

The Study of Academic Achievements and Creative Learning Style of Senior Secondary School's Students of Moradabad District

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INTRODUCTION:-

A corner stone of modern educational psychology is that student's level of abilities is the major predictor of academic success. But it is also true that abilities do not predict academic performance completely. In the search of other variables that contribute to school and college achievement, researchers have devoted considerable attention to non-cognitive characteristics of the learners. Creative learning has emerged as most promising characteristic in recent years. It has been found in many studies that academic achievement depends upon the degree of learner's creative learning in studies, better or worse creative learning. It is further clear from the related literature that individual of the students but there is scarcity of research on these characteristics of learners across residential background, stream, type of institutions and academic performance in Indian context. The above observation appears to be truer in case of Secondary Students. In order to fulfill this research gap and bringing new facts in the lime light the investigator designs the present study which has been stated under following head.

REVIEW OF THE RELATED LITERATURE:-

In this section research related to learning styles of students has been reviewed with reference to Sex, Stream, Area and Institution. A number of investigators have conducted studies on the relationship of achievement and learning styles using a variety of learning style inventories. Some studies reflecting upon this aspect have been reported in the following paragraphs. **Schmeck (1980)** observed that synthesis analysis style was significantly correlated with vocabulary and comprehension but was not related to reading rate. **Leesa (1981)** found 'participant' as predominating style of American some community college students however, did not report significant correlation between learning style and achievement.

Styles of cognition and learning have been studied in relation to streams at different levels of education. Some of the investigations have been reviewed here. **Tamir (1975)** concluded that cognitive style preference is at least partially discipline and subject matter dependent. Student's cognitive styles for Biology and Chemistry are found different. **Plovnick (1975)** reported that different types of choice of specialty of medical students were found to be associated with different learning styles as measured through Kolb's Learning Style Inventory.

A little amount of research is available on the relationship of residential background and learning styles of senior secondary students. As regards learning styles of women students there is a dearth of the investigations. Some studies dealing with association between residential background and learning/cognitive styles have been reported in this section. **Ram (1981)** did not notice any significant difference in cognitive style of rural and urban students. **Sharma and Ahuja (1982)** also did not find any significant difference between rural-urban habitats on field dependence/field independence dimension of cognitive style.

Some researchers in foreign countries and India have studies learning styles of students of different types of institutions Available researches have been reviewed here: **Tamir (1975)** reported that significant differences were found in cognitive preferences of students of different types of schools-city schools and agricultural

4. To measure and compare the relationship of the Academic Achievement and Creative Learning Styles of Rural, Urban.
5. To measure and compare the relationship of the Academic Achievement and Creative Learning Styles of Science and Art stream.
6. To measure and compare the relationship of Academic Achievement and Creative Learning Styles of Government and Public Senior Secondary School's Students.

HYPOTHESIS OF THE STUDY:-

In this study Null Hypothesis was used. These hypotheses are explained, as there is no significant difference between mean score of first & second group of Senior Secondary School's Students. Hence, the hypothesis are formulated & tested by the investigator.

1. There is no significant difference among the mean score of Academic Achievement of Senior Secondary School's Students.
2. There is no significant difference between the mean score of Academic Achievement and high & low Creative learning style relation of Senior Secondary School's Students.
3. There is no significant relationship between of the Academic Achievement and Creative Learning Styles of Male and Female of Senior Secondary School's Students.
4. There is no significant relationship between the Creative Learning Style and Academic Achievement Test of Rural and Urban Senior Secondary School's Students.
5. There is no significant relationship between the Academic Achievement and Learning Styles of Science and Arts of Senior Secondary School's Students.
6. There is no significant relationship between the Academic Achievement and Creative Learning Styles of Government and Public Senior Secondary School's Students.

DELIMITATIONS OF THE PROBLEM:-

The present study was delimited in terms of the following:

1. This study is delimited to Moradabad district.
2. This study is delimited to Class XI and XII.
3. This study is delimited to Government and Public Schools.
4. This study is delimited to C.B.S.E. & U.P. Board Schools.
5. This study is delimited to Rural and Urban Location.

METHOD OF RESEARCH STUDY:-

The investigator has used descriptive survey method of the research. According to John W. Best (1977, p. 15) "Descriptive research describes what is it involves the description, recording, analysis, and interpretation of conditions that now exist. It involves some type of comparison or contrast and may attempt to discover relationships that exist between existing non-manipulative variables". In this research the study the existing relationship between Academic Achievement with creative learning style of Senior Secondary School's Students.

TOOLS OF RESEARCH STUDY:-

Keeping in view the above suggestions the purpose of this study is to obtain a reliable and valid measure of Academic Achievement of Senior Secondary School's Students. For this purpose the researcher has used one self-constructed tool "Academic Achievement Test" which is made by Investigator and rest three standardized tools "Creative learning Inventory" which is made by Dr. B.P. Verma.

