



Studies on Learning Styles in relation to Academic Achievement: An analysis

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Abstract: *The objective of the review paper to review the studies related to learning styles in relation to academic achievement of secondary school students. to achieve this objective the researcher has reviewed many studies and on the basis of those studies that there is positive relationship between learning styles and academic achievement. Learning styles are the strategies which help to achieve excellence in academic achievement. The highest education is that which does not merely give us information but makes our life in harmony with all existence (Rabindranath Tagore). Learning is the modification of behavior through experience and training (Gates). Learning styles as the general approaches students used to learn a new subject or tackle a new problem (Oxford et al. 1991). The purpose of this review study to know the relation of learning styles with academic achievement. In the context of this the researcher reviewed last seven years studies on these variables. Among those studies the researcher included ten studies in this paper. In the present review paper learning styles is independent variable and academic achievement is dependent variable. All the studies which were reviewed by the researcher are almost showed positive relationship of learning styles with academic achievement. It is founded that those students who used learning styles in their learning excel in academic achievement.*

Key words: Learning, Learning Styles, Relation, Academic Achievement

Introduction: Educations have utmost importance in this digitalization and competition era. Education means holistic development of the child. Learning should be in an enjoyable environment and focus on experience learning (NEP-2020). Learning is nothing but acquisition of knowledge. Different ways and strategies which are very important for fast learning which leads to lifelong learning. Of course learning styles are key for learners to remember the information and to solve problem. It depends on the learner capacity and capability which helps in acquisition of knowledge. Learning is life long process. There are different learning styles which indeed help the learner in learning process. When we talks about the learning there is no right or wrong style of learning but all the people or learner doesn't the learn the things in same style. Some feels comfortable and convenient when they are taught by their favorite style because when they are not according to their interested styles they become confused and face difficulty to understand. The ways which are used by the learner for learning are known as

learning styles. It is often seen that the children from their early year of life start taking interest in their specific and best learning style. It is duty and responsibility of the teacher to teach the children keeping in view the learning styles of children. Academic achievement means excellence in all academic disciplines, in class as well as extracurricular activities.

The studies which are reviewed in which the researcher founded that there are different learning styles which are positively related with the academic achieve of the students. Some of the learning styles such as auditory learning style, visual learning style, tactile/kinesthetic learning style etc. On the basis of these the learner has been classified as auditory learners , visual learners and tactile/kinesthetic learners.`

1. Auditory learners: auditory learner are those learner who learn best when they are taught by verbal lectures, discussions, talking and by listening. They interpret the information by only listening in a better way. Pitch of voice and aloud sound is very helpful in their learning.
2. Visual learners: visual learner may be defined as those learners who learn and understand the things by seeing. They always think about pictures and learn effectively from the visual displays including videos, diagrams, illustrated books and flipcharts.
3. Tactile/ kinesthetic learners: these are those learner who learns through doing, touching, feeling and moving. They learn best through a hand on approach. They always keep busy themselves in exploring the things.

The present paper focused on review of researches conducted by different researchers based on the relation of learning styles and academic achievement.

Kumar (2012) conducted a study on academic achievement of adolescent in relation to their emotional intelligence, styles of learning and thinking with aims to find out the difference between right hemisphere and left hemisphere of brain preferred adolescents on academic achievement and also to find out the difference between high emotional intelligent arts and science adolescents on academic achievement. The researcher has taken 600 students as sample from the 11th standard school students from Haryana state. The researcher used the tools as for Emotional intelligence, Mangal emotional intelligence inventory were used and for Styles of learning and thinking tools developed by Venkataraman were used. The researcher founded that right hemisphere adolescents are high academic achievers than left hemisphere adolescent. The present study also revealed those high emotional intelligent adolescents are high academic achievers than low emotional intelligent adolescents

Rajalakshmi (2015) Conducted a study to find out the level of brain drain dominance and learning styles of higher secondary students and also to find out whether there is any significant influence of left brain dominance and learning styles on academic achievement of higher secondary students. The researcher used the survey method and sample consist of 1050 students from 26 schools of standard XI in government aided and matriculation schools from Tinnelveli. The researcher used the percentage, multiple correlation and t test. The researcher founded that more than two fourth of the higher secondary students have moderate level of left and right brain dominance, the two fourth of the higher secondary students have moderate level of learning styles.

