# THINKING STYLE OF SECONDARY EDUCATION TEACHERS OF BHOPAL CITY

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#### **ABSTRACT**

The purpose of the study is to examine the thinking style of secondary education teachers of Bhopal city of Madhya Pradesh. This study used Normative Survey Method to measure the thinking style. The sample consists of 500 secondary education teachers selected by Random Sampling. The tool used for the present study is Thinking Style Scale (TSS) constructed and validated by the investigator and the guide (2014). The findings of the study reveal: (i). The level of thinking style and its dimensions of secondary education teachers is moderate. (ii) There is no significant difference between male and female secondary education teachers in their left brain thinking style, right brain thinking style and thinking style in total. (iii). There is a significant difference among State Board, CBSE and ICSE secondary education teachers in their right brain thinking style and thinking style in total.

**Key Words:** Left brain thinking style, Right brain thinking style, Secondary Education Teachers, State Board, CBSE, ICSE

# **INTRODUCTION**

Human thinking, and the human ability in particular, to solve complex, real-life problems contributes more than any other ability to the development of human culture and growth and development of human life on earth. Thinking is an act or process of having ideas or thoughts, including reasoning, problem solving, decision making, formation of mental models, knowledge, beliefs and opinions. Teachers' basic responsibility prior to start teaching is to focus on learning outcome and to achieve it skillfully by suggesting appropriate learning experiences that make them think understand and form correct concepts.

Thinking Style is an individual's preference for a certain mental process, a specific reasoning and problem solving strategy. It is a preferred way of processing information and has cognitive as well as affective dimensions. In the present study thinking style refers to the

two patterns (dimensions) of thinking; namely Left Brain Thinking Style (analytic style) and Right Brain Thinking Style (holistic style).

An explicit focus on thinking, thinking styles and teaching of thinking skills aims at developing students' thinking in a qualitatively higher level. Students need to be guided and supported to move beyond the lower-order cognitive skills of recalling and comprehension, to the development of higher order process required for creative problem solving, decision making and conceptualizing. Further, they need to develop the capacity for meta-cognition: the capacity to reflect on and manage their own thinking. This can only happen if the teachers who handle the students have knowledge of thinking process and variant styles adopted.

#### SIGNIFICANCE OF THE STUDY

Teachers possessed with a higher level of thinking skills show a better improvement in teacher behaviour, critical thinking, judicial thinking, legislative thinking, analytical thinking and reflective thinking. They tend to create a learning atmosphere in which students are allowed to evaluate different viewpoints. Thinking is a process that evaluates ideas through testing of statements and soundness of reasoning behind them. Teachers using different thinking styles suitable to the classroom situation are always better communicators. Neurologists have found that different parts of our brain contribute to different thought process. Although the idea is disputed, it has been proposed that the left part of the brain focuses on logical thought process and is the most active when one is engaged in sequential/ linear thinking such as language. The right part of the brain is usually associated with more holistic thought processes, such as music, spatial thinking and creativity. Teachers can increase their success in communicating by choosing to practice each style and making themselves capable of using it constructively.

To live successfully in a democracy, people must be able to think critically in order to make sound decisions about personal and civic affairs. If students learn to think critically, then they can use good thinking as the guide for their academic achievement. It is crucial for students to have skills in questioning, analyzing, comparing, contrasting and evaluating so that they will not become addicted to being told what to think and do. Putting into practice the findings from the thinking style research will help teachers to teach these skills and enable students to gain better understanding both in school settings and in the world outside of the school. The ability to solve problems, to think critically and being emotionally stable are valuable assets for the academic achievement. In order to perform his/her role effectively,

a teacher should be intelligent and smart in thinking, because a teacher is the hope for an individual and the nation. Teachers' personality, behaviour, interest, attitude and emotions affect the students' behavioral patterns in the teaching-learning process.

Effective teachers have the ability to recognize the thinking styles and create an atmosphere so that learning is enhanced by the proper thinking style. Although little research has been published on the development of the teachers own thinking style, schools and supportive local authorities will need to address the part that teachers are ought play in the process.

