

## **NINTH STANDARD STUDENTS ATTITUDE TOWARDS LEARNING MATHEMATICS IN THANJAVUR DISTRICT**

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### **ABSTRACT**

*The main aims of the present study is to find out the mathematical attitude of ninth standard students in Thanjavur District of Tamil Nadu, India. All the ninth standard students should study the mathematics as a compulsory subject at secondary level. The attitude of mathematics is one of the factors for learning mathematics. The study was conducted on a sample 300 students who are studying in IX standard. It also aims to find out whether there is any significant difference between the variables of mathematics attitude. The investigator had adopted the descriptive survey method. The results showed that the ninth standard day scholar students has a better attitude towards mathematics than that of hostel students.*

**Keywords:** Mathematics, Attitude, Secondary Students.

### **Introduction**

Learning mathematics is not only a cognitive challenge, but also an effective one. The attitude of students towards mathematics has been the subject of a great deal of attention from educators. Students with a positive attitude toward mathematics tend to enjoy the subject, understand its value, and have confidence in it; thus, they are likely to prioritize the study of mathematics, which could lead to high performance in the same. The pace of mathematical discovery and intervention has accelerated amazingly during the last few decades. It has been said that mathematics is the only branch of learning in which theories of two years old are still valid. Mathematics lays the foundation for the study of all other subjects and it is too early for a child to decide about the profession. The knowledge of mathematics is a vital role for the society. In particular, mathematics knowledge is necessary for secondary school students, it is very useful for higher education. At secondary level, attitude of mathematics is very important role for the learning mathematical concept with interest.

### **Need and Importance of Study**

Mathematics is a fundamental part of human thought and logic and integral to attempts at understanding the world and ourselves. Mathematics provides an effective way of building mental discipline and encourages logical reasoning and mental rigor. In addition, mathematical knowledge plays a crucial role in understanding the contents of other school subjects such as science, social studies and even music, arts and it considered as one of the most important allied subjects in a secondary school curriculum. The number of failures in mathematics in secondary school level examination is more comparable to that of other subjects. Because mathematics is a highly abstract subject. If secondary students have positive attitude towards mathematics is very well otherwise very low. So, their attitude is the main role of learning mathematics.

### **Statement of the Problem**

The present study is entitled '**Ninth Standard Students Attitude towards Learning Mathematics in Thanjavur District**'.

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**Objectives of the Study**

The following objectives have been formulated related to study:

- To find out the significant difference between IX standard students in their attitude towards learning mathematics with reference to gender.
- To find out the significant difference between IX standard students in their attitude towards learning mathematics with reference to students' locality.
- To find out the significant difference between IX standard students in their attitude towards learning mathematics with reference to types of students.
- To find out the significant difference between IX standard students in their attitude towards learning mathematics with reference to types of family.

**Hypothesis of the Study**

The following null hypotheses were formulated by the above objectives:

- There is no significant difference between IX standard students in their attitude towards learning mathematics with reference to gender.
- There is no significant difference between IX standard students in their attitude towards learning mathematics with reference to student's locality.
- There is no significant difference between IX standard students in their attitude towards learning mathematics with reference to types of students.
- There is no significant difference between IX standard students in their attitude towards learning mathematics with reference to types of family.

**Variables of the Study**

- Dependent Variable  
Attitude towards mathematics
- Independent variables  
Gender, Students locality, Types of students, Types of family

**Limitations of the Study**

The present study has the following limitations

- The investigator selected three hundred ninth standard students in Thanjavur district in Tamil Nadu, India, for the present study.
- Only ten higher secondary schools are used for present study.

**Method of the Study**

Considering the objectives and hypotheses of the study, the investigator had selected the descriptive survey method for the present study.

**Sample of the Study**

The sample consisted of 300 students of government and matriculation secondary IX-standard students in Thanjavur district, Tamil Nadu, India.

**Statistical Technique used in the Study**

The mean, standard deviation and t-test were used for analysing the data.

**Testing the Hypothesis****Hypothesis 1**

There is no significant difference between IX-standard students in their attitude towards learning mathematics with reference to gender.

This hypothesis was tested using 't' test,

**Table 1**

Gender	N	Mean	S.D	t-Value	Significant level
Male	150	79.8667	13.6985	0.2966	NS
Female	150	80.3333	13.7437		At 0.05 level

It is inferred from the above table-1 shows that the calculated 't'-value (0.2966) is less than the critical value (1.96). Hence, the hypothesis is accepted. Thus, there is no significant difference between male and female IX-standard students' attitude towards mathematics.

### Hypothesis 2

There is no significant difference between IX standard students in their attitude towards learning mathematics with reference to student's locality.

This hypothesis was tested using 't' test,

**Table 2**

Locality of Students	N	Mean	S.D	t-Value	Significant level
Rural	170	80.8235	13.5543	1.0437	NS at 0.05 level
Urban	130	79.1539	13.9331		

It is inferred from the above table-2 shows that the calculated 't'-value (1.0437) is less than the critical value (1.96). Hence the hypothesis is accepted. Thus, there is no significant difference between rural and urban IX-standard students' attitude towards mathematics.

### Hypothesis 3

There is no significant difference between IX standard students in their attitude towards learning mathematics with reference to types of students.

This hypothesis was tested using 't' test,

**Table 3**

Types of Students	N	Mean	S.D	t-Value	Significant level
Day Scholars	180	81.6111	13.5536	2.3478	Significant at 0.05 level
Hostelers	120	77.8333	13.6927		

It is inferred from the above table-3 shows that the calculated 't'-value (2.3478) is greater than the critical value (1.96). Hence, the hypothesis is rejected. Thus, there is a significant difference between day scholar and hosteler IX- standard students' attitude towards mathematics.

### Hypothesis 4

There is no significant difference between IX standard students in their attitude towards learning mathematics with reference to types of family.

This hypothesis was tested using 't' test,

**Table 4**

Types of Family	N	Mean	S.D	t-Value	Significant level
Joint Family	100	77.9000	14.1630	1.9411	NS at 0.05 level
Nuclear Family	200	81.2000	13.3626		

It is inferred from the above table-4 shows that the calculated 't'-value (1.9411) is less than the critical value (1.96 at 0.05 level). Hence the hypothesis is accepted. Thus, there is no significant difference between joint family and nuclear family IX-standard students' attitude towards mathematics.

### Findings of the Study

The following are the important findings of the present study:

- The table no-1 shows that the computed value of 't' 0.2966 is less than the critical values of 1.96 at 0.05 level and hence it is not significant. It can be said that there is no significant difference between IX standard students in their attitude towards mathematics with reference to gender.
- The table no-2 shows that the computed value of 't' 1.0437 is less than the critical values of 1.96 at 0.05 level and hence it is not significant. It can be said that there is no significant difference between IX standard students in their attitude towards mathematics with reference to students' locality.
- The table no-3 shows that the computed value of 't' 2.3478 is less than the critical values of 1.96 at 0.05 level and hence it is significant. It can be said that there is significant difference between IX standard students in their attitude towards mathematics with reference to types of students. It is also inferred that day scholars (81.6111) have high level of attitude towards mathematics than the hostelers (77.8333).

- The table no-4 shows that the computed value of 't' 1.9411 is less than the critical values of 1.96 at 0.05 level and hence it is not significant. It can be said that there is no significant difference between IX standard students in their attitude towards mathematics with reference to types of family.

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