

Relationship Between Cognitive Attainment and Home Environment of Secondary School Students



Education

KEYWORDS : investigation, stratified, cognitive attainment, coefficient of correlation, significant.

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ABSTRACT

The present study aims at investigating relationship between cognitive attainment and home environment of secondary school students. The sample of the present investigation was drawn from eight private and government secondary schools of Aligarh district India. The sample consisted of 300 students (150 girls and 150 boys) studying in class X, and was drawn by stratified random sampling technique. Home environment inventory by Dr. Karuna Shankar Mishra was used to assess the quality of home environment and cognitive attainment was ascertained with the help of report cards of students. Mean, SD and t test were calculated to analyse the data, and Pearson's coefficient of correlation have been adopted to find out the relationship between cognitive attainments and home environment. The results of this research study indicate significant variation between the two groups.

INTRODUCTION

Education is the basic need of the society because it nurtures and develops quality and skills so that a child became a human and icon of the society. It enlightens the wisdom and knowledge and differ us from animal. As human beings are immersed in a social environment it is through education that human beings can contribute to our society and whole universe.

There are two environments school and home which have greater influence in child's life. Home environment is the most important experience and institution in the development of various personality traits and for the existence and continuance of human life. The school is the most important experience in the child's development process. Home environment is the quantity and quality of the emotional, cognitive and social support available to the children and connotes the psychological environment of home. An ideal home environment is one where parents put fewer restrictions to strengthen the desired behaviour in the child, where the children are not forced to act according to parental expectations and desires, where there is a keen interest in and love for the children, where opportunities are provided to the child to express freely and best use of affective punishment.

Various studies show that high parental encouragement and involvement with children leads to high achievement and low parental involvement with children leads to low achievement (Ahuja and Goyal 2005). Family being the major and first agency of child's socialization plays a pivotal role in making his life. Family life is child's first school for emotional learning (Goleman, 1997). The total home environment consists of both negative and positive conditions which interact with each other.

Studies have shown that most of the well adjusted and successful children come from homes where positive relationships exist between parents and their children. Parent's behaviour is an important factor in creating the home environment either favourable or unfavourable.

Bradley (1995) states that "home environment shows generally stronger relation to cognitive development".

It is the home, which aids intellectual growth in the child, sets the pattern for the child's attitude towards society, supports his achievements and aspirations. (Shaha and Sharma, 1984) assessed significant and positive relationship between family and academic achievement. Studies conducted by different researchers have revealed that children coming from high environment groups achieved greater success than children coming from middle and low home environment groups. Jagannathan 1986, Lakshmi & Arora 2006 studied the impact of home environment on the scholastic achievement of children and found that good home environment had positive correlation with high level of scholastic achievement. Studies conducted by (Walsey, 1982; Clark 1983; Caldwell & Bradley, 1984; Walberg 1984; Comer 1988) found that family environment has a significant

effect on the child's development.

Kim's (2002) research findings indicate that parental involvement makes a positive contribution to children's academic achievement. Studies conducted by (Baharudin & Luster 1998; Featherstone & Cundick, 1992; Watkins 1997) have shown that academic achievement is affected by home environment.

Epstein (1992) states that "students at all grade levels do better academic work and have more positive school attitudes, higher aspirations and other positive behaviours if they have parents who are aware, knowledgeable, encouraging and involved".

Crow and Crow (1969) define academic achievement as "the extent to which a learner is profiting from instruction in a given area of learning or in other words, achievement is reflected by the extent to which skill and knowledge has been imparted to him."

Academic achievement can be defined as the symbol obtained by a pupil in a formal examination session. For convenience and for comparative purposes, the achievement symbols will be used. This approach constitutes an improvement on the method of results analysis (Jubber, 1994:137).

Thus the present study envisaged to assess the relationship of the home environment and the cognitive attainments of the students with the following objectives.

1. To study the cognitive attainment and home environment of secondary school students.
2. To study the relationship between cognitive attainment and home environment of secondary school students.
3. To compare home environment of male and female school students.
4. To compare cognitive attainments of male and female school students.

