

ABSTRACT This study examines the critical thinking of IX standard students on their academic achievement. The sample of study comprised of 330 IX standard students of various schools in Tirunelveli district. The investigator used random sampling method for collecting the data. t-test, F-test, correlation analysis were used for analyzed data. It was found that there is significant difference in IX standard students' critical thinking about academic achievement with regard to background variables.

# **KEYWORDS**: Critical Thinking, Academic achievement, IX standard students.

## INTRODUCTION

The ability to think critically calls for higher-order thinking than simply the ability to recall information. Critical thinking is a "capacity to work with complex ideas whereby a person can make effective provision of evidence to justify a reasonable judgment" (Moon 2005). "Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning or communication, as a guide to belief and action" (Michael scrive & Richard Paul 2003). Critical thinking is the use of those cognitive skills or strategies that increase the probability of a positive outcome. It is used to describe thinking that is purposeful, reasoned, and goal directed (Diane F. Halpern 1996).

Academic achievement is the extent to which a student, teacher or institution has achieved their short or long-term educational goals. Academic achievement refers to the level of schooling you have successfully completed and the ability to attain success in your studies. It is measured by the final grade earned in the course.

#### SIGNIFICANCE OF THE STUDY

The purpose of this study is to analyze current literatures and examine strategies for developing Critical Thinking Skills among IX standard students. The purpose of conducting this study is to assist this researcher in implementing a structured approach to develop Critical Thinking among the IX standard mathematics classroom. This research has universal implications for all subject areas, and therefore will be applicable to the general high school setting. The aim of Critical Thinking Skills as a core component of higher thinking skills development in mathematics is to improve students' learning abilities. The information gathered in this study would also help teachers, institutions and researchers in education to have a better understanding on Critical Thinking which would enable them to evaluate students' performance in mathematics more appropriately. A challenge, according to these researches, is how to teach skills for Critical Thinking in academic achievement. The purpose of this study is to examine the critical thinking and academic achievement of IX standard students.

# **OBJECTIVES OF THE STUDY**

- 1. To find out the influence of critical thinking and Academic achievement of IX Standard students with regard to gender.
- 2. To find out the relationship between Critical Thinking and Academic Achievement.

#### HYPOTHESES OF THE STUDY

- 1. There is no significant difference in critical thinking and Academic achievement of IX Standard students with regard to gender.
- 2. There is no relationship between Critical Thinking and Academic Achievement of IX Standard students.

## **METHOD OF THE STUDY**

The investigator adopted survey method for this study.

#### SAMPLE

The investigator used simple random sampling technique to select the samples consisting of 330 IX Standard students randomly selected in Tirunelveli district.

#### **TOOLS USED**

Questionnaire on influence of Critical thinking and Academic achievement was developed by the investigator and the guide.

#### STATISTICS USED

't' test, and correlation analysis are used to analyse the data

### ANALYSIS OF DATA Table 1 Influence of Critical Thinking and Academic achievement of IX Standard Students with regards to Gender

Variable	Gender	Ν	Mean	SD	t-Value	p-Value
Critical	Male	202	64.96	6.53	6.331	0.000**
Thinking	Female	128	69.72	6.83		
Academic	Male	202	71.23	7.51	0.70	0.484NS
Achievement	Female	128	70.9	8.88		

From the above table, since the p-value (= 0.000) is less than 0.01, the null hypothesis is rejected at 1% level of significance. It shows that there is significant difference in the critical thinking of IX Standard students with regards to Gender.

From the above table, since the p-value (= 0.484) is greater than 0.05, the null hypothesis is accepted at 5% level of significance. It shows that there is no significant difference in the academic achievement of IX Standard students with regards to Gender.

# Table2 Relationship between Critical Thinking and Academic achievement

Variables	r-Value	p-Value
Critical Thinking	0.028	0.609
Academic achievement		

In the above table, since the r-Value (=.028) is greater than 0.01, the null hypothesis is accepted at 1% level of significance. It shows that there is no relationship between Critical Thinking and Academic achievement of IX Standard students.

#### **MAJOR FINDINGS**

- 1. There is significance difference in Critical Thinking of IX Standard students with regard to Gender
- 2. There is no significance difference in Academic Achievement of IX Standard students with regard to Gender
- 3. There is no relationship between Critical Thinking and Academic achievement of IX Standard students.

## RECOMMENDATIONS

- 1. To improve the critical thinking of IX standard students about academic achievement, school should increase practical classes related to the theoretical studies.
- 2. Teachers should give more puzzles in mathematical classes.
- 3. Teachers should increase the reading skills of students; it will also increase the critical thinking.

#### REFERENCES

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