

# A STUDY ON LEARNING STYLES OF MALE & FEMALE SENIOR SECONDARY STUDENTS OF RESIDENTIAL SCHOOL

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**Abstract:** Students perceive and learn in different ways. Learning styles are the ways that students adopt differently. The teacher must check the learning styles of their students and should use the method to best fit each student's learning styles. The focus of the paper is to compare the learning styles of male and female Senior Secondary students of Residential schools. The tool used was D. Venkataraman Style of Learning and Thinking Inventory. *Style of Learning and Thinking (SOLAT)* by Venkataraman(1993). The study was conducted on a sample of 150 students. It was found that the male & female prefer different learning styles. This study will help the teacher in planning & implementing learning strategies so that his/her teaching is more effective and will enhance the performance and achievement of the students. It will also help the students to know their own preferences so that they can plan their modes of study.

**Index Terms - Learning Styles and Residential Schools.**

## I. INTRODUCTION

*'The destiny of our nation is shaped in her classrooms'.*

*Kothari Commission*

Education is a way of developing desirable habits, skills and attitudes that makes an individual a good citizen. It is said that the future of a nation depends on its children – the future citizens. Education is considered as one of the main and important enterprises of a country. In the process of education, we try to shape the behavior of young children in accordance with the aims and goals of nation.

Education plays an important role and is a powerful instrument of progress and social change. The teaching-learning process is a central focus of it. Teaching is the axis of education. It is a tripolar process, which establishes a relationship between the teacher, the child and the disciplines. But the teaching cannot take place unless learning takes place.

In education, one of the most processing problems is to help students develop effective methods of learning. The school demands that the child spend many hours, many days and many years in learning the subject matter, skills and attitudes essential for effective living in a civilized community and for active citizenship in a democracy.

In Andy Hargreaves's opinion, "knowledge society is really a learning society by processing information and knowledge in ways that maximize learning, stimulate ingenuity and invention and develop the capacity to initiate and cope with change." (Hargreaves, 2003). Under these conditions the ways in which people learn will be different. This leads to the ability "learning to learn". Personality traits as learning styles, intelligence, motivation, self perception and self-confidence, cognitive style, brain lateralization, and so on, together with sociological and environmental factors and specific characteristics of the tasks are only some of the elements that develop the "learning to learn" abilities.

Every child has a unique leaning style. A student's learning style reflects the manner in which he or she assimilates processes and recalls information and instructor must recognize learning styles as a significant source of diversity in the classroom. This diversity underscores the need for educators to incorporate a variety of teaching methods, curriculum materials and assessment techniques to faster and support the process of learning (Torres and Cano, 1994).

The term 'learning style' refers to the way in which an individual concentrates on, processes, internalizes, and retains new and difficult information (Dunn et al., 2009). When students are aware of their own styles, they are more likely to take initiatives in their own learning process and make adjustments to learn in ways better suited to their preferences. Students may use knowledge of their own styles to help them do homework, solve problems, and better sort through information (Boström & Lassen, 2006; Burke & Dunn, 2002). In one study, high school students were given their learning style inventory reports and they then used that information to adjust their study techniques and perform better on exams (Callan, 1996). Dunn (1990) discussed the benefits of learning style based instruction in an interview. She expressed that, when shown how to study and do homework through their learning style strengths, many students demonstrated significant increases in academic achievement and improved attitudes. According to Kolb, 1999; 2005, the concept of learning style describes individual differences in learning based on the learner's preference for employing different phases of the learning cycle. Because of our hereditary equipment, our particular life experiences, and the demands of our present environment, we develop a preferred way of choosing.

## II. NEED AND SIGNIFICANCE OF THE STUDY

It is widely known that there are diversities in students of a classroom like differences in their IQ, interest, gender, aspiration, aptitude, etc. It is clear from the research that brain tissue and cognitive processing of males and females are different. For educators, cerebral sexual dimorphism is of pedagogical concern as it is thought to affect how children think, learn, and behave. It is also true in reverse; “the actual ‘wiring’ of the brain is affected by school and life experiences” (Caine & Caine, 1990, p. 66).

While this wiring is different for each gender, it is not correct to say that boys and girls are opposites in their learning styles. There are many learning activities and teaching methods that can be jointly favorable for both boys and girls – although perhaps for different reasons. Neuroscience tells us that the boys and girls are different. The brains of males are larger, but female’s brains grow faster and typically, their interests and so learning styles vary.

It is true that many males select less social cues than their female counterparts. Similarly, it is factually accurate that girls make more serotonin and oxytocin, so they are calmer and more interested in emotional connection. Males mature more slowly than females and girls have more of their cerebral cortex defined for verbal function. The hippocampus, where memory and language exists, develops more rapidly and is larger in females than in males. This will have an effect on vocabulary, reading and writing skills. Males, on the other hand, have more of their cerebral cortex defined for spatial relationships. As a result, they learn easily through movement and visual experience. Also, because girls have more serotonin and oxytocin, they can sit for longer periods of time, easier than boys who may need movement to feel comfortable. Educators have noticed that some students prefer certain methods of learning more than others. These methods of learning are referred to as learning styles.

A number of studies suggest that there may be benefit in addressing students’ learning styles as a technique for improving achievement and attitude towards school. (Cafferty,1980; Carbo& Hodges,1988; Domino,1979; Doyle & Rutherford,1984; Shands& Brunner,1989; Shea,1983).

