



Critical Thinking Skills of Higher Secondary School Students of Jharkhand

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Abstract

Albert Einstein once said, "The important thing is not to stop questioning. Curiosity has its own reason for existing". A critical thinking skill is a thinking skill that produces new methods, new concepts, new understandings, new inventions and new works of arts. Critical thinking skill has different dimensions like metacognition, creative thinking, thinking processes, core thinking skills and the relationship of content area knowledge to thinking. This paper is an attempt to present the critical thinking skills of Higher Secondary School of Jharkhand. The sample comprised of 100 higher secondary school students. The objectives of the study were to find the significance difference between the mean scores of Higher Secondary School students of Jharkhand in their critical thinking skills on the basis of gender, habitation, type of school, medium of instruction and mode of residence. The investigator adapted the survey method. Self-constructed and validated tool on critical thinking skills was administered to collect the data through online mode. Mean, standard deviation and 't' test was used to analyse the data. 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 of medium of instruction, residential and non-residential school.

Keywords: Critical Thinking Skills, Higher Secondary School, Students, Jharkhand

I. INTRODUCTION

Critical thinking is a continuous mental process of higher order thinking or reasoning. When critical thinking skills are omitted from the educational process, society misses tremendous benefits (Jenkins, 2009). Therefore, it plays pivotal role in the modern education system. There are many constructive traits of having education, such as critical thinking skills self-worth, and self-confidence, view obstacles as challenges, overcome fear and face new things. The more a person utilizes his critical thinking skills the better and clear ideas he has. He is able to think not only for himself but for others too. He shares his ideas, views, opinions, reflections and intuitions with others and for sharing them with others he uses the most common, economic and effective means. Social media is one of such means. In social media there is a trend of 'forward as received' without properly reflecting over the messages, audios, videos or images received. This can create trouble not only for oneself but for the others and for the larger society too. 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.

II. SIGNIFICANCE OF THE STUDY

National Education Policy 2020 focuses on critical thinking skills; it states that "education must develop students' cognitive capacities such as critical thinking and problem solving." (page 4); Critical thinking is "one of the fundamental principles that will guide both the education system at large, as well as the individual institutions within it." Critical thinking skills are vital for reformation and social change. What happens when teachers and students become good critical thinkers? They become informed citizens, start looking at things critically, question the status quo, and dissent. Critical thinking and dissent go together. It is the powerful skill in bringing about desired change in human life. Therefore, it is essential to develop critical thinking skills in students and teachers for personal and professional growth.

III. STATEMENT OF THE PROBLEM

Critical Thinking Skills of Higher Secondary School students in Jharkhand

IV. OPERATIONAL DEFFINITIONS

- i. **Critical Thinking Skills** - Skills which lead to objective analysis and evaluation of an issue in order to form a right judgment.
- ii. **Higher Secondary School** - Education at 10th and +2 level.
- iii. **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 skills 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 skills 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 skills 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 skills on the basis of medium of instruction.
- v. To find the significance difference between the mean scores of Higher Secondary School students of Jharkhand in their critical thinking skills on the basis of residential and non-residential school.

VI. TOOL USED

Self-constructed and validated tool on Critical Thinking Skills Scale (CTSS)

VII. METHOD USED

The investigator adapted survey method for the present study.

VIII. POPULATION FOR THE STUDY

For the present study Higher Secondary School Students from Jharkhand State.

IX. SAMPLE

There were 100 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 100 samples from the state of Jharkhand.
- ii. The researcher has taken higher secondary school tribal students of Jharkhand for the study.
- iii. The survey method is used in the research.

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 Skills on 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 medium of school.
5. 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 residential and non-residential school.

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 Secondary school Students

Gender	N	Mean	Std. D.	t - value	Remarks
Male	50	83.02	8.79	2.82	S
Female	50	77.72	8.95		

(At 0.5%, level of Significance, the table value of 't' is 1.96)

It is inferred from above table that calculated 't' value is 2.82 which is more than the table value 1.96 at 0.5% level of significance. Therefore, the null hypothesis is rejected. It means that There is a significant difference between the mean scores of Higher Secondary School Students of Jharkhand in their Critical Thinking Skills on the basis of gender.

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

Habitation wise Critical Thinking Skills of Higher Secondary School Students

Habitation of school	N	Mean	Std. D.	t - value	Remarks
Rural	50	79.17	9.29	1.99	S
Urban	50	81.57	10.72		

(At 0.5%, level of Significance, the table value of 't' is 1.96)

It is inferred from the above table that the calculated 't' value is 1.99 which is more than the table value 1.96 at 0.5% level of significance. Therefore, the null hypothesis is rejected. It means that there is a significant difference between the mean scores of Higher Secondary School Students in their Critical Thinking Skills on the basis of habitation.

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 Higher Secondary School Students

Type of school	N	Mean	Std. D.	t - value	Remarks
Government	50	81.53	10.71	2.20	S
Private	50	79.17	9.23		

(At 0.5%, level of Significance, the table value of 't' is 1.96)

It is inferred from the above table that calculated 't' value is 2.20 which is more than the table value 1.96 at 0.5% level of significance. Therefore, the null hypothesis is rejected. It means that There is a significant difference between the mean scores of Higher Secondary School Students of Jharkhand in their Critical Thinking Skills on the basis of type school.

Null Hypothesis – 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 medium of school.

Table - 4

Medium wise Critical Thinking Skills of Higher Secondary School Students

Medium	N	Mean	Std. D.	t - value	Remarks
Hindi	50	81.62	9.89	0.94	NS
English	50	79.85	8.95		

(At 0.5%, level of Significance, the table value of 't' is 1.96)

It is inferred from the above table that the calculated 't' - value is 0.94 which is less than the table value 1.96 at 0.5% level of significance. Therefore, the null hypothesis is accepted. It means that 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 medium of school.

Null Hypothesis – 5

There is no significant difference between the mean scores of Higher Secondary School Students in their Critical Thinking Skills on the basis of residential and non-residential school.

Table - 5

Residential and Non-Residential School Wise Critical Thinking Skills of Higher Secondary School Students

Type of School	N	Mean	Std. D.	t - value	Remarks
Residential	50	81.67	9.89	1.89	NS
Non-residential	50	79.85	8.95		

(At 0.5%, level of Significant the table value of it is 1.96)

It is inferred from the above table that the calculated 't' value is 1.89 which is less than the table value 1.96 at 0.5% level of significance. Therefore, the null hypothesis is accepted. It means that 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 residential and non-residential school.

CONCLUSION

It is concluded from the above table 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 gender, habitation and type of school. Whereas there is no significant difference between the mean scores in the awareness of Critical Thinking Skills of Higher Secondary School Students in Jharkhand on the basis of medium of instruction and residential and non – residential school.

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