

# A Study Of 'Learning Style Preferences Among Secondary School Students In Relation To Their Gender And Place Of Living'

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## Abstract

The study was conducted to analyse preferable learning styles among secondary school students of Visakhapatnam District. The present study is a modest effort to find out the effect of gender and place of Living on learning style preferences of secondary school students. A sample of 300 secondary school students of Visakhapatnam District of Andhra Pradesh was selected for the study. Learning Style Inventory (2012) by Sreekala and Amalraj was used to collect relevant information for the study. Findings of the study indicate that the most preferred learning style among secondary school students is Visual (45.7%) followed by Auditory (21.0%) and Kinaesthetic (15%) It means that most of the secondary school students favoured visual format of learning. It was also found that the most preferred learning style among male and female students was visual learning style. Rural, urban and semi-urban students were found to have no significant difference in their learning styles.

Keywords: education, influence, information, Learning style, Secondary school students.

## Introduction

Learning is an episode in which a motivated individual attempts to adapt his behaviour so as to succeed in a situation which he perceives as requiring action to attain a

goal (Pressey, Robinson and Horrocks (1967). Learning is a lifelong process and occupies very important place in human life. Learning is not confined to school or a particular age only rather it is a comprehensive a term which is involved to every aspect of life at all developmental stages. It is the basis of success for every individual. Every individual has its own way of perceiving and understanding information. Some people learn by oral repetition, some by writing it out, while others may learn through practical work. Therefore every learner has his own learning style. The learning styles play a crucial role in how effectively the information is stored. Each learner has different ways of learning that depend upon many personal factors and everyone has a distinct cognitive learning style (Montgomery, 1996; Mumford and Honey, 1996). Learning style can be described as a set of factors, behaviours and attitudes that simplify learning for an individual. It is the ability of learners to understand and process information in learning situations. It is the learner's habitual way of acquiring and processing information. The idea of learning styles originated in the 1970s, and has greatly influenced education.

Each person has his or her own individual way of gathering and processing information, and solving problems in day-to-day situations. These personal cognitive abilities, acquired through a long process of socialization are called "learning styles" (Reynolds, 1997). Riding (2005) assured that students are not all the same and that individual differences influence both their learning and their academic achievement. Knowledge of one's learning style can lead to enhanced learning and helps the learner focus on improving weaker points. Learning Styles analysis is also useful for informing the teaching and learning process and can be used as a tool to enhance achievement and inclusion. (Rose & Nicholl, 1997).

Psychologists, educationists and researchers have defined the learning style in different ways.

Following are the definitions given by the different authors: **Keefe (1979)** defines "learning styles as the composite of characteristic cognitive, affective and psychological factors that serve as relatively stable indicators of how a learner perceives, interacts with and responds to the learning environment". **Letteri (1980)** states that learning style refers

to the style of information processing, the storage and retrieval of information. **Debellow (1990)** defines the learning style as the way people absorb process and retain information. **Reiff (1994)** states that learning style can be described as a set of factors, behaviours and attitudes that facilitates learning in a given situation. **James and Gardner (1995)** states that the ways learner's react to overall learning environment make up the individual's learning style. **Vermunt (1996)** defines learning style as coherent whole of learning activities that students usually employ. According to **Sarasin (1998)**, "the preference or predisposition of an individual to perceive and process information in a particular way or combination of ways". **Fleming (2001)** opines learning style as individual's preferred ways of gathering, organizing, and thinking about information". An overview of various definitions of "learning style" reveals that learning styles are consistent preferred ways of learning which the individual learners employ during learning of various tasks.

#### **Significance of the study**

Previous works and investigations in the field of learning have indicated the existence of individual difference in the learning process. Each Individual thinks, perceives, remembers and solves problems in one's own unique style. Trevathan (2002) reported learning style as an important aspect of student learning process that may influence academic achievement. Boys (2003), Oswald (2003) and Maynes (2004) reported that there is a positive relationship between learning style and academic achievement. Many studies have reported the significant effect of learning style and achievement. Though many studies have been conducted in the field of learning style and related variables, a few attempts were made to study preferred learning styles of secondary school students in relation to their gender and place of living. Hence the investigator made an attempt to conduct a study on secondary school students pertaining to this particular area. It is expected that the results of the study would be helpful in organizing guidance and counselling programs for school students for maximizing their academic performance by adopting proper learning style.

#### **Objectives of the Study**

The objectives of this study are as follows:

1. To investigate the most preferable learning style of Secondary school students.
2. To find out the effect of the prominent demographic determinants i.e. gender and place of living on learning style preferences of secondary school students.

## METHODOLOGY

### Sample:

All the secondary school students of Visakhapatnam District comprised the population of the study. A representative sample of 300 (150 Male & 150 Female) secondary school students belonging to five secondary schools were selected from the population.

### Tools Used:

“Learning Style Inventory” developed by Sreekala and Amalraj, (2012) which is a 3 point scale consisting of 42 statements was used to study preferred learning styles. The inventory is classified into three categories visual, auditory and kinaesthetic. The reliability of the inventory was 0.9

For obtaining information about gender and place of living a personal data sheet had been constructed by the researcher.