SAMPLE & SAMPLING:-

The study covers the 200 Senior Secondary School's Students of C.B.S.E. & U.P. Board of Moradabad district on the basis of Multi-Stratified Random Sampling. There will be prepared a list of Senior Secondary Schools of C.B.S.E. and U.P. Board of Moradabad having the facilities of Science and Art teaching both & bifurcate this list into Government and Public Senior Secondary Schools. Further division will be made into Rural and Urban Senior Secondary Schools and randomly selected 4 Senior Secondary Schools from each lists (Total 16 Senior Secondary Schools) and lastly, randomly selected 8 Male Students of Science, 8 Male Students of Art, 8 Female Students of Science and 8 Female Students of Art from each Senior Secondary Schools.

STATICAL TECHNIQUES:-

In this present research the investigator is used T-Score, t-Test, F-test, and Product Moment Correlation as high-level statistical technique for effective analysis of the data on the important parametric statistical techniques.

DATA COLLECTION AND ORGANIZATION:-

For this study, data were collected on two variables, Academic Achievement and Creative learning. All two variables will be administrated one by one on all 200 Senior Secondary School's Students selected from U.P. and C.B.S.E. Boards of Moradabad district by using Multi-Stratified Random Sampling. The variables were administrated in each School individually, to each student for making their options on prescribed answer sheet and collected personally on the same day. Response of students will be converted in scores with the help of scoring key as per instructions & procedure adopted by the tool constructor.

DATA ANALYSIS AND INTERPRETATION OF THE STUDY:-

1. Hypothesis One: - For the verification of hypothesis one "there is no significant difference among the mean score of Academic Achievement of Senior Secondary School's Students." The study of the following procedure has adopted by the researcher. The F-test and t-test as statistical techniques were used for the verification of hypothesis one of this project in following table 1, 2 & 3.

Table No - 1

The statistical Involved for F-Test among five Categories of Academic Achievement Test of Senior Secondary School's Students

S. No.	Categories	N	SS	Mean	S.D.
1.	Hindi	200	56449	11.12	1.32
2.	English	200	47620	12.14	1.75
3.	Mathematics	200	651905	12.19	1.33
4.	Biology	200	38977	10.13	1.44
5.	Geography	200	32415	10.12	1.22

The above table No.-1 represent that the mean of Mathematics 12.19 was highest, while the mean of Geography 10.12 was lowest among the five categories of Academic Achievements of Senior Secondary Schools Students. Thus it may be interpreted that the Senior Secondary School's Students had more achievement in Mathematics and less achievement in Geography aspect of Academic Test. This is also illustrated by figure1.

Figure No. - 1

The statistical Involved for F-Test among five Categories of Academic Achievement Test of Senior Secondary Students

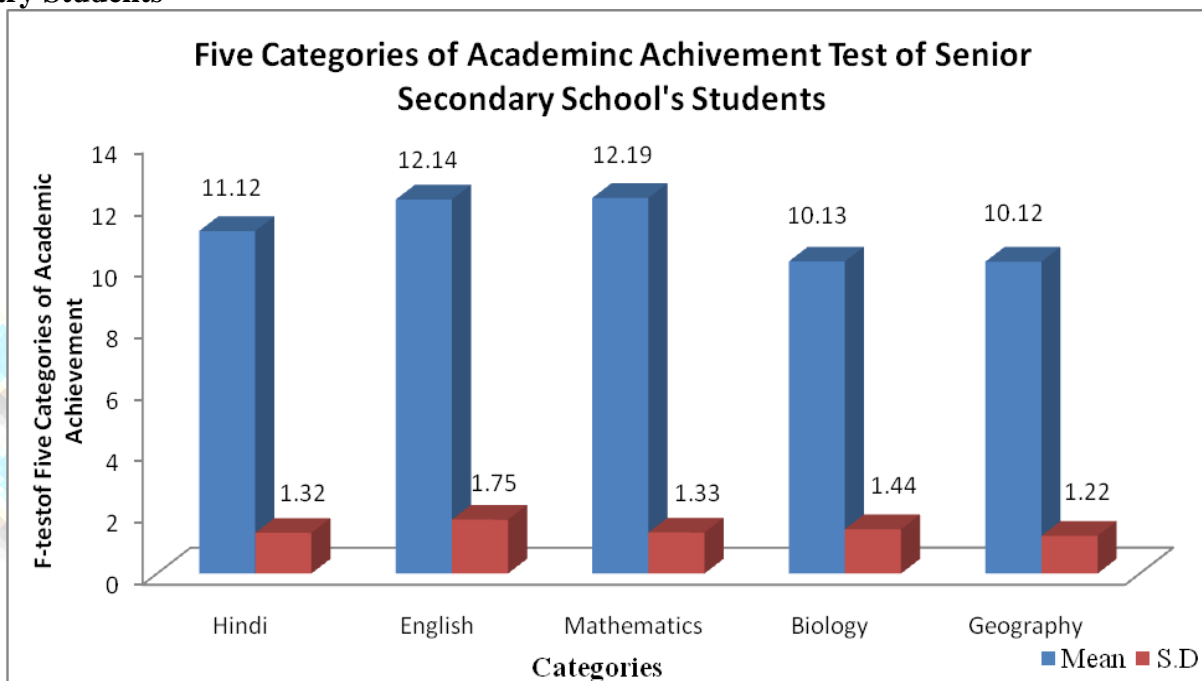


Table No - 2

The Analysis of Variance for F-Test among five Categories of Academic Achievement Test of Senior Secondary School's Students