# **OBJECTIVES OF THE STUDY**

- i). To find out the level of Thinking Style and its dimensions of the Secondary Education Teachers.
- ii).To find out the level of Thinking Style and its dimensions of the male and female Secondary Education Teachers.
- iii).To find out whether there is any significant difference in Thinking Style and its dimensions of male and female secondary education teachers.
- iv). To find out whether there is any significant difference in Thinking Style and its dimensions among State Board, CBSE and ICSE secondary education teachers.

### HYPOTHESES OF THE STUDY

- There is no significant difference in Thinking Style and its dimensions of male and female secondary education teachers.
- 2. There is no significant difference in Thinking Style and its dimensions among State Board, CBSE and ICSE secondary education teachers.

### POPULATION OF THE STUDY

The total population includes all the secondary school teachers working in the State Board, CBSE and ICSE secondary schools of Bhopal city.

# SAMPLE FOR THE STUDY

Random Sampling Technique has been used by the investigator for selecting the sample size of 500 secondary school teachers from the above schools of Bhopal for the study.

#### TOOL FOR THE STUDY

The tool used to collect data from the selected sample is Thinking Style Scale (TSS) constructed and validated by the investigator, Peter M.V and guide, Amaladoss Xavier (2014).

# ANALYSIS OF DATA

The analysis of data and result was presented in the following tables:

# **Descriptive Analysis of Emotional Intelligence**

(i) The level of thinking style and its dimensions of secondary education teachers.

Table 1

LEVEL OF THINKING STYLE AND ITS DIMENSIONS OF SECONDARY

EDUCATION TEACHERS

Dimension		Low	derate	High		
Difficusion	N	%	N	%	N	%
Left Brain Thinking Style	91	18.2	316	63.2	93	18.6
Right Brain Thinking Style	78	15.6	333	66.6	89	17.8
Thinking Styles in Total	88	17.6	335	67.2	77	15.4

The level of thinking style and its dimensions of secondary education teachers is moderate. The level of right brain thinking style is high (66.6%) and left brain thinking style is low (63.2%).

(ii) The level of thinking style and its dimensions of male and female secondary education teachers.

Table 2
LEVEL OF THINKING STYLE AND ITS DIMENSIONS OF MALE AND FEMALE
SECONDARY EDUCATION TEACHERS

Dimension		Male (N=180)					Female (N=320)					
		Low		Moderat		High		ow	Moderate		High	
				e								
		%	N	%	N	<b>%</b>	N	%	N	%	N	<b>%</b>
Left Brain Thinking Style	35	19.4	109	60.6	36	20.0	56	17.5	207	64.7	57	17.8
Right Brain Thinking Style	30	16.7	118	65.6	32	17.8	51	15.9	218	68.1	51	15.9
Thinking Styles in Total	41	22.8	113	62.8	26	14.4	47	14.7	224	70.0	49	15.3

The level of thinking style and its dimensions of male and female secondary education teachers is moderate. The level of female secondary education teachers (70.0) is higher than male secondary education teachers (62.8) in thinking style in total. The level of right brain thinking style of male secondary education teachers is high (65.6%) and left brain thinking style is low (60.6%). The level of right brain thinking style of female secondary education teachers is high (68.1%) and left brain thinking style is low (64.7%).

## DIFFERENTIAL ANALYSIS OF THINKING STYLE

# **Hypothesis: 1**

There is no significant difference between male and female secondary education teachers in their thinking style and its dimensions.

Table 3

DIFFERENCE BETWEEN MALE AND FEMALE SECONDARY EDUCATION
TEACHERS IN THEIR THINKING STYLE AND ITS DIMENSIONS

	Ma (N=1)		Female (N=320)		Calculated		
Dimension	Mean	SD	Mean	SD	't' value	Remark	
Left Brain Thinking Style	80.50	9.30	79.37	9.03	1.32	NS	
Right Brain Thinking Style	82.62	8.01	82.45	7.95	0.22	NS	
Thinking Styles in Total	163.12	11.96	161.82	12.13	1.16	NS	

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

It is inferred from the above table that there is no significant difference between male and female secondary education teachers in their left brain thinking style, right brain thinking style and thinking style in total.

