



INFLUENCE OF LEARNING STYLE ON ACADEMIC ACHIEVEMENT OF HIGHER SECONDARY STUDENTS WITH SPECIAL ATTENTION ON THEIR GENDER

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ABSTRACT :

This research article focuses the learning style and academic achievement of higher secondary students with special attention on their gender. The investigator adopted survey method for collecting the data. Joy M. Reid's Perceptual Learning Style Questionnaire (1987) was used to collect data. The total marks obtained by the students in the last examination were taken to measure the academic achievement of the students. The population of the present study comprises all the students studying standards XI and XII in higher secondary schools in Thiruvallur District. From the population, the investigator has taken 842 higher secondary students by random sampling technique. For analyzing the data, the investigator used Mean, SD, 't' Test, F test and Pearson's Product Moment Correlation. The findings showed that .

KEYWORDS : Learning Style, Achievement.

INTRODUCTION

Learning is something that takes place inside a person's brain, and it is known to be an enormously intricate and complex process. Knowledge about learning can be accumulated by scientific methods and when such knowledge is adequately verified, it can be expressed as learning principles. Learning process enables the teachers to recognise that learning has taken place when they note a behavioural change in the learner and also when they note the persistence of this change.

Learning happens in various stages, and at each stage, the students learn in so many ways. Difficulties that arise in schooling are often due to differences in learning styles. Children's academic performance and success in life depend on the thinking and problem solving skills, they develop in early childhood. By the time, the students reach the higher grades, their reading ability is sufficient for them to learn.

LEARNING STYLE

Learning styles are points along a scale that helps to discover the different forms of mental representations; however, they are not good characterizations of what people are or are not like. One should not divide the population into a set of categories (i.e., visual and auditory learners). What these various instruments attempt to do is to allocate a person on some point on a continuum (similar to measuring height or weight). In other words, do not pigeonhole people as we are



all capable of learning under almost any style, no matter what our preference is.

Stewart and Felicetti (1992) define learning styles as those “educational conditions under which a student is most likely to learn.” Thus, learning styles are not really concerned with what learners learn, but rather how they prefer to learn.

LEARNING STYLE PREFERENCES

Visual Learning Style

One may gain well from seeing words in books, on the writing slate, and in exercise manuals. He recalls and comprehends the data and directions better in the event that he understands them. He doesn't require as much oral clarification as a sound-related student, and regularly adapts alone, with a book. One should take notes of addresses and oral headings in the event that he needs to recollect the data.

Auditory Learning Style

One may gain from hearing words verbally expressed and from oral clarifications. He may recollect data by perusing so anyone might hear or moving the lips as he peruses, particularly when he is adapting new material. He profits by hearing audiotapes, addresses, and classroom discourse. He likewise profits by making tapes to tune in to, by showing different understudies, and by speaking with the instructor.

Kinesthetic Learning Style

One may adapt best by understanding, by being included physically in classroom encounters. He recalls data well when he effectively partakes in exercises, field treks, and pretending in the classroom. A mix of improvements for instance, an audiotape joined with a movement will see new material.

Tactile Learning Style

One may adapt best when he has the chance to do "hands-on" encounters with materials. That is, taking a shot at investigations in a research facility, dealing with and building models, and contacting and working with materials give the best learning circumstance. Composing notes or guidelines can recollect data, and physical association in class related exercises may see new data.

Group Learning Style

One may adapt all the more effectively when he thinks about with no less than one other, and he will be progressively fruitful finishing function admirably when he works with others. One esteems assemble communication and class work with different understudies, and he recalls data better when he works with a few cohorts. The incitement one gets from gathering work learns and see new data.

Individual Learning Style

One may learn best when he works alone. He may think better when he studies alone, and he remembers the information to learn by himself. He understands new material best when he learns it alone, and to make better progress in learning when he works by himself.

