ISSN NO. 2320-5407

Journal homepage: http://www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH

RESEARCH ARTICLE

Learning style and academic achievement of post graduate students of University of Kashmir

Aasia Maqbool
Assistant professor Faculty of Education Ku.

Manuscript Info

Manuscript History:

Received: 14 May 2015
Final Accepted: 26 June 2015
Published Online: July 2015

Key words:

Corresponding Author

Aasia Maqbool

Abstract

The present study was carried out to study the learning style and Academic Achievement of Science, Social science P.G students of Kashmir University. The sample for the study was 180 (80 science, 80 social science) randomly selected from different P.G departments of Kashmir University. D.Venkataraman Style of Learning and thinking Inventory was employed for the data collection. Academic Achievement was taken as the marks obtained by the students in Graduation, mean, S.D, t-test and Pearson's correlation was employed for the analysis of data. The result of the study highlight – I) science and social science students differ significantly on learning style ii) Science and social science students differ significantly on Academic Achievement. iii) There is significant relation between learning style and academic achievement of science students. iv) There is significant relation between learning style and academic achievement of social science students. v) In aggregate (science and social science students) there is significant relation between learning style and Academic achievement.
Key words: learning style, Academic Achievement, post graduate students.

INTRODUCTION

The idea that people learn differently is venerable and probably had its origin with the ancient Greeks (Wratcher, Morrison, Riley & Scheirton, 1997). Learning is one of the fundamental areas in psychology. The theorists named Pavlov, Toleman, Watson and Skinner are some of the most influential in this discipline. The history of learning theory is, in many ways, the history of psychology. Some of the earliest psychological research came from studies in animal learning conducting by Edward Lee Thorndike in the 1890's Edwin R.Gurthrie in the early 1900's and form Toleman, Pavlov, and others. One of the most important movements in psychology, behaviourism was largely a learning –based approach. Watson founded this school of thought, and described it in his book Behaviorism (1925), in an effort to make psychology an objective and scientific field research. He believed that all behavior could be explained by learning principles. Skinner extended and continued this field of thought beginning in the 1930's and behaviorism dominated psychology for the next few decades. Grasha (1996) has defined learning styles as, "personal qualities that influence a student's ability to acquire information, to interact with peers and the teacher, and otherwise participate in learning experiences". By assessing and then planning for each student's individual learning style, a teacher can improve the chances of each student to learn. Learning styles appear to be biological and perhaps socialized difference that influences class-room learning, in particular and lifelong learning in general. There are consistent ways to facilitate learning through the use of the sense or environmental stimuli, hemisphere specialization (i.e right or left brain) auditory, visual. Kinesthetic olfactory preferences or preferences for environmental conditions e.g. light, noise are examples of physiological styles. Stewart & Felicetti (1992) define learning styles as those "educational conditions under which a student is most likely to learn." Keefe (1979) defines learning styles as 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". Students at colleges or universities are struggling to cope with their studies and the unique demands imposed by Particular courses (Boström, 2011). Learning styles are among the concepts that are postulated by researchers to show learners' differences and varied needs. As a result, the present study aims to examine the relationship between learning styles and overall academic achievement of the students in university.

Grades are the most universally accepted indicators of achievement in educational settings that focus on the student (Anaya, 1999; Biggs, 1989; Goberna 1987; Haraakiewicz, Barron, and Elliot, 1998; Pardo and Olea, 1993). Academic achievement occupies a very important place in education as well as in the studying and learning process. Good (1973), has defined, Academic achievement as knowledge attitude or skills developed in the school subject usually designed by test scores or by marks assigned by a teacher or by both. Consequently, academic achievement could be defined by Crow and Crow (1969) as the extent to which a learner is profiting from instructions in a given area of learning i.e achievement is reflected by the extent to which skill and knowledge has been imparted to him. Academic achievement also denotes the knowledge attained and skill developed in the school subject, usually designated by test scores. Consequently, academic achievement could be defined as self perception and self evaluation of one's objective success.

Need and importance

Learning style is important for many reasons; however, there are three vital ones. First of all, people's learning styles will vary because everyone is different from other naturally. Secondly, it offers the opportunity to teach by using a wide range of pedagogies in an effective way. Sticking to just one model unthinking will create a monotonous learning environment, so not everyone will enjoy the lesson. In other words, learning and teaching will be just words and not rooted in reality. Thirdly, we can manage many things in education and communication if we really recognize the groups under consideration. Of course, we may not know every detail; however, being aware of our student's learning styles, psychological qualities and motivational difference will help us regulate our lessons appropriately and according to the conditions (Mc Carthy, 1982; Felder, Silverman, 1988; Coffield et al; 2004). Learning style thus occupies a vital place in the lives of individuals. When the individual knows his or her learning style, she will integrate it in the process of learning and she will learn more easily and quickly and will be successful. The main concern of all educational efforts to be seeing that the learner achieves. Quality control, quality assurance and of late total quality management of achievement have increasingly gained the attention of researchers in education".

