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#### A COMPARETIVE STUDY OF LATERAL THINKING ABILITY OF RURAL AND URBAN BOYS AND GIRLS OF SECONDARY SCHOOLS

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#### AB<u>STRA</u>CT

he academic method has to be aimed at developing creative talents amongst children. this may be completed via acquainting amongst college students via teachers and parents the real means of the creative technique and the approaches and means of developing and nurturing creative thinking competencies. Edward de Bono who invented the term "Lateral Thinking" in 1967 is the pioneer of lateral thinking. Lateral thinking is involved with the era of new thoughts, liberation from old thoughts and the stimulation of recent ones are twin aspects of lateral thinking. Lateral thinking is a creative skill from which all people can benefit enormously. In this study, the researcher made an attempt to study lateral thinking ability of rural and urban boys and girls of secondary school students of Vijayapur district. statistics for the take a look at were accumulated the use of self-made Lateral thinking ability test (LTAT). The researcher used stratified random sampling technique. The sample consisted of 600 students which300 boys and 300 girls ofrural and urban area. For analyzing the data descriptive analysis, Mean and SD were used as the statistical techniques. The study revealed that the total mean score of lateral thinking ability of the boys student have higher lateral thinking ability scores as compared to girls students.

#### KEYWORDS: Lateral Thinking.

#### **INTRODUCTION:**

The dramatic increase in information and technology in the 20th century was accompanied by a need to know more about the physical structure and functioning of the brain. A teacher who is made aware of the huge untapped storage of human brain potential could be trained to disclose a learner's unused abilities, through adjusted education, thus informing learners of the intrinsic abilities of the brains. The society in which we live places much value on achievement. Hama check (1994:324) reports how research has shown that our achievement as individuals is more or less consistent with how we view ourselves. The educational process should be aimed at developing creative abilities among children. This can be achieved by acquiring students by teachers and parents real meaning of the creative process and the ways and means of developing and nurturing creative thinking abilities.

#### LATERAL THINKING

Lateral Thinking is closely related to insight, creativity and humor. All four processes have the same basis. But whereas insight, creativity and humor can only be prayed for, lateral thinking is a more deliberate process. It is as definite a way of using the mind as logical thinking – but a very different way. Culture is concerned with establishing ideas. Education is concerned with communicating those established ideas. Both are concerned with improving ideas by bringing them up to date. The only available method for changing ideas is conflict which works in two ways. In the first way there is a head on confrontation between opposing ideas. One or other of the ideas achieves a practical dominance over the other idea which is suppressed but not changed. In the second way there is a conflict between new information and the old idea. As a result of this conflict the old idea is supposed to be changed. This is the method of science which is always seeking to generate new information to upset the old ideas and bring about new ones. It is more than the method of science it is the method of human knowledge.

Education is based on the safe assumption that one only has to go on collecting more and more information for it to sort itself into useful ideas. We have developed tools for handling the information: mathematics for extending it, logical thinking for refining it.

The purpose of thinking is to collect information and to make the best possible use of it Because of the way the mind works to create fixed concept patterns we cannot make the best use of new information unless we have some means for restructuring the old patterns and bringing them up to date. Our traditional methods of thinking teach us how to refine such patterns and establish their validity. But we shall always make less than the best use of available information unless we know how to create new patterns and escape from the dominance of the old ones. Vertical thinking is concerned with proving or developing concept patterns. Lateral thinking is concerned with restructuring such patterns (insight) and provoking new ones (creativity). Lateral and vertical thinking are complementary. Skill in both is necessary. Yet the emphasis in education has always been exclusively on vertical thinking.

#### NEED AND IMPORTANCE OF THE STUDY

Lateral Thinking is intended for use both home and school the emphasis has traditionally continually been on vertical thinking which is effective however incomplete. This selective sort of thinking wishes to be supplemented with the generative features of innovative thinking. Lateral thinking is the process of the use of data to result in creativity and insight restructuring. Lateral thinking can be learned, practiced and used. It is possible to acquire skill in it just as it is possible to acquire skill in school subjects.

Today, the students are being trained mostly in vertical thinking. The teachers are not aware of the importance of developing Lateral Thinking ability in students. The students face many challenge situations well searching for jobs and in their work places. If the students are trained in Lateral Thinking form of creative thinking, the students can achieve something significant in their life. Accordingly, this study assumes greater importance in today's educational field.