NEED AND SIGNIFICANCE OF THE STUDY

The students have different learning styles and preferences in the ways they take in and process information, functioning effectively in any professional capacity, however, requires, working well in all learning styles. If teachers teach exclusively in a manner favouring their students less preferred learning style modes, the students' discomfort may be great enough to interfere with their learning.

According to educational thinkers, learning was considered the “third eye” of man which gives him an insight into all affairs and teaches him / her to act, that leads us to the salvation. Style of learning differs from one to another. Hence, there is no universal style of learning as such. Each and everyone should be conscious of his own learning style. Then only, he can learn the lessons easily, quickly and clearly. Using that

style, students should possess theoretical knowledge of different types of learning styles. Then only, they can select suitable learning style for a particular subject.

Teachers should take care of learning styles of their students. Based on those styles, the teachers should suggest or advice to modify the learning style of their students or change their teaching strategies in order to suit the learning styles of their students. Regarding the learning style, still there are no right or wrong styles. And at the same time, there exists no connection between learning style and intelligence of students. It is dominant in one student and for other it may be different.

Changes in learning styles of the higher secondary students require their teachers to take up necessary steps to improve the learning of a particular subject at higher secondary level. Hence, there is a need for teachers to become familiar with the learning styles of their students. It seems very few attempts have been made to identify the learning styles and hemisphericity of higher secondary students and its influence on their achievement. Under these conditions, the investigator of the present study would like to conduct a detailed study on the problem stated below.

DEFINITIONS OF THE TERMS

Learning Style

Learning style refers to the different ways of learning. It is an individual quality, which influences a student's ability to learn particular subject or concept. Operationally, it is the score obtained by the higher secondary students on the "Perceptual Learning Style Questionnaire" developed by J.M.Reid (1987) adapted by the investigator.

Academic Achievement

By 'Academic Achievement', the investigator means the total marks obtained by the higher secondary students in their school examination.

Higher Secondary Students

By 'Higher Secondary Students', the investigator refers to the students studying standards XI and XII in the higher secondary schools in Thiruvallur District.

OBJECTIVES

1. To find the preference of learning style of higher secondary students.
2. To find significant difference in their academic achievement of the higher secondary students having different learning styles.

METHOD AND PROCEDURE

The investigator adopted survey method for collecting the data. Joy M. Reid's Perceptual Learning Style Questionnaire (1987) was used to collect data. The total marks obtained by the students in the last examination were taken to measure the achievement of the students. The population of the present study comprises all the students studying standards XI and XII in higher secondary schools in Thiruvallur District. From the population, the investigator has taken 842 higher secondary students by random sampling technique. For analyzing the data, the investigator used Mean, SD, 't' Test, F test and Pearson's Product Moment Correlation.

ANALYSIS AND FINDINGS

Hypothesis - 1

1. The preference of learning style of higher secondary students is not major.

Table - 1.
Preference of Learning Style of Higher Secondary Students

Variable	Negligible		Minor		Major	
	N	%	N	%	N	%
Visual Learning Style	21	2.49	527	62.59	294	34.92
Tactile Learning Style	14	1.66	554	65.80	274	32.54
Auditory Learning Style	17	2.02	551	65.44	274	32.54
Group Learning Style	18	2.14	540	64.13	284	33.73
Kinesthetic Learning Style	14	1.66	522	62.00	306	36.34
Individual Learning Style	18	2.14	530	62.95	294	34.92

It is inferred from the above table that 2.49% of higher secondary students have negligible, 62.59% of them have minor and 34.92% of them have major level of visual learning style.

1.66% of higher secondary students have negligible, 65.80% of them have minor and 32.54% of them have major level of tactile learning style.

2.02% of higher secondary students have negligible, 65.44% of them have minor and 32.54% of them have major level of auditory learning style.

2.14% of higher secondary students have negligible, 64.13% of them have minor and 33.73% of them have major level of group learning style.

1.66% of higher secondary students have negligible, 62.00% of them have minor and 36.34% of them have major level of kinesthetic learning style.

