



# Critical Thinking Skill: A Key to Outshine in Higher Secondary School Students of Jharkhand

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**Abstract:** I think therefore, I am, said, Rene Descartes, (1637) a French philosopher. As humans, we are thinking beings or we can consider ourselves thinking animals. Our living state is determined by the quality of our faculty of thinking. Our quality of life depends on our quality of thinking. A critical thinking skill is a skill which generates new methods, concepts, understandings, inventions and works of arts. This paper is to present a Critical Thinking a Key Skill for Higher Secondary School Students of Jharkhand on the basis of Gender, Location, School Board, Medium of Instruction and Type of Family. The population consists of Higher Secondary School Students in Ranchi, district of Jharkhand. The sample consisted of 1000 higher secondary school students. The investigator adapted the survey method. Self-constructed and validated tool to establish the validity and reliability of the tool. Mean, standard deviation and t-test was used to analyses the data to infer findings. The results revealed that there was a significant difference between mean scores of higher secondary school students of Jharkhand in their Critical Thinking Skills on the basis of gender, habitation, type of school whereas there was no significant difference between mean scores of higher secondary school students of Jharkhand in their Critical Thinking Skills on the basis type of board.

**Index Terms - Critical Thinking, Key to Outshine, Higher Secondary School, Jharkhand**

## I. INTRODUCTION

Richard Paul (1992) said critical thinking is “perfections of thought.” Critical thinking means analyzing arguments, making inferences using inductive or deductive reasoning, judging or evaluating, and making decisions or solving problems. Critical thinking skills involves cognitive, affective and conative domain of human. Critical thinking roots in two primary academic discipline, philosophy and psychology. Very recently, NEP 2020 included critical thinking as a major course of study in India. Critical thinking skill is the yardstick of an educated person. The more educated a person is, the more critical his thinking is. Educated persons do not follow the beaten path; do not turn blind eyes and ears to unwanted happenings; don't get satisfied with the minimum but keep looking for improvement and 'better' and 'more'. Critical thinking sounds negative but it is not so. Critical thinking is the need for every human growth. It is neither yes to yes nor no to no. It is not criticizing and finding faults. It is not searching and finding mistakes, rather, it is a genuine evaluation of self and others. The Critical thinking skills leads to imaginations, analysis and higher thinking resulting in

innovations and inventions by the creative mind. It also builds up the moral and personality of the person to know their self-worth. The word critical has negative meanings, critical thinking skill is not being critical or argumentative. It involves engaging with information and not just receiving it. The objective of critical thinking skill is to get the best outcome possible in any circumstance. In order to achieve, it must include gathering and analyzing data from various sources. It helps you to try and identify new and better solutions. Critical thinking skill is the ability to think clearly and rationally, understanding the logical connection between ideas.

## II. SIGNIFICANCE OF THE STUDY

The National Education Policy (NEP) 2020 highlights inquiry-based, discovery-oriented discussion-based, and analysis-driven learning to develop critical thinking skills. It holds significant importance in the 21<sup>st</sup> century Education. Critical thinking skills essential for preparing students to face complex academic, social and real-world challenges. Hence, in the absence of critical thinking skills, students succumb to academic growth and real-world preparedness. Students who lack critical thinking skills often struggle in convergent thinking, divergent thinking, problem-solving, decision-making, and independent learning. In the long term, these thinking skills reduced employability because employers look for an individual who can think critically, adapt and innovate.

## III. STATEMENT OF THE PROBLEM

Critical Thinking Skill a Key to Outshine in Higher Secondary School Students of Jharkhand

## IV. OPERATIONAL DEFINITIONS

- i. **Critical Thinking Skill** -Skill which lead to convergent and divergent thinking which objectively analysis and evaluate an issue in order to form a right judgment.
- ii. **Key to Outshine** - Genuine Excellence in academic.
- iii. **Higher Secondary School** - Education at 10<sup>th</sup> and +2 level.
- iv. **Jharkhand - Jharkhand** (Lit. “Bushland” or the land of forest) is a state in Eastern India, carved out of the southern part of Bihar on 15 November 2000.

## V. OBJECTIVES OF THE STUDY

- i. To find the significance difference between the mean scores of Higher Secondary School students of Jharkhand in their Critical Thinking Skill on the basis of gender.
- ii. To find the significance difference between the mean scores of Higher Secondary School students of Jharkhand in their Critical Thinking Skill on the basis of habitation.
- iii. To find the significance difference between the mean scores of Higher Secondary School students of Jharkhand in their Critical Thinking Skill on the basis of type to school.
- iv. To find the significance difference between the mean scores of Higher Secondary School students of Jharkhand in their Critical Thinking Skill on the basis of school board.

## VI. TOOL USED

Self-constructed and validated tool on Critical Thinking Skills Scale (CTSS) with the help of the supervisor.

## VII. METHOD USED

The investigator adapted survey method for the present study.

## VIII. POPULATION FOR THE STUDY

The researcher has selected Higher Secondary School Students from Jharkhand State.

## IX. SAMPLE

There were 1000 Higher Secondary School Students of Jharkhand State.