METHODOLOGY

The sample of the present investigation was selected from eight government and private secondary schools of Aligarh district of Uttar Pradesh state. The sample comprised of 300 students (150 girls and 150 boys) studying in class X, and was drawn by stratified random sampling technique.

Statistical Techniques

Mean, SD and t test were calculated to analyze the data, and Pearson's coefficient of correlation have been adopted to find out the relationship between cognitive attainment and home environment.

Tools

1. Home Environment Inventory developed and validated by Dr. Karuna Shankar Misra was used by the present investigator. The Inventory has 100 items belonging to ten dimensions of home environment. The ten dimensions are (A)

control, (B) Protective, (C) Punishment, (D) Conformity, (E) Social isolation (F) Reward, (G) Deprivation of privileges (H) Nurturance, (I) Rejection, (J) Permissiveness. Each dimension has ten items belonging to it.

- In the present investigation academic achievement constitutes the aggregate marks obtained by the subjects in their previous class examination.

RESULTS AND DISCUSSION

Table-1 Correlation of Home Environment and Cognitive attainment of Students

Variables	N	r value	Level of significance 0.01 level
Home Environment	150	.125	
Cognition	150		

It is clear from table1, that the calculated value of coefficient of correlation between home environment and cognitive attainment is 0.125 which is highly significant at 0.01 level of significance. It may therefore be concluded that cognitive attainment is significantly correlated with home environment and both are affected by each other. Home environment puts its effect on cognitive attainment and vice-versa.

Table-2 Distribution showing population mean and variability of home environment and cognitive attainment of school students

	N	\bar{X}	σ	σM
Home Environment	150	174.00	27.45	0.98
Cognitive Attainment	150	401.44	69.11	2.61

As can be seen from Table-2 mean scores of home environment and cognitive attainments of students was calculated which is 174.00 and 401.44 respectively. In this way we can say that a Child's life is affected by the environment in which he/she lives. Home environment is the basic and essential nurturing support system for all of us. Bradley (1995) demonstrates that, home-environment shows generally stronger relation to cognitive development.

Table-3 Showing value of Home Environment of male and female school students

Gender	Mean	SD	N	Standard Error Mean	Z-value
Male	186.7840	30.19854	150	1.81242	12.985
Female	165.0657	19.90653	150		

As it is evident from Table-3 the mean score of home environment of male students is 186.7840 which is significantly higher than that of female students whose mean score is 165.0657. It may therefore be concluded that male students have more favourable home environment than female students.

Table-4 Showing value of Cognitive Attainment of male and female school students

Gender	Mean	SD	N	Standard Error Mean	Z-value
Male	387.9235	81.844560	150	5.87437	5.885
Female	424.5001	51.77568	150		

Table-4 shows that the mean scores of female students are 424.5001 which are significantly higher than that of male students whose mean score is 387.9235. It may be concluded that female students have more cognitive attainment than male students.

CONCLUSION

The main purpose of the present study was to see the relationship between cognitive attainments and home environment of secondary school students, it can be concluded that home environment and cognitive attainment of school students is significantly correlated. Home environment affects the cognitive attainment of students. It may be said that the children who have better home environment have high cognitive attainment, the quality of home environment we provide to our children has a definite impact on their future achievement.

Vygotsky (1978) emphasizes that "a student's cognitive development is a result of a dialectical process involving a student who learns better when helped by a mentor such as teachers and parents". Studies have also noted how support, aid, or scaffolding provided by experts or parents to children who are learning how to carry out a task is very important in these children's learning.

RECOMMENDATIONS

- Parents and teachers should ensure that gender bias does not exist even in the subtlest manner in home and school environment.
- Efforts should be made by parents to provide conducive home environment to build emotional competence in children, so that they can better fulfil their various roles in life.
- Schools should organize various personality development programs from time to time to help students mature socially and emotionally.
- Some social and emotional learning programs should be organized in schools which can help the parents in reinforcing the social and emotional development of children.

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