LEARNING STYLE AND ACADEMIC ACHIEVEMENT OF HIGH SCHOOL STUDENTS IN TAMIL SUBJECT

G. Grace¹, Dr. D. Kalpana²

M Ed Research Scholar¹, Assistant Professor²

N.K.T. National College of Education for Women, Triplicane, Chennai, India.

Abstract

This study was an attempt to find out the Learning style and Academic achievement of high school students of Chennai District of Tamil Nadu state in respect to their Tamil subject. Learning is defined as modification of behavior through experience. It is also the ability of learners to perceive and process information in learning situations. Learning is the modification and coordination of the response of the creature. One of the most important uses of learning styles is that it makes it easy for teachers to incorporate them into their teaching. It tries to find out relation and effect of different learning styles and academic achievements of students in Tamil subject. A sample of 210 students of class 9th and 10th standard of Tamil Nadu state of Chennai district were selected for the study. The results of the study showed that the relationship between the learning style and academic achievement of high school student is High and positively correlated. Further no significant difference was found in learning style with respect to the gender, medium of instruction, type of schools. It is expected that the findings of the study would help the authorities to plan curricular and activities for high school students.

Keywords: Learning style, academic achievement, High school students.
Introduction

Learning happens inside an individual’s heads in the mind, and it is a tremendously multifaceted and complex procedure. Information about learning can be gathered by logical techniques when such information is satisfactorily checked, it tends to be communicated as learning standards. Learning is a procedure, which empowers the educator to perceive that learning has occurred when they note a conduct change in the student and when they note the steadiness of this change. Learning occurs in stages, and at each stage, under-students learn in various manners. Troubles that emerge in-home tutoring are frequently because of contrasts in learning styles.

The simplest conceptualization of a learning style is the learning strengths and preferences of a student. Learning style is the composite of characteristic cognitive, affective, and physiological factors that serve as relatively stable indicators of how a learner perceives, interacts with and responds to the learning environment. (Keefe, 1982). It means that students would respond to what they learn on the basis of communication which helps them to understand and use the knowledge based on their physical, mental and emotional capacity to acquire the knowledge, attitude and skill. The basic idea can be seen through a few examples provided by Felder (1996) who opines that some students might focus on facts while others prefer theories or that some students learn better visually and others verbally. In other words, a learning style may be viewed as a habitual pattern or a preferred way of acquiring knowledge or doing something. This means that each learner has unique learning style preferences.

Learning style refers to an individual’s preferred way of processing new information for efficient learning (Huston JL, Huston TL.). Rita Dunn described the concept of learning style as “a unique way developed by students when he/she was learning new and difficult knowledge” (Dunn RS, Dunn KJ.) Learning style is about how students learn rather than what they learn. Research has shown that individuals exhibit different approaches in the learning process and a single strategy or approach was unable to provide optimal learning conditions for all individuals (Brown T et.al) This may be related to students’ different backgrounds, strengths, weaknesses, interests, ambitions, levels of motivation, and approaches to studying Felder (RM, Brent R.). To improve undergraduate education, educators should become more aware of these diverse approaches (Carmo L, Gomes A, Pereira F, Mendes A.) Learning styles may be useful to help students and educators understand how to improve the way they learn and teach, respectively.

Academic achievement

Battle & Lewis, 2002 reported that “with a change in scenario and thrust on modern materialistic achievement, the education has undergone a drastic change. A person’s education has become an indicator of his status in society. The scores in examination decide about the level of intelligence whereas the education is linked to the life chances, income and wellbeing”. In modern age of rivalry and flawlessness each person takes a stab at progress. For student, achievement infers academic achievement which ought to be very much coordinated with columns on which the future accomplishment of their lives stands.”
Review of Literature

Ismail Erton (2010) showed that there is a weak positive statistical correlation between students' learning styles and their achievement in foreign language. Zainol Abidin (2011) his Study outcomes that a significant relationship between academic achievement and learning styles. In all learning styles, high achievers, moderate achievers, and low achievers have a similar learning preference styles. Vaishnav and Chirayu (2013) have found that significantly affect the academic achievement of the students. Along with this it was also revealed and exposed that kinesthetic learning style was more in practice and found used by everybody than visual and auditory. Nzesei (2015), Shah (2017), Dahiya and Dahiya (2019) have found that a significant difference in learning style preference among male & female and among high and low academic achievement. They could find that Extraversion was positively related with all four learning styles whereas no gender differences could be seen in learning styles of male and female E-Learners. GPA of subjects was found to be positively correlated with three learning styles.

Scope of the study

The learning styles on the part of the learners play a significant role in the way of acquiring, processing and retaining information. Each individual will be having a unique style of learning. The teachers and the institutions must understand the style of the learners and encourage them in their same way. The teachers and the educational institutions must train the child with their able style of learning. The Knowledge about the learning styles of students to different grades can be utilized for designing the course and the curriculum. The Tamil course design and curriculum should be in accordance with the various learning style. The educational program should comprise the opportunities for the students to attain a growth and development in all their areas of life. The curriculum and syllabus should therefore be framed according to the interest, abilities, attitudes, needs and desires of individuals. It is expected that the findings of the study would help the authorities to plan curricular and activities for high school students.

Statement of the Problem

The problem of the present study was "Learning style and academic achievement of high school students in Tamil subject."

Objectives of the study

To find whether there is any significant relationship between Learning style and Academic achievement of high school students.

To find whether there is any significant difference in the Learning style of high school students with respect to

- Gender
- Medium of Instruction
- Type of school
Hypothesis of the study

The following hypotheses are formulated based on the objectives of the study.