# Hypothesis:2

There is no significant difference among State Board, CBSE and ICSE secondary education teachers in their thinking style and its dimensions.

Table 4

DIFFERENCE AMONG SECONDARY EDUCATION TEACHERS WORKING IN DIFFERENT TYPE OF SCHOOLS IN THEIR THINKING STYLE AND ITS DIMENSIONS

Dimension	Source of variation	SS	df	MS	'F' Value	Remark
I C D ' M' I' C I	Between	118.25	2	59.13	0.71	NC
Left Brain Thinking Style	Within	41568.75	497	83.64	0.71	NS
Did Di militi di 1	Between	567.25	2	283.63	4 45	G.
Right Brain Thinking Style	Within	31653.75	497	63.69	4.45	S
This line Style in Total	Between	1105.00	2	552.50	2.70	G
Thinking Style in Total	Within	72457.00	497	145.79	3.79	S

(At 5% level of significance, the table value of 'F' at df 2, (497) is 3.03)

It is inferred from the above table that there is no significant difference among State Board, CBSE and ICSE secondary education teachers in their left brain thinking style. But there is significant difference among State Board, CBSE and ICSE secondary education teachers in their right brain thinking style and thinking style in total.

# The data are further analyzed:

Table 4 (a)

MEAN DIFFERENCE IN RIGHT BRAIN THINKING STYLE OF SECONDARY

EDUCATION TEACHERS WITH RESPECT TO TYPE OF SCHOOL

Variable	Type of	School	Mean Value	Mean Difference	CMD	Remark
Right Brain Thinking Style  81.7  CBS	State Board	CBSE	84.06	2.28	1.52	S
	81.78	ICSE	81.70	0.08	3.62	NS
	CBSE 84.06	ICSE	81.70	2.36	3.73	NS

It is inferred from the above table that there is a significant difference between State Board and CBSE teachers in right brain thinking style. The CBSE secondary education teachers have more mean score (84.06) than other types of secondary education teachers in their right brain thinking style.

Table 4 (b)

MEAN DIFFERENCE IN THINKING STYLE OF SECONDARY EDUCATION

TEACHERS WITH RESPECT TO TYPE OF SCHOOL

Variable	Type of	School	Mean Value	Mean Difference	CMD	Remark
This lein a	State Board	CBSE	164.41	3.02	2.30	S
Thinking Styles in	161.38	ICSE	159.80	1.58	5.48	NS
Total	CBSE 164.41	ICSE	159.80	4.61	5.64	NS

It is inferred from the above table that there is a significant difference between State Board and CBSE secondary education teachers in their thinking style in total. The CBSE secondary education teachers have more mean score (164.41) than other types of secondary

education teachers in thinking style.

#### FINDINGS AND DISCUSSIONS

- (i) The level of thinking styles and its dimensions of secondary education teachers is moderate. The level of right brain thinking style is high and left brain thinking style is low. This may be due to the fact that teachers might have found advantage of using right brain thinking style. The right part of the brain is usually associated with more holistic thought processes, such as music, spatial thinking and creativity. A holistic individual approaches a problem by understanding the general meaning.
- (ii) The level of female secondary education teachers is higher than male secondary education teachers in thinking style in total. This may be due to the fact that female teachers are more concerned about the whole problem rather than a part of it. Hence they spend time in analyzing the whole problem in order to find the solution.
- (iii) There is a significant difference among State Board, CBSE and ICSE secondary education teachers in their right brain thinking style and thinking style in total. The CBSE secondary education teachers have more mean scores than other types of secondary education teachers in thinking style in total and right brain thinking style. This may be due to the fact that CBSE secondary education teachers may be giving more time for reflection and doing things in a perfect way and they may be spending more time in learning.

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