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## Home Environment Affecting the Mathematics Students Academic Achievement

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### **Abstract:**

*The quality of teaching and learning mathematics has been one of the major challenges and concerns of educators. One of the important factors affecting mathematics achievement is particularly important for making the best design decisions. This research paper was investigated to find the relationship between home environment and the mathematics achievement of students through collected the data. Results revealed that relationship between Home Environment and Academic Achievement and its significant.*

### **1. Introduction**

Mathematics is a tool in which the students and youngsters get knowledge and experience about life, they learn how to deal with problems, and apply their knowledge into real life problems, they improve their ability about logical thinking and reasoning, and they are getting ready for their future. (Arslan, 2012). Kothari Commission has rightly pointed out that Mathematics should be made a compulsory subject for the students of 1st to 10th standard, as a part of general education (Bishnoi, 2010). It is thought generally believed that the students' attitude towards a subject determines their success in their subject. In other words, ones favorable attitude of a subject results to good achievement in the subject. A student's constant failure in a school subject and mathematics in particular subject can make him/her to believe that he can never do well on the subject thus accepting defeat. Ones successful experience can make him/her develop a positive attitude towards learning the subject (as cited in velaippan, 2014).

### **2. Home Environment**

Parents have the greatest influence on the achievement of young people through supporting their learning in the home rather than supporting activities in school.

Parents are a child's first educator. A child's family and home environment has a strong impact on his/her language and literacy development and educational achievement

The home environment is regarded as a setting which contains social and cultural knowledge and skills that are important for children's growth and development in literacy skills (Lanter, 2006). The social knowledge and skills provide children with education and life skills that enable them to interact actively with other people in the community. The cultural knowledge and skills provide children with language, technology and strategies which enable them to participate functionally in social experiences and activities (Miller, 2002).

Children develop language and learn important information about language through active participation and interaction with other people in and around the home environment

### **3. Home Environment Definitions**

Home is place (such as a house or apartment) where a person lives or a place where something normally or naturally lives or is located (Merriam Webster dictionary, 2015). Home is place in which one's domestic affections are centered.(Dictionary.com, 2015). Home is the place where one lives permanently, especially as a member of a family or household, the family or social unit occupying a permanent residence. (Oxford dictionaries, 2015)

The conditions that surround someone or something: the conditions and influences that affect the growth, health, progress, etc., of someone or something the environment: the natural world the social and cultural conditions that affect the life of a person or community, a person's physical surroundings. (Merriam Webster dictionary, 2015),the conditions that you live or work in and the way that they influence how you feel or how effectively you can work. (Cambridge dictionary online, 2015)

### **4. Types of Home Environment**

According to this view can classify home as

- ❖ The over regulated home
- ❖ The home of loveless authority
- ❖ The home of over affectionate authority
- ❖ The home of impersonal authority
- ❖ The home of restrictive (which carries a feeling of guilt)

And also by the view point of systems like democratic authority, wholesome Authority, bossy authority etc. On the other side of home environment, there are 10 factors related to the home environment which is carrying major or minor constituents in home environment positive or negative convenient or non convenient for overall development of child. In same way and manner socio-economical status is also playing a major role in it.

### 5. Objective

To find out the relationship between home environment and academic achievement of higher secondary school students.

### 6. Hypothesis

There is no significant relationship between home environment and academic achievement of higher secondary school students.

### 7. Method of the Study

Method plays a prominent place in research methodology. Accuracy in results are mostly depends on the method of data collection. The researcher should take care about the selection of method of research. Here, the investigator has selected the survey technique for collecting data.

### 8. Sample of the Study

The sample of higher secondary school students has selected by using simple random sampling technique of Thiruvarur District, Tamil Nadu.

### 9. Statistical Techniques of the Study

After scoring the filled in Home Environment Scale and Academic achievement score a Master Table was prepared by plotting the scores. Only one type of Statistical Measures were used in the study for finding out solutions to the problems which are the following statistics is used for the study is Pearson Product Moment Correlation.

		Home Environment	Academic Achievement
Home Environment	Pearson Correlation	1	.46**
	Sig. (2-tailed)		.000
	N	532	532
Academic Achievement	Pearson Correlation	.456**	1
	Sig. (2-tailed)	.000	
	N	532	532

\*\* . Correlation is significant at the 0.01 level (2-tailed).

*Table 1: Relationship between Home Environment and Academic Achievement*

From the table the correlation co-efficient between Home Environment and Academic Achievement is 0.456 which indicates 45.6% positive relationship between Home Environment and Academic Achievement and its significant at 1% level. Hence the hypothesis is accepted.

### 10. Conclusion

This research paper reported that mathematics student's academic achievement and home environment is having positive relationship. Educators need to adapt and create alternative innovative learning and teaching strategies for effective mathematics education. Hence the Home Environment is a factor that only affects the mathematic student's academic achievement.

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