Although some researchers deny there is a statistically significant correlation between learning style and performance, many of these researchers acknowledge there is likely an educational benefit from the use of varied modalities in instructional practice (Hall & Moseley, 2005; Karns, 2006; Kratzig & Arbuthnott, 2006; Pashler, Mc Daniel, Rohrer, & Bjork, 2009).

Statement of problem:

The problem for the present investigation has been undertaken as under:

"Learning Styles and Academic achievement of post graduate students of university of Kashmir"

Objectives of the study:

1. To study the learning styles of science and social science post graduate students.
2. To study the Academic achievement of science and social science post graduate students.
3. To compare the science and social science post graduate students on learning styles.
4. To compare the science and social science post graduate students on academic achievement.
5. To examine the relationship between learning styles and Academic Achievement of science students.
6. To examine the relationship between learning styles and Academic Achievement of Social science students.

Hypotheses:

1. There is no significant difference between science and social science post graduate students on learning styles.
2. There is no significant difference between science and social science post graduate students on academic achievement.
3. There is no relationship between learning style and Academic Achievement of Science students.
4. There is no relationship between learning style and Academic Achievement of Social Science students.

5. There is no relationship between learning style and Academic Achievement of P.G students of Kashmir University. (in aggregate)

Tool Used:

(1) D. Venkataraman Style of Learning and thinking Inventory.

Operational definitions of the variables:

Learning style: learning style for the present refers to the scores obtained by the subjects on D. Venkataraman Style of Learning and thinking Inventory. This Inventory consists of 50 items. It can be administered on High school to P.G students.

Academic Achievement: Academic achievement for the present study shall be taken the graduation marks of the students.

Sample:

The sample for the present study shall consist of 180 post graduate students' science and social science streams of University of Kashmir. The sample break is as:

Faculty of Science	Sample Taken	Faculty of Social science	Sample. Taken
Zoology	30(male15,female15)	History	30(male15,female15)
Botany	30(male15,female15)	Political science	30(male15,female15)
Chemistry	30(male15,female15)	Economics	30(male15,female15)

Statistical Analysis:

Mean S.D and t- Test

Table: 1 Mean comparison of Science and Social Science students on Learning Styles (N=90 in each group).

Group	N	Mean	Std. Deviation	Std. Error Mean	t-value	Level of Significance
Science	90	32.11	3.286	.346	4.67	Significant at 0.01 level
Social Science	90	30.20	2.224	.234		

The table 1 shows the mean comparison of Science and Social Science students on Learning Styles. The calculated t-value 4.67 exceeds the tabulated t-value (2.58) at 0.01 level of significance. Which depicts that there is a significant difference between Science and Social science students on Learning Styles. Further it was found that Science students have high Learning Styles than Social science students. The results revealed that Science students have high verbal, content preference, class preference, learning preferences and interests than Social Students,

Thus from the confirmation of the results the above table the hypotheses No. 1 which reads as, "There is no significant difference between science and social science post graduate students on learning styles stands rejected".

Table 2. Mean comparison of Science and Social Science students on Academic Achievement (N=90 in each group).

Group	N	Mean	Std. Deviation	Std. Error Mean	t-value	Level of Significance
Science	90	59.91	3.34	0.35	11.59	Significant at 0.01 level
Social Science	90	52.73	4.321	0.45		

The table 2 shows significance of mean difference between Science and Social science students on Academic Achievement. A perusal of the table shows that Science and Social science students differ significantly in their

mean scores on Academic Achievement. The difference was found significant at 0.01 Level. It further indicates that Science students have better Academic Achievement than Social science students.

Thus from the confirmation of the results from the above table the hypotheses No.2 which reads as, "There is no significant difference between science and social science post graduate students on Academic Achievement stands rejected". .

Table 3. Relationship between Learning Style and Academic Achievement of science students

Variable	N	Coefficient of correlation	Level of significance
Learning Style Academic Achievement	90	0.49	0.01

The table 3. Shows the relationship between Learning Styles and Academic achievement of science students. The calculated value (0.49) exceeds the tabulated value (0.138) at 0.01 level of significance, which depicts that there is a significant relationship between Learning Styles and Academic achievement of science students.

Thus from the confirmation of the results from the above table the hypotheses No.3 which reads as, "There is no positive relationship between Learning Styles and Academic Achievement of Science students" stands rejected.

