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A STUDY OF STYLE OF LEARNING AND THINKING OF URBAN AND RURAL STUDENTS OF AURANGABAD DISTRICT

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Abstract

Present research Aims to study styles of learning and thinking of urban and rural students of Aurangabad District. The sample of the study was selected by Stratified Random Sampling method which includes $200 X^{th}$ std students from urban and rural area .Tool used for the research was SOLAT (Styles of Learning and Thinking) developed by Dr.Venkataraman. Research finding revealed that majority of the students have right hemispheric dominant style of learning and thinking. Significant difference was found in right hemispheric and whole hemispheric dominant learning & thinking style of urban and rural students. Boys and Girls differ significantly in right, left and whole hemispheric dominant style of learning & thinking.

Key words: SOLAT, Styles of Learning and Thinking, Urban and Rural, Hemispheric brain dominance.

Introduction: Rene Descartes the French philosopher says "cognitoergosum" which is the essence of our existence. It means we think, therefore we exist. This existence is possible only because of the existence of the human brain. Brain is considered to be the seat of higher mental process What happens to us in life depends on not just 'how we' think, but 'how well' we think and learn. Of all the factors that influence an individual, his styles of learning and thinking play a major role.

"Styles depend upon cerebral dominance of an individual in retaining & processing different modes of information in his own style of learning and thinking. Style indicates the

hemispheric function of the brain and students learning strategy and information processing are based on the preferences of the brain area ". (Venkataraman 1990).

Hemisphericity is the cerebral dominance of an individual in retaining and processing modes of information on his/her own style of learning and thinking. (Raina, 1984).

The brain is the most important part of the human anatomy. It tells all the other parts what to do, and when to do it. The concept of right brain and left brain thinking was developed from the research in the late 1960s of an American psycho biologist, Roger W. Sperry. He discovered that the human brain has two very different ways of thinking. Similarly, Evans (2010) mentioned that the right brain / left brain theory emphasizes that the brain has two hemispheres (commonly called the right brain and the left brain) which think in different ways. One (the right brain) is visual and processes information in an intuitive and simultaneous way, looking first at the whole picture then the details. The other (the left brain) is verbal and processes information in an analytical and sequential way, looking first at the pieces then putting them together to get the whole.

Brain hemisphericity is the tendency of an individual to process information through the left hemisphere or the right hemisphere or in combination (Bradshaw & Nettleton, 1981; McCarthy, 1996; Springer & Deutsch, 1993). Research has demonstrated that the left hemisphere operates in a linear, sequential manner with logical, analytical, propositional thought. On the other hand, the right hemisphere operates in a nonlinear, simultaneous fashion and deals with non-verbal information as well as dreams and fantasy (Iaccino, 1993; McCarthy, 1996; Oxford, 1996; Oxford, Ehrman, & Lavine, 1991; Springer & Deutsch, 1993; Torrance, 1988).

Researches conducted during the last two decades have shown that the human left cerebral hemisphere is to be specialized for primarily verbal, analytical, abstract, temporal and digital operations (Bogen, 1989; Gazzaniga, 1990; Fitzerald & Hattie, 1993). The same investigations revealed that the right cerebral hemisphere is to be specialized for primarily non-verbal holistic, concrete, creative, analogical and aesthetic functions.

Individuals differ in their style of learning and thinking. In academic institutions, learning and teaching processes are mismatched. Teaching and thinking styles of the teachers and learning and thinking styles of students differ because learning differences are not tied up to the understanding and thinking abilities of students. The differences in preference of the two hemispheres for information processing have been referred to as styles of learning and thinking

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(SOLAT) by Torrance. Styles are propensities rather than abilities. They are the ways of directing the intellect which an individual finds comfortable. The styles of learning and thinking are as important as levels of ability and we ignore to identify and develop then in students at an early and appropriate stage. Styles are propensities rather than abilities. They are the ways of directing the intellect which an individual finds comfortable. The styles of learning and thinking are as important as levels of ability and we ignore to identify and develop then in students at an early and appropriate stage. It is foremost important for the teacher to focus their attention on student's favored thinking style before imparting the subject matter if they fail to do so; the consequences may be serious, because the teachers may tend to confuse styles of students mind. If mismatch exist between the Preferred style of teacher and that of students ,such students are frequently seen to uninterested in the in content ,feel bored and reject the learning activity .Therefore it is important for the teacher to know the students preferred styles so that the teacher can capitalize the opportunity for students learning.

Objectives of the study: 1. To study the styles of learning and thinking of Urban and rural students. 2. To compare the different styles of learning and thinking of Urban and rural students . 3. To compare the different styles of learning and thinking of Girls and Boys.