Gill (2016) studied on academic achievement of secondary school students in relation to their anxiety, learning styles and school environment with aims to find out the relationship between academic achievement and learning styles of senior secondary school students and to study the relationship between academic achievement and different dimensions of learning styles. The researcher has taken a sample of 264 students of 11th standard of senior secondary schools of Faridabad district. The study is survey type under the category of descriptive research. To measure the learning styles, learning style inventory 2012 developed by karuna Shankar Mishra. The researcher has founded that the relationship between academic achievement and learning styles of senior school students is positive and very less correlated. All the dimension of learning style (enactive, figural, and verbal learning styles) shown same result.

Narula (2017) elaborated a study with aimed to compare academic achievement in English of senior secondary school students having high enactive learning style and average enactive learning style. The researcher employed the descriptive survey method and taken a sample of 600 senior secondary school students from five district of Haryana state. To measure the learning style inventory developed by Mishra (2012). As far as data analysis is concerned the researcher used the descriptive statistics like mean, S.D ,and Pearson's correlation coefficient were used. Apart from this t test and SPSS was used. The researcher founded that the mean and S.D score of academic achievement in English of students having high enactive learning style and average enactive learning style are (67.26+- 12.91)and (59.05+- 12.38) respectively. The t- value is 7.551 which is significant at 0.01 level. It depicts that students having high and average enactive learning style differ significantly on academic achievement in English and students having high enactive learning style had better academic achievement in English than students having average enactive learning style.

Munir et al. (2018) conducted a study on relationship of learning styles and academic performance of secondary school students ,university of swat Pakistan, with aims to identify the learning styles of secondary school students and also to find out the relationship of these learning styles with their academic achievement. The population of the study comprised of all tenth grade male and female students of public sector schools of Rawalpindi and Islamabad. A total of 745 students were randomly selected from 12 schools by applying simple random techniques and data was collected with survey method. The data was analysed with mean, correlation used. The researcher founded that male students had higher level of preference in visual and auditory learning styles as compared to female students at the secondary level and no significant relationship was found between learning styles and academic achievements of students.

Singh and cutting (2018) conducted a study on learning style and academic achievement of secondary school students with aims to analyse learning style and academic achievement among the senior secondary schools students of faizabad city in U.P, also to know the effect of different learning style on academic achievement of senior secondary school students. The study was survey type under the category of descriptive research. The researchers have taken 200 sample of students through random sampling technique. The correlation between academic achievement and learning style was determined using Pearson product moment coefficient of correlation method and also to identify the effect of learning style on academic achievement ANOVA , F Test were used. The researchers founded that there exist positive high correlation between learning style and academic achievement and there exist significant effect of different learning styles on academic achievement.

Meseret (2019) studied about the relationship of university student's engagement with teaching style, learning style and academic achievement in Ethiopia with aims to investigate the learning styles of university students in Ethiopian public universities and to determine university students engagement from their academic achievement. Researcher has adopted 31 public universities of Ethiopia and taken 400 samples. The researcher used casual correlational research design. Parallel to teaching style grasha (1990, 1996) later developed learning style inventory of six sub dimension was used and for academic achievement CGPA was used. The researcher founded that students engaged was highest for behavior engagement and lowest for emotional engagement dimension. The mean score of university students learning styles were found to be highest for avoidant, dependent and competitive and moderate for independent. Academic achievement was found to be positive correlated.

.Rohtesh (2021) elaborated a study to find out relationship of extraversion- introversion with academic achievement and relationship of divergent thinking with academic achievement of secondary school students and also wanted to know the difference between learning styles of introvert and extrovert secondary school students. The researcher used the descriptive research method and taken a sample of 407 secondary school students Rohtak district of Haryana. Learning style inventory by Karuna Shankar Misra was used to measure the learning style. The researcher founded that extraversion introversion and academic achievement of secondary school students is significantly correlated, there is positive correlation between divergent thinking

with academic achievement. It is founded that students high on individual control prefer verbal constructive and low opt for verbal reproducing learning styles.

Overview of Researches Based on Learning Styles in Relation to Academic Achievement