## X. STATISTICAL TECHNIQUES USED

- i. Mean
- ii. Median
- iii. Standard Deviation
- iv. 't' test

## XI. DELIMITATIONS OF THE STUDY

- i. The researcher has taken 1000 samples from the state of Jharkhand.
- ii. The researcher has taken tribal students of Jharkhand for the study.
- iii. The survey method is used in the research.
- iv. Majority of the secondary school students are from the rural area.

## XII. NULL HYPOTHESIS

1. There is no significant difference between the mean scores of Higher Secondary School Students of Jharkhand in their Critical Thinking Skills on the basis of gender.
2. There is no significant difference between the mean scores of Higher Secondary School Students of Jharkhand in their Critical Thinking Skills on the basis of habitation.
3. There is no significant difference between the mean scores of Higher Secondary School Students of Jharkhand in their Critical Thinking Skill son the basis of type school.
4. There is no significant difference between the mean scores of Higher Secondary School Students of Jharkhand in their Critical Thinking Skills on the basis of schoolboard.

**Null Hypothesis – 1**

There is no significant difference between the mean scores of Higher Secondary School Students of Jharkhand in their Critical Thinking Skills on the basis of gender.

**Table - 1****Gender Wise Critical Thinking Skills of Hr. Sec. Schools**

Gender	N	Mean	SD	t-value	Level of Significance
Male	519	130.66	19.850	.907	NS
Female	481	132.77	48.967		

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

From the table, it is inferred that the calculated value of 't' is .907 which is less than the table value of 't' 1.96 at 5% level of significance. Further, the mean scores of male Hr. Sec. School students is 130.66 which is significantly less than that of female Hr. Sec. School Students which is 132.77. Therefore, female students' Critical Thinking Skills is better than that of male students. Hence, there is no significant difference between male and female Hr. Sec. School Students in their Critical Thinking Skills.

**Null Hypothesis – 2**

There is no significant difference between the mean scores of Higher Secondary School Students of Jharkhand in their Critical Thinking Skills on the basis of habitation.

**Table - 2****Location Wise Critical Thinking Skills of Hr. Sec. Schools Students**

Location	N	Mean	SD	t-value	Level of Significance
Rural	410	127.28	22.605	3.158	S
Urban	590	134.73	43.873		

(At 1% level of significance, the table value of 't' is 2.59)

From the table, it is inferred that the calculated value of 't' is 3.158 which is more than the table value of 't' 2.59 at 1% level of significance. Further, the mean scores of urban Hr. Sec. School Students is 134.73 which is significantly more than that of rural Hr. Sec. School students which is 127.28. Therefore, urban students' Critical Thinking Skills is better than that of rural students. Hence, there is a significant difference between rural and urban Hr. Sec. School Students in their Critical Thinking Skills.

**Null Hypothesis – 3**

There is no significant difference between the mean scores of Higher Secondary School Students of Jharkhand in their Critical Thinking Skills on the basis of type school.

**Table – 3****Type of School Wise Critical Thinking Skills of Hr. Sec. Schools Students**

Type of School	N	Mean	SD	t-value	Level of Significance
Government	612	136.10	21.269	2.458	S
Private	388	132.65	22.109		

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

From the table, it is inferred that the calculated value of 't' is 2.458 which is more than the table value of 't' 1.96 at 5% level of significance. Further, the mean scores of Government is 136.10 which is significantly more than that of private which is 132.65. Therefore, the students of Government school are better than that of private in their Critical Thinking skills. Hence, there is a significant difference between Government and private students in their Critical Thinking Skills.

**Null Hypothesis – 5**

There is no significant difference between the mean scores of Higher Secondary School Students in their Critical Thinking Skills with respect to school board.

**TABLE NO. 4.36****School Board Wise Critical Thinking Skills of Hr. Sec. Schools Students**

School Board	N	Mean	SD	t-value	Level of Significance
JAC	699	130.17	20.698	1.97	S
CBSE/ICSE	301	135.16	59.213		

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

From the table, it is inferred that the calculated value of 't' is 1.97 which is more than the table value of 't' 1.96 at 5% level of significance. Further, the mean scores of CBSE/ICSE board Hr. Sec. School Students is 135.16 which is significantly more than that of JAC board Hr. Sec. School Students which is 130.17. Therefore, the students' of CBSE/ICSE board are better than that of JAC board in their Critical Thinking Skills. Hence, there is a significant difference between JAC board and CBSE/ICSE board Hr. Sec. School Students in their Critical Thinking Skills.

**XIII. CONCLUSION**

It is concluded from the above tables that there is a significance difference between the mean scores in the critical thinking skills of Higher Secondary School Students in Jharkhand on the basis of habitation and type of school and school board whereas there is no significant difference between the mean scores in the study of

Critical Thinking Skills of Higher Secondary School Students in Jharkhand on the basis of gender and medium of instructions.

#### **XIV. EDUCATIONAL IMPLICATIONS**

Critical thinking skills integrate all levels of teaching and learning. It analyzes information, evaluate argument and make reasoned decisions. It helps in curriculum design, pedagogical approaches, teacher preparation and professional development and student empowerment and lifelong learning. Critical thinking skills increase comprehension skills by teaching students how to evaluate the logical structures of texts. Critical thinking abilities enable the students to comprehend and apprise a situation using all relevant facts and information. Moreover, the skills enable the students to reflect and analyze different situations and extract goodness in their day today movements. This enables the students not to take things as they are but it makes them churn and discern for the better career and undertakings for their future lives.

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