Table 4. Relationship between Learning Style and Academic Achievement of social science students

Variable	N	Coefficient of correlation	Level of significance
Learning Style Academic Achievement	90	0.49	0.01

The table 4. Shows the relationship between Learning Styles and Academic achievement of Social science students. The calculated value (0.42) exceeds the tabulated value (0.13) at 0.01 level of significance, which depicts that there is a significant relationship between Learning Styles and Academic achievement of Social science students.

Thus from the confirmation of the results from the above table the hypotheses No.4 which reads as, "There is no positive relationship between Learning Styles and Academic Achievement of Social Science students" stands rejected.

Table 5. Overall Relationship between Learning Style VS Academic Achievement

Variable	N	Coefficient of correlation	Level of significance
Learning Style Academic Achievement	180	0.38	0.01

The table 5. Shows the relationship between Learning Styles and Academic achievement of P.G students (Science and Social science in aggregate). The calculated value (0.38) exceeds the tabulated value (0.138) at 0.01 level of significance, which depicts that there is a significant relationship between Learning Styles and Academic achievement of P.G students.

Thus from the confirmation of the results from the above table the hypotheses No. 5 which reads as, "There is no positive relationship between Learning Styles and Academic Achievement of P.G students" stands rejected.

SUMMARY, CONCLUSIONS AND SUGGESTIONS

The major purpose of the study was to compare and relate learning styles and academic achievement of Science and Social Science P.G students of Kashmir University.

A sample of 180 P.G students of Kashmir University (90 science and 90 Social science) P.G students of Kashmir university were selected randomly from the various science and social department of Kashmir university. Style of Learning and Thinking Inventory by D. Venkataraman was used. In order to assess the academic achievement, marks scored by the students in graduation were taken as sample for academic achievement. Various statistical methods used include mean, S.D. t-test and correlation was applied in order to analyze the data. Certain meaningful conclusions have been drawn.

- Science students have better Learning Styles than Social science students.
- Science students have high Academic Achievement than Social science students.
- Positive and moderate relationship between learning style and Academic achievement of science, social science P.G students of Kashmir University.
- Positive and moderate relationship between learning style and Academic achievement of P.G Students (in aggregate) of Kashmir University.

References

- Cassidy, S. (2004) Learning Styles: An Overview of the Theories, Models and Measures, Educational Psychology; 24, 4: 419-444.
- Dunn, R. and et al (1995) A Meta Analytic Validation of the Dunn and Dunn. Learning Styles Model: journal of Educational Research, 88 (6), 353-361 (6).
- Buch, M.B. (1998) Fourth survey of Research in education: Vol. I New Delhi National Concert of Educational Research and training.
- Grasha, A. F. (1996). Teaching with style. Pittsburgh, PA: Alliance.
- Wratcher, M. A., Morrison, E. E., Riley, V. L., & Scheirton, L. S. (1997). Curriculum and program planning: A study guide for the core seminar. Programs for higher education: Nova Southeastern University.
- Keefe, J.W. (1979). Learning style: an overview (pp. 1-17). In: Keefe, J.W. (Ed.). Student learning styles: diagnosing and prescribing programs. Reston: National Association of Secondary School Principals.
- Stewart, K.L. & Felicetti, L.A. (1992). Learning styles of marketing majors. Educ. Res. Quarterly, 15(2), 15-23.
- Butler, Kathleen A. (1988) Learning and Teaching Style: In Theory and Practice. Revised ed. Columbia CT: Learner's Dimension,
- Clarke T. Lesh, T. Trocchio, J (2010) Thinking Styles: Teaching and learning styles in graduate education students.
- Cano Garcia- Francisco, Hughes Elaini Hewitt (2000) Learning and thinking styles; An analysis of their interrelationship influence on academic achievement.
- David L. Marrison, Martin J. Frick, (1994) The Effect of Agricultural Students Learning Styles on Academic Achievement and Their Perceptions of Two Methods of Instruction; Journal of Agricultural Education 26 Vol. 35, No. 1, 1994
- Jafre Mohamad Abidin Zainol Rezaee Abbas Ali, Nor Helan Abdullah (2011) Learning Styles and Overall Academic Achievement in a Specific Educational System; International Journal of Humanities and Social Science Vol. 1 No. 10; August 2011 143
- Renou Janet (2010) A Study of Perceptual Learning Styles and Achievement in a University-level Foreign Language Course; Universidad de Puerto Rico, Mayaguez
- Sharma Parveen (2011) A Study of Learning Thinking Style of Secondary School students in relation to their Academic Achievement Sonepat-131001(Haryana) Neetu Lt. M.S. College of Education Sector-2, Bahadurgarh-124507 (HR) India
- Sheikh Humaira (2010) Learning Styles of Adolescent boys and girls in relation to their Academic Achievement" M. A. Dissertation University of Kashmir P no.19-42