Research on gender and education reveals that there is a disconnection between teaching practice and the needs of male and female brains. In the present age, a continuous development in process of new education system is taking place. The continuous development of every student in a classroom is needed. So, the teacher must aware of this and he or she must choose such type of teaching style that suits the students. He or she must be aware of learning styles of the students and teach them accordingly. This indicates the need for investigation in area of the gender and learning styles. Educators explore some of the differences, because recognizing these differences can help teachers to find solutions for many of the challenges that they experience in the classroom. Of course, generalized gender differences may not apply in every case. Therefore, it is enthusiastic wish of investigator to direct efforts in the direction of finding some relationship between genders and learning style for making the teaching or understanding more effective.

## III. STATEMENT OF THE PROBLEM

The problem specifically reads as:

“A STUDY ON LEARNING STYLES OF MALE & FEMALE SENIOR SECONDARY STUDENTS OF RESIDENTIAL SCHOOL”

## IV. OBJECTIVE OF THE STUDY

To compare the Learning Styles of Male & Female Senior Secondary Students of Residential Schools.

## V. HYPOTHESIS

There is no significant difference in learning styles of male and female Senior Secondary students of Residential schools.

## VI. DELIMITATIONS OF THE STUDY

- 1) The study is delimited to residential schools only.
- 2) The study is delimited to students of class XI & XII.
- 3) The sample size is delimited to 150 students only.

## VII. METHODOLOGY

### 7.1. Sample

The sample consisted of 150 students of class XI & XII of two Residential higher secondary schools. They were selected randomly. The schools were English medium schools where most of the students belong to middle class families.

### 7.2. Variable

Learning Style

### 7.3. Tool

Learning Styles for the proposed study refer the differences in preference of the right and left hemispheres for information processing on D. Venkataraman Style of Learning and Thinking Inventory – Style of Learning and Thinking (SOLAT) by Venkataraman (1993). The tool (SOLAT) has been developed by Venkataraman (1993) and published by Psycom service, Delhi. This tool is designed for school children of eighth standard and above up to college students, and consists of 50 items, based on

accumulated research findings, concerning the specialized functions of the left and right hemispheres. The tool has two dimensions, i.e., Learning Styles (Items from 1 to 25) and Thinking Style (Items from 26 to 50).

### VIII. PROCEDURE FOR DATA COLLECTION

The data for the present research was collected from two Residential schools. Permission for the same was sought from the Principals of both schools. The above-mentioned test was administered on the students of Classes XI and XII in both schools, and thereafter conducted scoring as per the manual of the test and conclusion was drawn.

### IX. RESULT AND ANALYSIS

t-Test was applied to find the significant difference in learning styles of Residential senior secondary school students.

It was hypothesized that –

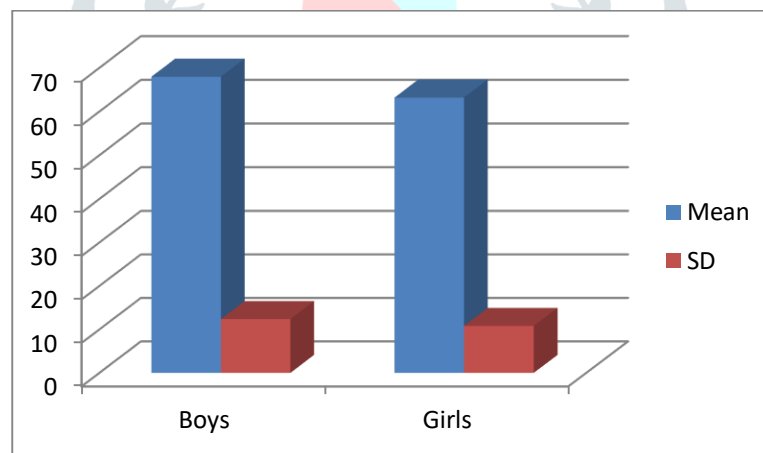
“There is no significant difference in learning styles of male & female senior secondary students of Residential schools.

Table-Depicting mean, SD, t-value for the scores learning styles of male & female senior secondary students of Residential schools:

S.No.	Category	Mean	Sd	Df	T-value (observed)	Mean Diff.	T-value at (0.05 level)
1	Male	67.97	12.37	148	2.40	4.78	1.98
2	Female	63.19	10.81				

Significance at 0.05 df 148 (1.98)

The table shows that t-value to be 2.40 and with 148 degree of freedom. The t-value of given data is 2.40 but critical value at 0.05 level is 1.98. Therefore, H<sub>0</sub> is rejected. Thus, the learning styles of male & female senior secondary students of residential schools are different.



Graphical representation of learning styles of boys and girls of residential schools

### X. CONCLUSION

It was found that boys & girls differ in their learning styles. Girls prefer to listen more than boys. The boys prefer kinesthetic and visual style. It is important to note that the results do not suggest that there is an inborn difference in aptitude between genders, nor is it promoting separation of genders in the learning process (i.e., need of separate classes for male and females). This study asserts that male and females have difference preferences in learning style. Students learning style preferences can be determined by the use of the VARK questionnaire, which helps both the learner and educators. There is a significant difference found in learning styles preferences of male and females. So, it is the responsibility of the instructor and the students to be aware of learning style preferences to improve learning. As teachers, we need to assess and understand how to teach all students by understanding how to present the information in multiple modes. As teachers, we can help students more effectively; both in and out of the classroom. If we are aware of their learning style, we can help them in determining their preferences. As a student, it is vital to be self aware of preferences to adjust study techniques to best fit each student, even when the information and instruction provided does not match the preferred style.

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