significant/ Insignificant
						0.05 level	0.01 level	
1.	Right	50	22.16	5.298	7.9639	2.02	2.69	Significant
2.	Left	50	13.98	4.968				

Table 4: Table showing Mean, S. D., t-value of the scores of achievement of male and female students and learning style by right hemisphere of IX standard students of Raipur city

Sr. No.	Category	N	M	S.D.	t- value	Table Value		Significant/ Insignificant
						0.05 Level	0.01 Level	
1.	Male	25	23.04	5.9829	0.4250	2.02	2.69	Insignificant
2.	Female	25	22.12	4.28				

Table 5: Table showing Mean, S. D., t-value of the scores of achievement of male and female students of learning style by left hemisphere of IX standard students of Raipur city

Sr. No.	N	Mean of left hemisphere	S.D.	t- value	Table value		Significant/ Insignificant
					0.05 Level	0.01 Level	
1.	25	15.0	5.3328	0.637	2.02	2.69	Insignificant
2.	25	17.04	4.7787				

13. Findings

1. Table I reveals that Coefficient of Correlation between the scores of home environment and academic achievement of IX standard students of Raipur city is **-0.1381**. Hence the hypothesis is rejected. The relationship between home environment and academic achievement is low, negative and negligible.
2. Table II reveals that Coefficient of Correlation between the scores of school environment and academic achievement of IX standard students of Raipur city is **0.0509**. Hence the hypothesis is rejected. The relationship between school environment and academic achievement is positive but negligible.
3. Table III reveals that t-value of the scores of learning style by right hemisphere and left hemisphere of IX standard students of Raipur city is **7.9639** which is greater than table value at both 0.01 and 0.05 level. The difference in the scores of learning style by right hemisphere and left hemisphere is significant and hence null hypothesis is rejected.
4. Table IV reveals that t-value of the scores of learning style by right hemisphere of male and female of IX standard students of Raipur city is **0.4259** which is less

than the table value at both 0.01 and 0.05 level. The difference in the scores of learning style by right hemisphere of male and female is insignificant and hence null hypothesis is accepted.

5. Table V reveals that t-value of the scores of learning style by left hemisphere of male and female of IX standard students of Raipur city is **0.637** which is less than the table value at both 0.01 and 0.05 level. The difference in the scores of learning style by right hemisphere of male and female is insignificant and hence null hypothesis is accepted.

14. Conclusion

After analysis and interpretation the following conclusions were drawn:

1. Hypotheses H I:

“There is positive and high correlation between the scores of home environment and academic achievement of ninth standard students of Aurangabad city” is disproved/rejected as coefficient of correlation between home environment and academic achievement is **0.1381** which is insignificant at both 0.05 and 0.01 level of significance.

2. Hypotheses H II:

“There is positive and high correlation between scores of school environment and scores of academic achievement of ninth standard students of Aurangabad city” is disapproved as coefficient of correlation between school environment and academic achievement is **0.0509** which is positive, low and insignificant.

3. Hypotheses III (H 0):

“There is no significant difference between the achievement of students having learning style by right hemisphere and by left hemisphere” is rejected as the t-value is **7.9649** which is significant at both 0.05 and 0.01 level of significance.

4. Hypotheses IV (H 0):

“There is no significant difference between the achievement of male and female students having learning style by right hemisphere” is accepted as the t-value is **0.4250** which is insignificant at both 0.05 and 0.01 level of significance.

5. Hypotheses V (H 0):

“There is no significant difference between the achievement of male and female students having learning style by left hemisphere” is accepted as the t-value is **0.637** which is insignificant at both 0.05 and 0.01 level of significance.

References

1. Best J. W. and Kahn J. V, Research in Education (Prentice Hall of India Pvt.Ltd., Seventh Edition)
2. Best J. W. and Kahn J. V, Research in Education (Prentice Hall of India Pvt.Ltd., Tenth Edition)
3. Chandra S.S. and Sharma R.K., Research in Education (Atlantic Publishers and Distributors)
4. Dr. Asthana B., Measurement and Evaluation in Psychology and Education. (Vinod Pustak Mandir, Agra – 2)
5. Edu Track (Jan 2006 Vol. V) Publisher Suresh Chandra Sharma
6. Garrett H. E. and Woodworth R. S., Statistics in Psychology and Education (Vakils, Feiffer and Simons Pvt.Ltd.)
7. K. Abdul Gafoor, *“Relationship of thinking style with physics achievement among Higher Secondary students of Kerala”*, Indian Educational Review, Vol. 26, Jan 2010
8. Yilmaz Soylu, Meryem, Akkoyunlu, Buket, *“The Effect of learning styles on Achievement in Different Learning Environments”*, Turkish online journal of Educational Technology (TOJET), v8 n4 (p43-50) Oct 2009
9. David P. Diaz & Ryan B. Cartnal (1999), *“Comparing students learning style in online distance learning-class and an equivalent on campus class”*
10. <http://www.lib.umi.com/dissertations>
11. Indian Educational Abstracts (Vol. 5), Jan and July 2005 by N.C.E.R.T.
12. Indian Educational Review (Vol. 46) No.1, Jan 2010
13. Journal of Indian Education (Vol. 35) Feb 2010 by N.C.E.R.T.
14. Kothari K.C., Research Methodology, Methods and Techniques (Second Edition).

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