Hypotheses of the study: 1. Majority of the students have right hemispheric dominant style of learning and thinking. 2. There is no significant difference between different styles of learning and thinking of Urban and rural students. 3. There is no significant difference between the different styles of learning and thinking of male and female students.

Methodology: *Method:* Survey method of research was employed to study Style of Learning and Thinking of Urban and Rural Students of Aurangabad District.

Sample: A sample of 200 X th std students, 100Urban (50 male+ 50 female) and 100rural (50 male+ 50 female) of Aurangabad District was selected by Stratified Random Sampling method.

Tools: SOLAT (Styles of Learning and Thinking) developed by Venkataraman (1994) was used in the present study. It is a modified version of the tool developed by Torrance. It identifies

hemispheric dominance by way of studying the hemisphere functions. It indicates the learning and thinking styles and brain hemisphere preference.

Statistical Analysis: Percentage, Mean, SD, and t-test were used to analyze the data. **ANALYSIS AND INTERPRETATION OF RESULTS:** Hypothesis 1: Majority of the students have right hemispheric dominant style of learning and thinking.

Area	Right		Left		Whole(Integrated)	
	Ν	%	Ν	%	N	%
Urban=100	86	(86%)	11	(11%)	3	(3%)
Rural=100	57	(57%)	26	(26%)	17	(17%)
Total=200	143	(71.5%)	37	(18.5%)	20	(10%)

Table 1: Showing dominant style of learning and thinking.

Table 2: Showing dominant style of learning and thinking of Girls & Boys.

Gender	Right		Left		Whole(Integrated)	
	N	%	N		Ν	%
Girls=100	71	(71%)	17	(17%)	12	(12%)
Boys-100	72	(72%)	20	(20%)	8	(8%)
Total=200	143	(71.5%)	37	(18.5%)	20	(10%)

It is inferred from the table 1 & 2 that 86% of Urban students and 57% students have right hemispheric dominant style of learning and thinking. Similarly 71% Girls and &72% boys have right brain dominance. Hence majority of the students have right hemispheric dominant style of learning and thinking.

Hypothesis **2**: There is no significant difference between different styles of learning and thinking of Urban and rural students

Table 3: Showing comparison of the different styles of learning and thinking of Urban and rural students

Style of learning & thinking	Gender	Mean	S.D	t value	Diff ⁿ Bet ⁿ Means
Right	Urban	25.34	4.94	4.96	Significant
	Rural	21.25	6.59		
Left	Urban	16.77	4.55	0.41	Not Significant
	Rural	16.47	5.60		
Whole	Urban	5.83	5.28	4.46	Significant
	Rural	10.12	8.03		
df 198 at 0.05 level of significance = 1.97					

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From table 3 ,the obtained t values 4.96 & 4.46 are greater than table value 1.97 at 0.05 level of significance .Therefore significant difference was found in right hemispheric and whole hemispheric dominant learning & thinking style of urban and rural students. whereas t value 0.41 is less than 1.97 showing insignificant difference in left hemispheric learning thinking style of urban and rural students.

Hypothesis **3**: There is no significant difference between different styles of learning and thinking of Girls and Boys.

Table 4: Showing comparison of the different styles of learning and thinking of Girls and

Style of learning & thinking	Gender	Mean	S.D	t value	Difference between Means
Right	Girls	22.26	6.08	2.40	Significant
	Boys	24.33	6.10		
Left	Girls	15.29	5.03	3.81	Significant
	Boys	17.95	4.82		
Whole	Girls	10.01	7.07	4.21	Significant
	Boys	5.94	6.57		
df 198 at 0.05 level of significance = 1.97					

Boys.

From table 4, the obtained t values 2.40, 3.81 & 4.21 are greater than table value 1.97 at 0.05 level of significance .Therefore significant difference was found in right, left and whole hemispheric dominant learning & thinking style of Girls and Boys.

Findings: Research finding reveals that majority of the students have right hemispheric dominant style of learning and thinking. Significant difference was found in right hemispheric and whole hemispheric dominant learning & thinking style of urban and rural students. Insignificant difference was found in left hemispheric learning thinking style of urban and rural students. significant difference was found in right, left and whole hemispheric dominant learning & thinking style of Girls and Boys.

Conclusion: To conclude it is essential to identify the styles of learning and thinking of children in order to facilitate the process of learning and teaching. Since the focus is on child-centred pedagogy giving primacy to the child's experiences, voices, thoughts and participation in learning which the National Curriculum Framework (2005) reiterates in its chapter on 'Learning and Knowledge', it becomes necessary to change our approach to teaching. In fact, knowledge of the child's information processing styles would enhance teaching and make the exercise fruitful. The teaching techniques in the schools can be undertaken in consonance with the students' style of learning and thinking.

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