

## INFLUENCE OF RESILIENCE ON CRITICAL THINKING OF HIGHER SECONDARY SCHOOL STUDENTS

**T. Anitha Devi,**

Research Scholar

N. K. T. National College of Education for Women (Autonomous) Chennai  
and

**Dr. S. Chamundeswari**

Principal

N. K. T. National College of Education for Women (Autonomous) Chennai

### Abstract

*(The researchers made an attempt to investigate the resilience as a predictor of critical thinking of higher secondary school students. The purpose of the study was to find out the relationship between resilience and critical thinking of higher secondary school students. The objective of the study was to find out the significant difference if any in resilience and critical thinking of higher secondary school students with reference to gender and nature of college and to find out the significant relationship between resilience and critical thinking of higher secondary school students. A descriptive survey method was used in this study. Purposive sampling method was adopted in this study. Researchers used 240 higher secondary school students from 6 different schools from Madurai educational district. Resilience, critical thinking and reflective thinking (RCR) scale was developed and validated by Anitha Devi and Chamundeswari (2023). Mean, standard deviation, 't' test and ANOVA were used to analysed the data. The findings showed that regarding gender, the girls are better than boys in their resilience and critical thinking. Regarding nature of school the girls' school students are better than boys and co-educational school students in their resilience. Regarding critical thinking, the boys and girls school students are better than co-educational school students in their critical thinking. Significant positive relationship was found between resilience and critical thinking of higher secondary school students)*

**Key Words:** Resilience, Critical Thinking, Cognitive Abilities, Reflection

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### Introduction

Resilience is the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioural flexibility and adjustment to external and internal demands. A number of factors contribute to how well people adapt to adversities, including the ways in which individuals view and engage with the world, the availability and quality of social resources, and specific coping strategies. Fundamentally, resilience refers to positive adaptation, or the ability to maintain or

regain mental health, despite experiencing adversity. Definitions have evolved as scientific knowledge has increased. Resilience is studied by researchers from diverse disciplines, including psychology, psychiatry, sociology, and more recently, biological disciplines, including genetics, epigenetics, endocrinology, and neuroscience (Herrman et. al., 2011).

Human thought is rooted partly in words, partly in emotions, and partly in the body states that may accompany or give rise to emotions; another way of saying this is that our thought processes are partly conscious but mostly unconscious. Critical thinking is essential components of executive function, a set of cognitive abilities that allow ones to manage one's own thoughts, actions, and emotions. Building resilience and critical thinking skills can be challenging, but the effort is well worth it. Students who develop these skills are better equipped to manage the challenges of higher secondary level and beyond.

### **Significance of the Study**

Everyone has a different capacity to be able to work through difficult events, which can vary drastically from person to person. People who are resilient may even maintain better physical health, including less tension. It can be measured by looking at a singular event. The severity of the event and the impact on the individual will also determine the outcome. For parents and caregivers in particular, fostering resilience has become an essential part of modern students rearing. Encouraging the resilience trait teaches students to cope with difficulties, manage stress and ultimately navigate the world on their own when they are grown. But the benefits of resilience training extend far beyond family life, too. 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. It can help to solve the problems because it enables the person to analyze a problem and determine potential solutions. People can also use critical thinking to determine the benefits and challenges of each potential solution so the people can choose the best one to implement if the person becomes resilient.

Resilient people and one of the key predictors of personal and organizational resilience capability is evidence of critical thinking skills. Critical thinking skills can help individuals to understand context and various opportunities. Resilience and critical thinking skills can help the people succeed. These skills will help students better manage stress, solve problems, and make well-informed decisions. Resilience is a learned behaviour that can be

developed through intentional practices. Hence the resilience is a predictor of critical thinking skills. Here the researchers want to know about the how resilience correlated the critical thinking of higher secondary school students.

### **Methodology**

Descriptive survey method was used. The population consisted of the total number students are studying the higher secondary schools in and around Madurai educational district. Purposive sampling method was adopted in this study. The sample consisted of 240 higher secondary school students from 6 different schools from Madurai educational district. Resilience, Critical thinking and Reflective thinking (RCR) scale was developed and validated by Anitha Devi and Chamundeswari (2023). Mean, standard deviation, 't' test and ANOVA were used to analysed the data.

### **Objectives**

1. To find out the significant difference if any in resilience and critical thinking of higher secondary school students with reference to gender and nature of college.
2. To find out the significant relationship between resilience and critical thinking of higher secondary school students.