- There will be a significant and positive relationship between Learning style and Academic achievement of high school students.
- There will be no significant difference between boys and girls with respect to their learning style of high school students.
- There will be no significant difference in learning style of high school students with respect to Medium of instruction.
- There will be no significant difference in learning style of high school students with respect to type of schools.

Statistical techniques adopted

1. Karl Pearson’s product-moment method of correlation
2. Test of significance of difference between means of large independent sample (t test)
3. ANOVA (F) test.

Methodology

The research design is of normative survey method and sampling technique used for the study is stratified random sampling technique. To find out the Learning style and Academic achievement of high school students, data were collected from high school students studying in various types of schools.

Population and Sample

The population of the study includes all the higher secondary students studying in schools of Chennai district. Keeping in view the aim of the study 210 students were randomly selected. Samples were collected from high school students of government schools, government aided schools, self-finance schools.

Sample Distribution

Keeping in view the aim of the study 210 students from higher secondary schools were randomly selected on the basis of gender, namely boys and girls. Further, the sample were drawn from government school, government aided school, self-finance School, who study English medium and Tamil medium at high school level in Chennai district.

Instruments Used

- Learning style scale constructed and standardized by Abdollahi Mohammad and Jaafar R (2014) was used to assess learning style of high school students.
- Academic achievement will be measured on the basis of the marks scored in the quarterly examination.
Analysis and Interpretation Of Data

Measures of relationship between the variables

Hypothesis - 1
There will be a significant and positive relationship between learning style and Academic achievement of high school students.

Table 1. Correlation coefficient (r) between Learning style and Academic achievement

<table>
<thead>
<tr>
<th>Variables correlated</th>
<th>N</th>
<th>r</th>
<th>Level of significance</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Style and Academic Achievement</td>
<td>210</td>
<td>0.771</td>
<td>0.01</td>
<td>Positively and Significantly correlated</td>
</tr>
</tbody>
</table>

Table 1 show that correlation between learning style and academic achievement of high school students was 0.771 which was significant 0.01 levels. This indicated that there existed a significant high correlation between two variables. Therefore the relationship between learning style and academic achievement is high.

Hypothesis - 2
Test of significance of difference between means (t test)
There will be no significant difference between boys and girls with respect to learning style of high school students.

Table 2 - Significant of difference between boys and girls with respect to learning style of high school students

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Style</td>
<td>Boys</td>
<td>97</td>
<td>23.24</td>
<td>12.919</td>
<td>1.68</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>113</td>
<td>23.56</td>
<td>15.086</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the above table it is observed that the mean scores and standard deviation of learning style of boys are 23.24 and 12.919 and of girls are 23.56 and 15.086 respectively. The critical ratio of learning style of boys and girls students is 1.68 which is not significant. It indicates that boys and girls do not differ significantly in their learning style. It shows the boys and girls students possess similar learning style. This may be due to the same characteristics and attitude of boys and girls towards learning style of Tamil subject.
Hypothesis - 3
There will be no significant difference between students studying Tamil and English medium with respect to learning style high school students.

Table.3 - significant of difference between students studying Tamil and English medium with respect to learning style high school students

<table>
<thead>
<tr>
<th>Variable</th>
<th>Medium of instruction</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning</td>
<td>Tamil Medium</td>
<td>112</td>
<td>23.54</td>
<td>15.085</td>
<td>1.62</td>
<td>NS</td>
</tr>
<tr>
<td>Style</td>
<td>English Medium</td>
<td>98</td>
<td>23.28</td>
<td>12.921</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the above table it is observed that the mean scores and standard deviation of learning style of Tamil medium students are 23.54 and 15.085 and of English medium students are 23.28 and 12.921 respectively. The critical ratio of learning style of boys and girls students is 1.62 which is not significant. It indicates that Tamil medium and English medium students do not differ significantly in their learning style. It shows the Tamil medium and English medium students possess similar learning style. This may be due to the same study habit of Tamil medium and English medium towards learning style of Tamil subject.

Hypothesis - 4
There will be no significant difference in learning style of high school students with respect to type of schools.

Table.4 ANOVA for learning style scores of high school students with respect to type of schools

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group status</th>
<th>Sum of square</th>
<th>df</th>
<th>Mean square</th>
<th>F value</th>
<th>Level of significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Style</td>
<td>Between groups</td>
<td>160.201</td>
<td>3</td>
<td>53.3</td>
<td>0.261</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>42201.72</td>
<td>207</td>
<td>203.873</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>42361.963</td>
<td>210</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the table 4, F- ratio calculated for the learning style with respect to type of schools reveals that students belongs to government, government aided and self- finance schools do not differ significantly in their learning style. Hence, the formulated hypothesis there will be no significant difference in learning style with respect to type of schools is accepted. This may due to fact that learning style becomes more mandatory for all type of schools at the present situation, students’ possess similar learning style.
CONCLUSION

This study is beneficial to students, teachers, parents, school administrators and educators. Students may recognize their own learning styles. Teachers may know the different learning styles of their own students and manage the learning strategies according to learning styles of their students. Education, thus, includes all influences in life. Learning style and academic achievement plays a significant role for cognitive affective and psycho motor development of students. The curriculum and syllabus should therefore be framed according to the interest, abilities, attitudes, needs and desires of individuals. It is expected that the findings of the study would help the authorities to plan curricular and activities for high school students. The students with the preferable Tamil Subject will ultimately help for attaining excellence in the process of learning.

REFERENCES


Battle & Lewis (2002). The increasing significance of class: The relative effects of race and socioeconomic status on academic achievement, journal of poverty, 6(2), 21-35.