This study assumes that Lateral Thinking is the genesis of creativity, which happens to be the goal of present day education. Class teaching in our country, has unfortunately been convergent in nature. The emphasis is therefore to be laid on Lateral Thinking.

#### **OBJECTIVES**

1. To identify the Lateral Thinking ability of secondary school students.

2.To compare the Lateral Thinking ability of boys and girls of secondary school students.

3. To compare the Lateral Thinking ability of rural and urban secondary school students.

#### **HYPOTHESES**

1. There is no significant difference in the Lateral Thinking ability of boys and girls.

2. There is no significant difference in the Lateral Thinking ability of students of rural and urban secondary school.

#### **METHOD AND SAMPLE**

Descriptive Survey method of research was used in the present study to collect the data. The sample for investigation was drawn from various secondary school students of Vijaypur district. A total of 600 sample were selected by stratified random sampling method. The sample includes 300 boys and 300 girls out of these 600,

300 rural and 300 urban students were selected. For analyzing the data descriptive analysis, Mean and SD were used as the statistical technique.

#### **TOOL USED**

For the purpose of data collection, Lateral Thinking Ability Test (LTAT) tool was designed and standardized by the investigator. For validating the LTAT Item Cronbach alpha method was used. The test-retest method was used to establish the reliability co-efficient for the tool which was 0.9758. Thus, a total of 60 items with 5 dimensions namely analogies, fractionation, generation of alternatives, brainstorming and dominate ideas were selected for the final tool.

#### DATA COLLECTION PROCEDURE

For collecting the data, the researcher visited the selected secondary schools with the tools for students. The investigator took the help of friends and teachers of the schools for collecting data. To ensure quick and complete return of the tool, it was administered personally to the target population with prior permission of the heads of the institutions.

#### **RESULT AND FINDINGS**

Variables		Sum mary	Boys	Girls	Total
		Ν	300	300	600
Lateral thinking ability		Mean	56.52	55.63	56.08
		SD	6.89	7.31	7.11
	1) Analogies	Mean	29.87	29.91	29.89
		SD	3.81	4.22	4.02
	2) Fractionation	Mean	6.27	5.76	6.01
		SD	1.87	2.16	2.03
Dimonsions	3) Generation of alternatives	Mean	9.08	9.03	9.06
Dimensions		SD	2.01	2.69	2.37
	4) Brain storming	Mean	8.70	8.15	8.42
		SD	2.33	2.46	2.41
	5) Dominant ideas	Mean	2.60	2.78	2.69
		SD	1.05	1.27	1.17

Table 1: Mean and SD of Lateral thinking ability and its dimensions by boys and girls students of secondary schools

The above table represents the Mean and SD of Lateral thinking ability and its dimensions by boys and girls students of secondary schools. It clearly shows the following:

• The total mean score of lateral thinking ability of students of secondary schools is 56.08±7.11. In which, the boy students (56.52±6.89) have higher lateral thinking ability scores as compared to girl students (55.63±7.31).

• The totals mean score of dimension of lateral thinking ability i.e. analogies of students of secondary schools is 29.89±4.02. In which, the boy students (29.87±3.81) have slight smaller analogies scores as compared to girl students (29.91±4.22).

• The totals mean score of dimension of lateral thinking ability i.e. fractionation of students of secondary schools is  $6.01\pm2.03$ . In which, the boy students ( $6.27\pm1.87$ ) have higher fractionation scores as compared to girl students ( $5.76\pm2.16$ ).

• The totals mean score of dimension of lateral thinking ability i.e. generation of alternatives of students of secondary schools is  $9.06\pm2.37$ . In which, the boy students ( $9.08\pm2.01$ ) have higher generation of alternatives scores as compared to girl students ( $9.03\pm2.69$ ).

• The totals mean score of dimension of lateral thinking ability i.e. brain storming of students of secondary schools is 8.42±2.41. In which, the boy students (8.70±2.33) have higher brain storming scores as compared to girl students (8.15±2.46).

• The totals mean score of dimension of lateral thinking ability i.e. dominant ideas of students of secondary schools is 2.69±1.17. In which, the boy students (2.60±1.05) have smaller dominant ideas scores as compared to girl students (2.78±1.27).