### **Null Hypotheses**

1. There is no significant difference between boys and girls students of higher secondary school in their resilience.
2. There is no significant difference among boys, girls and co-education school higher secondary students in their resilience.
3. There is no significant difference between boys and girls students of higher secondary school in their critical thinking.
4. There is no significant difference among boys, girls and co-education school higher secondary students in their resilience.
5. There is no significant relationship between resilience and critical thinking of higher secondary school students.

## Analysis of Data

### Null hypothesis 1

There is no significant difference between boys and girls students of higher secondary school in their resilience.

**Table 1**  
**Difference between boys and girls students of higher secondary school in their resilience**

Variable	Gender	N	Mean	S D	Calculated 't' value	Remark at 5% level
Resilience	boys	120	49.47	19.19	6.68	S
	girls	120	67.73	22.96		

*(At 5% level of significance, the table value of 't' is 1.96)*

It is inferred from the above table shows that the calculated value of 't' is greater than the table value at 5% level of significant. Hence the null hypothesis is rejected. It shows that there is significant difference between boys and girls students of higher secondary school in their resilience.

### Null hypothesis 2

There is no significant difference among boys, girls and co-education school higher secondary students in their resilience

**Table 2**  
**Difference among boys, girls and co-educational higher secondary school students in their resilience**

Variable	df	Source of Variation	Sum of Squares	Mean Square	Calculated 'F' value	Remarks at 5% level
Resilience	2,237	between	6636.44	3318.22	6.56	S
		Within	119923.36	506.01		

*(At 5% level of significance, the table value of 'F' is 3.03)*

It is inferred from the above table shows that the calculated value of 'F' is greater than the table value at 5% level of significant. Hence the null hypothesis is rejected. It shows that there is significant difference among boys, girls and co-education higher secondary school students in their resilience.

### Null hypothesis 3

There is no significant difference between boys and girls students of higher secondary school in their critical thinking.

**Table 3**  
**Difference between boys and girls students of higher secondary school in their critical thinking**

Variable	Gender	N	Mean	S D	Calculated 't' value	Remark at 5% level
Critical Thinking	boys	120	39.19	11.76	9.13	S
	girls	120	51.87	9.63		

*(At 5% level of significance, the table value of 't' is 1.96)*

It is inferred from the above table shows that the calculated value of 't' is greater than the table value at 5% level of significant. Hence the null hypothesis is rejected. It shows that there is significant difference between boys and girls students of higher secondary school in their critical thinking.

### Null hypothesis 4

There is no significant difference among boys, girls and co-education school higher secondary students in their resilience.

**Table 4**  
**Difference among boys, girls and co-education school higher secondary students in their resilience**

Variable	df	Source of Variation	Sum of Squares	Mean Square	Calculated 'F' value	Remarks at 5% level
Critical Thinking	2,237	between	3861.10	1930.55	13.75	S
		Within	33276.80	140.41		

*(At 5% level of significance, the table value of 'F' is 3.03)*

It is inferred from the above table shows that the calculated value of 'F' is greater than the table value at 5% level of significant. Hence the null hypothesis is rejected. It shows that there is significant difference among boys, girls and co-education higher secondary school students in their critical thinking.

### Null hypothesis 5

There is no significant relationship between resilience and critical thinking of higher secondary school students.

**Table 5**  
**Relationship between resilience and critical thinking of**  
**higher secondary school students**

Variable	N	df	Calculated 'γ' value	Table value at 5% level	Remarks at 5% level
Resilience Vs. Critical Thinking	240	238	0.385	0.138	S

It is inferred from the above table that the calculated 'γ' value is greater than the table value at 5% level of significant. Hence the null hypothesis is rejected. It shows that there is significant relationship between resilience and critical thinking of higher secondary school students.

### Discussion

Regarding resilience, there is significant difference between boys and girls students of higher secondary school in their resilience. While comparing the mean scores of boys (M=49.47) and girls (M=67.73), the girls are better than boys in their resilience. Regarding nature of school there is significant difference among boys, girls and co-education higher secondary school students in their resilience. Based on the post-hoc test, while comparing means scores of boys school (N=47; M=52.38), co-education (N=130; M=56.79) and girls school (N=63; M=66.95), the girls school students are better than boys and co-educational school students in their resilience.

Regarding critical thinking, there is significant difference between boys and girls students of higher secondary school in their critical thinking. While comparing the mean scores of boys (M=39.19) and girls (M=51.87), the girls are better than boys in their critical thinking. Regarding nature of school, there is significant difference among boys, girls and co-education higher secondary school students in their critical thinking Based on the post-hoc test, while comparing means score of co-educational school (N=130; M=41.88), boys school (N=47; M=48.87) and girls school (N=63; M=50.57), the boys and girls school students are better than co-educational school students in their critical thinking. Significant positive relationship was found between resilience and critical thinking of higher secondary school students.

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