| S . N o | Name of the Researcher | Year | Title of the research | Independent variables/ dependent variable | Method and sampling | Tools used | Statistical techniques for analysis |
|---------|------------------------|------|--|---|---|---|--|
| 1 . | Kumar | 2012 | Academic achievement of adolescents in relation to their emotional intelligence styles of learning and thinking | Independent variable: emotional intelligence, style of learning Dependent variable: thinking | Descriptive survey method Sample:600 | Emotional intelligence inventory Learning style and thinking style inventory | Mean, S.D, t-test |
| 2 . | Rajalakshmi | 2015 | A study on brain dominance and learning styles of higher secondary students in relation to academic achievement | Independent variable: Brain dominance Dependent variable: Academic Achievement | Descriptive survey method and 1024 sample | Learning style inventory | Percentage, multiple correlation and t- test |
| 3 . | Gill | 2016 | Study of academic achievement senior secondary school students In relation to their anxiety learning styles and school environment | Learning styles, anxiety school environment/academic achievement | Descriptive survey method and 264 sample | Learning style inventory | Correlation, Mean ,S.D |
| 4 . | Narula | 2017 | Study of academic achievement in English as related to learning styles and metacognitive skills among senior school students | Learning styles ,metacognitive skills/Academic Achievement | Descriptive survey method Sample :600 | Learning style inventory | Mean, S.D Pearson's correlation coefficient t test |
| 5 . | Munir et al. | 2018 | Relationship of learning styles and academic performance of secondary school students | Independent variable: learning styles Dependent variable: Academic | Descriptive survey method Sample: 745 | Learning style inventory | Mean correlation |

| | | | | Performance | | | |
|---|-------------------|------|--|--|---|---|---|
| 6 | Singh and Cutting | 2018 | Learning style and academic achievement of secondary school students | Independent variable: Learning styles Dependent variable: Academic Achievement | Descriptive survey method Sample:200 | | ANOVA F-Test Pearson product moment |
| 7 | Meseret | 2019 | The relationship of University students engagement with teaching style, learning style and academic achievement in Ethiopia | Independent Variable: teaching style, learning style Dependent variable: academic achievement | Causal correlational research Sample:400 | Parallel teaching style inventory | Mean standard deviation Correlation |
| 8 | Rohtesh | 2021 | Academic achievement and learning styles of secondary school students in relation to Extraversion introversion divergent thinking and locus of control | Independent Variable: divergent thinking, locus of control, learning style Dependent variable: Academic Achievement | Descriptive survey method Sample: 407 | Learning style inventory locus of control scale | Karl Pearson's product moment correlation, mean, S.D, T-test, percent age |

Conclusion: on the basis of above reviewed studies it can be concluded that learning styles have a positive relationship with academic achievement of the students. Those students who use learning styles of their interest excel in their educational career. Kinesthetic learning style was found to be most dominant than visual and auditory learning styles and showed positive correlation between kinesthetic learning style and academic achievement (Singh and cutting 2018). Learning styles are essential in academic progress and achievement of the learners. We can say that it is a set of various indicators factors along with attitude and behavior which promotes and regulate learning of the students in a particular given situation in the system of learning individuals orientated to problem solving (Rohtesh, 2021). It can be concluded in the context of afore review studies that learning styles play a significant role in the academic achievements of students and it has a positive relationship with academic achievement of the students. Students need to their preferred learning style in order to excel in their career and life.

References:

1. **Gill, S.K. (2016)** Study of academic achievement of senior secondary school students in relation to their anxiety learning styles and school environment (Unpublished doctoral thesis) Maharshi Dayanand University, Rohtak, <http://hdl.handle.net/10603/208125>
2. **Kumar, M. (2012)** Academic achievement of adolescents in relation to their emotional intelligence styles of learning and thinking (Unpublished doctoral thesis) Maharshi Dayanand University, Rohtak, <http://hdl.handle.net/10603/302381>
3. **Meseret, G. T (2019)** the relationship of University students engagement with teaching style, learning style and academic achievement in Ethopia (Unpublished doctoral thesis) Andhra university, Andhra Pradesh, <http://hdl.handle.net/10603/367755>
4. **Munir N. , Ahmad N. , Hussain S. , and Ghani U. (2018)** Relationship of learning styles and academic performance of secondary school students, Rawal Medical Journal, Rawal Medical Journal **201;43:421-424**
5. **Narula, R. (2017)** study of academic achievement in English as related to learning styles and metacognitive skills among senior school students (Unpublished doctoral thesis), Maharshi Dayanand University, Rohtak. <http://hdl.handle.net/10603/60177>
6. **Rajalakshmi V (2015)** A study on brain dominance and learning styles of higher secondary students in relation to academic achievement (Unpublished doctoral thesis) Manonmian Sundaranar University, Abishekapatti, Tamil Nadu. <http://hdl.handle.net/10603/188030>
7. **Rohtesh (2021)** Academic achievement and learning styles of secondary school students in relation to Extraversion introversion divergent thinking and locus of control (Unpublished doctoral thesis) Maharshi Dayanand University, Rohtak. <http://hdl.handle.net/10603/374481>
8. **Singh, S. And cutting, K. (2018)** learning style and academic achievement of secondary school students. Journal of emerging technologies and innovative research, 5 (7), 2349-5162)