2.14% of higher secondary students have negligible, 62.95% of them have minor and 34.92% of them have major level of individual learning style.

Hypothesis – 2

There is no significant difference in their academic achievement of the higher secondary students having different learning styles.

Table - 2.
Difference in the Academic Achievement of the Higher Secondary Students with different Learning Styles

	Learning Style	Mean	SSb	SSw	Calculated 'F' Value	Table Value	Remark
Visual	Negligible	67.52	4831.45	74338.34	27.26	3.00	S
	Minor	75.59					
	Major	79.57					
Tactile	Negligible	75.79	3420.66	75749.13	18.94	3.00	S
	Minor	75.37					
	Major	79.68					
Auditory	Negligible	73.65	4148.16	75021.63	23.20	3.00	S
	Minor	75.30					
	Major	79.96					
Group	Negligible	69.33	3674.63	75495.16	20.42	3.00	S
	Minor	75.64					
	Major	79.42					
Kinesthetic	Negligible	68.71	4978.53	74191.26	28.15	3.00	S
	Minor	75.22					
	Major	79.81					

Individual	Negligible	69.39	4950.67	74219.12	27.98	3.00	S
	Minor	75.31					
	Major	79.88					

df = 2, 839; Table Value - 3.00; S - Significant - Ho Rejected.

It is found from the above table that the students having different learning styles differed significantly in their academic achievement. The students with different learning styles as their major learning style are found better in their academic achievement.

Hypothesis – 3

There is no significant difference in their academic achievement of the higher secondary students having visual learning styles with regard to gender.

Table - 3.
Difference in the academic achievement of the Higher Secondary Students having Visual Learning Styles with regard to Gender

	Gender	Learning Style	Mean	SSb	SSw	Calculated 'F' Value	Remark
Visual	Male	Negligible	66.27	2265.28	35401.39	13.31	S
		Minor	75.32				
		Major	78.91				
	Female	Negligible	68.90	2482.30	38753.00	13.45	S
		Minor	75.89				
		Major	80.11				
Tactile	Male	Negligible	78.57	1423.97	36242.70	8.17	S
		Minor	74.96				
		Major	78.94				
	Female	Negligible	73.00	2068.55	39166.75	11.09	S
		Minor	75.81				
		Major	80.32				
Auditory	Male	Negligible	75.00	1937.52	35729.15	11.28	S
		Minor	74.73				
		Major	79.33				
	Female	Negligible	72.70	2251.31	38983.98	12.13	S
		Minor	75.88				
		Major	80.57				
Group	Male	Negligible	69.90	1262.18	36404.49	7.21	S
		Minor	75.29				
		Major	78.31				
	Female	Negligible	68.63	2585.32	38649.97	14.05	S
		Minor	75.97				
		Major	80.59				
Kinesthetic	Male	Negligible	68.00	2594.80	35071.87	15.39	S
		Minor	74.76				
		Major	79.46				
	Female	Negligible	69.67	2275.72	38959.58	12.27	S
		Minor	75.72				
		Major	79.46				

		Major	80.10				
Individual	Male	Negligible	68.13	1529.03	36137.64	8.80	S
		Minor	75.24				
		Major	78.51				
	Female	Negligible	70.40	3692.77	37542.53	20.66	S
		Minor	75.39				
		Major	81.16				

df - 2, 416 for male and 2, 420 for female; Table Value - 3.01;

S - Significant-Ho Rejected

It is found from the above table that the students irrespective of their gender having different learning styles differed significantly in their academic achievement. The male and female students with different learning styles as their major learning style are found better in their academic achievement.

CONCLUSION

It is concluded that the students having different learning styles differed significantly in their academic achievement. The students with different learning styles as their major learning style are found better in their academic achievement. With regard to their gender, the students having different learning styles differed significantly in their academic achievement. The male and female students with different learning styles as their major learning style are found better in their academic achievement. Hence, the learning styles play a vital role in determining their academic achievement.

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