### Statistical techniques used

By using the latest version of SPSS the following statistical techniques were employed: Percentage Statistics  
Measures of central tendency  
Chi-square Test

## RESULTS AND DISCUSSION:

**Table I Descriptive statistics related to the preferred Learning Style of Secondary school students**

No. of Stds.	Types of Learning Style	Frequency	Percentage	Cumulative %
300	Visual	152	50.7	50.7
	Auditory	78	26	76.7
	Kinaesthetic	70	23.3	100
Total		300	100.0	

The table I reveals that the most preferred learning style among secondary school students is Visual (50.7%) followed by Auditory (26%) and Kinaesthetic (23.3%). It means that visual learners are more prevalent among the secondary school i.e. majority of students learn through visual aids than auditory or body movements. The result of this study is in coordination with the results of the study conducted by Maya and Rao (2004) who also reported that most of the students appear to be visual learners.

**Table II Descriptive statistics related to the preferred Learning Style of Secondaryschool students in terms of gender and place of living.**

Groups Type of Learning Style	Male(N=150)		Female(N=150)		Rural(N=35)		Urban(N=131)		Semi-Urban (N=134)
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	
Visual	76	50.7	77	51.3	18	51.4	77	58.8	58
Auditory	41	27.3	37	24.7	9	25.7	29	22.1	40
Kinaesthetic	33	22	36	24	8	22.9	25	19.1	36
									26.9

The review of the table II indicates that when preferred learning styles was observed in secondary school students in relation to their gender and place of living it was found in coordination with the results obtained in table I i.e. the most preferred learning style among male and female students was visual followed by auditory and kinaesthetic style. However, percentage of female students (51.3%) was higher than male students (50.7%) in favour of visual style of learning. Moreover the similar results were obtained for rural (51.4%), urban (58.8%) and semi-urban students (43.2%).

**Table III Significance of difference in Learning Styles of Secondary school students inrelation to Gender and Place of living.**

N	Group	Chi-Square Value	D.F.	Level of Significance
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300	Gender	5.242	3	0.15
	Place of Living	8.895	6	0.18

The above table reveals that male and female secondary school students do not differ significantly so far as their learning style is concerned. The results of this study are in coordination with the studies conducted by Thambusamy (2002) who concluded that the gender was not a significant variable in Engineering students' learning style preferences and Nasir (2006) who also found that the learning styles were not significantly different between male and female students. However, this result differs somewhat from that of Sizemore & Schultz (2005) where the male students had a significantly greater frequency of the Visual style than female students. It was also found that rural, urban and semi-urban students show no significant difference in their learning styles. The findings of the present study reveal that the most preferred learning style among secondary school students is Visual style of learning (50.7%) followed by auditory (26%) and Kinaesthetic (23.3%) learning styles. The results found are contradictory to the traditional belief that learners mostly learn through activities or "Learning by Doing".

#### **Conclusion:**

The findings of the present study reveal that visual learning style is the most preferable learning style among secondary school students followed by auditory and kinaesthetic learning style. The most preferred learning style among male and female students was visual followed by auditory and kinaesthetic style. However, the percentage of female students (51.3%) was higher than male students (50.7%) in favour of visual style of learning. Moreover, similar results were obtained for rural (51.4%), urban (58.8%) and semi-urban students (43.2%). It may be because the human brain has a power to decipher visual imagery much faster and visual sense is so active in humans that it not only enables us to recognise information at a much faster rate but it also helps us to memorise information for a long period of time.

#### **References:**

1. Agrawal, R. and Chawla, N. (2005) Influence of

- cooperative learning on academic achievement, *Journal of Indian Education*, XXXI (2), 52-59.
2. Abidin, Rezaee, Abdullah and Singh (2011) *International Journal of Humanities and Social Science*, 1(11).
  3. Barsch, J.R. (1996) *Barsch Learning Style Inventory*. Academic Therapy Publication. Novato, CA: USA.
  4. Bichler, R.f. (1974) *Study Guide: Psychology Applied to Teaching*. Boston, Houghton Mifflin Publication.
  5. Dunn, R. and Dunn, K. (1978) *Teaching students through their learning styles: A practical approach*, Reston, Virginia, Reston Publishing Company, 401-404.
  6. Erton, I. (2010). *Relations Between Personality Traits, Language Learning Styles and Success in Foreign Language Achievement*. *Hacettepe Egitim Dergisi (H.U. Journal of Education)*. 38: 115-126.
  7. Gibson, T.J. (1976) *Psychology for Classroom*, Englewood Cliffs, New Jersey, Prentice Hall, 260.
  8. Maya, S.S. and Rao, K.A. (2004) *Association between learning style preference and performance in the examination by medical students*. *Journal of Educational Research and Extension*, 41(1), 23-29.
  9. Nasir, Syed Jamal Abdul. (2006). *Learning Style among Multi-Ethnic Students in Four Selected Tertiary Institutions in the Klang Valley*. Ph.D. thesis. University Putra Malaysia: Malaysia.
  10. Pressey, Robinson and Horrocks (1967). *Essentials of Educational Technology* S.K Mangal PHI Learning Pvt limited New Delhi 2009, p.142.
  11. Sizemore & Schultz. (2005). *Ethnicity and Gender Influences on Learning Styles in Nursing Students from An Hispanic-Serving Institution*. *Journal of Hispanic Higher Education*.4 (4): 343-353.
  12. Thambusamy, R. X.(2002). *Learning Styles and Teaching Styles. An Investigation of The Language Learning Styles and Language Teaching Styles of A Selected Sample of ESL Students and Lecturers of Uitm*. Unpublished Thesis. University Malaya: Malaysia.