Figure 1: Comparison of mean lateral thinking ability by boys and girls student's secondary schools. 56.52 55.63 60.00 50.00 40.00 Mean value 30.00 7.31 6.89 20.00 10.00 0.00 Boys Girls Mean ■SD

The mean scores are also presented in the following figure.

Table 2:	Mean and SD of lateral thinking ability and its dimensions by students of rural and urban
	secondary schools

Variables		Summary	Rural	Urban	Total
		Ν	300	300	600
Lateral thinking ability		Mean	54.61	57.54	56.08
		SD	5.51	8.17	7.11
Dimensions	1) Analogies	Mean	29.27	30.51	29.89
		SD	3.69	4.24	4.02
	2) Fractionation	Mean	5.75	6.28	6.01
		SD	1.87	2.15	2.03
	3) Generation of alternatives	Mean	8.72	9.39	9.06
		SD	2.44	2.26	2.37
	4) Brain storming	Mean	8.22	8.63	8.42
		SD	2.24	2.55	2.41
	5) Dominant ideas	Mean	2.65	2.74	2.69
		SD	1.19	1.14	1.17

The above table represents the Mean and SD of lateral thinking ability and its dimensions by students of rural and urban secondary schools. It clearly shows the following:

• The total mean score of lateral thinking ability of students of secondary schools is  $56.08\pm7.11$ . In which, the urban students ( $57.54\pm8.17$ ) have higher lateral thinking ability scores as compared to rural students ( $54.61\pm5.51$ ).

• The totals mean score of dimension of lateral thinking ability i.e. analogies of students of secondary schools is 29.89±4.02. In which, the urban students (30.51±4.24) have slight smaller analogies scores as compared to rural

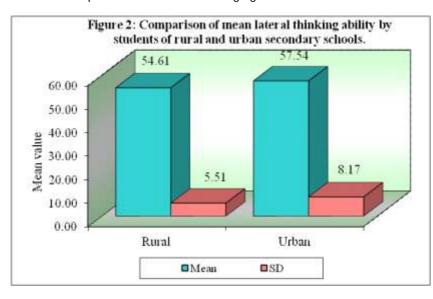
students (29.27±3.69).

• The totals mean score of dimension of lateral thinking ability i.e. fractionation of students of secondary schools is  $6.01\pm2.03$ . In which, the urban students ( $6.28\pm2.15$ ) have higher fractionation scores as compared to rural students ( $5.75\pm1.87$ ).

• The totals mean score of dimension of lateral thinking ability i.e. generation of alternatives of students of secondary schools is 9.06±2.37. In which, the urban students (9.39±2.26) have higher generation of alternatives scores as compared to rural students (8.72±2.44).

• The totals mean score of dimension of lateral thinking ability i.e. brain storming of students of secondary schools is 8.42±2.41. In which, the urban students (8.63±2.55) have higher brain storming scores as compared to rural students (8.22±2.24).

• The totals mean score of dimension of lateral thinking ability i.e. dominant ideas of students of secondary schools is 2.69±1.17. In which, the urban students (2.74±1.14) have higher dominant ideas scores as compared to rural students (2.65±1.19).



The mean scores are also presented in the following figure.

#### CONCLUSION

The study involved comparing the Lateral Thinking Ability of boys and girls of secondary schools students of rural and urban areas. The boy students have higher Lateral Thinking Ability as compare to girl students. In four dimensions, Lateral Thinking Ability namely analogies, fractionation, generation of alternatives and brainstorming boy students have higher scores compared to girl students. In the fifth dimension of Lateral Thinking Ability that is dominant ideas girl students have higher scores compared to boy students.

The lateral thinking ability of urban students of secondary schools areahave higher lateral thinking ability scores as compared to rural students. Except analogies in all the four dimensions has urban students have higher scores.

Once a new idea has been generated it may be possible to test it using logic, but lateral thinking will often be a better way of generating ideas in the first place. Therefore, much more importance should be given in the curriculum to bring out the creativity of students in secondary schools to develop their lateral thinking ability. Prospective rural students are lacking in lateral thinking ability and its dimensions when compared to urban students. For this reason, rural students should be encouraged to participate in various co-curricular and extracurricular activities to develop their creativity.Therefore, efforts should be made by teachers to develop Lateral Thinking Ability of students along with teaching of academic subjects.

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