S. No.	Source of Variance	df	SS	M	F-Value	Result
1.	Among Means	4	37021	925.52	227.40	Highly Significance
2.	Within Categories	1000	4075.7	4.07		

As is evident from above Table No- 2 that the F-Value 227.40 reflects the result was highly significant for both the level of confidence 95% and 99%. It could be inferred that Null hypothesis was rejected. It means all five Categories of academic achievements Test had significant Difference to each other on Score of Academic Test.

Table No- 3

The Significance of Mean Difference between five Categories of Academic Achievement of Senior Secondary School's Students

Categories of Test		T-Value				
		Cat.1	Cat.2	Cat.3	Cat.4	Cat.5
Result	Cat.1	-	Sig	Insig	Sig	Sig
	Cat.2	8.33	-	Sig	Sig	Sig
	Cat.3	8.32	18.52	-	Sig	Sig
	Cat.4	22.76	9.08	32.81	-	Sig
	Cat.5	28.11	15.18	34.11	8.32	-

From the above table No- 3 it is clear that the T-Value of all 10 pairs of Categories reflects the result was highly significant.

2. Hypothesis Two: - For the verification of Hypothesis two that “there is no significant difference between the mean score of Academic Achievement and high & low Creative learning style relation of Senior Secondary School’s Students”.

Table No. - 4

The Significance of mean Difference between Senior Secondary School’s Students of High and Low Creative Learning on Academic Achievement Test

S.No.	Categories	High Creative learning			Low Creative learning			t-value	Result
		N	Mean	S.D.	N	Mean	S.D.		
1.	Hindi	100	11.22	1.32	100	9.44	1.30	9.67	Sig
2.	English	100	10.22	1.62	100	8.32	1.52	12.57	Sig
3.	Mathematics	100	12.03	1.52	100	9.33	1.13	10.11	Sig
4.	Biology	100	9.32	1.33	100	7.31	1.11	10.14	Sig
5.	Geography	100	10.22	1.31	100	6.32	1.01	8.99	Sig
Overall		100	43.01	3.32	100	39.74	2.81	24.10	Sig

From the above table No - 4 that the t-value for five categories are significant along with overall Academic Achievement Test for the both level of confidence P 0.05 and P 0.01 with df 198 due to having more value in comparison to concerned t-value. It could be inferred that Null hypothesis is rejected. High creative learning students and low creative learning students have significant difference to each other of five categories of Academic Achievements and overall test.

3. Hypothesis Three: - For the verification of Hypothesis three that “there is no significant relationship between the Academic Achievement and Creative Learning Styles of Male and Female of Senior Secondary School’s Students.”

Table No – 5

The Significance of Correlation between the Academic Achievement and Creative Learning Style of Male and Female Senior Secondary School’s Students

S. No.	Categories	Male S. S. School’s Students			Female S.S. School’s Students		
		N	C. Correlation	Result	N	C. Correlation	Result
1.	Hindi	100	0.23	Sig	100	0.21	Sig
2.	English	100	0.39	Sig	100	0.29	Sig
3.	Mathematics	100	0.20	Sig	100	0.31	Sig
4.	Biology	100	0.24	Sig	100	0.20	Sig
5.	Geography	100	0.19	Sig	100	0.25	Sig
Overall		100	0.48	Sig	100	0.46	Sig

From the above table no. - 5 that the correlation between the Creative learning Style with the five categories of Academic Achievement Test for Male Senior Secondary School’s Students were significant for the level of confidence of 95% with df. 98 and similarly, correlation between the Creative Learning with the five categories of academic Achievements Test for Female Senior Secondary School’s Students were also significant for the level of confidence 95% with df. 98. Due to having more value in comparison to concerned t-value. It could be

inferred that Null Hypothesis was rejected. It means the score of Creative learning with the five categories of Academic Achievement Test and overall test of Male Senior Secondary School's Students and also for Female Senior Secondary School's Students had significant relationship.

4. Hypothesis Four: - For the verification of Hypothesis four that "there is no significant relationship between the Creative Learning Style and Academic Achievement Test of Rural, Urban Senior Secondary School's Students".

Table No - 6

The Significance of Correlation between the Creative Learning Style and Academic Achievement of Rural and Urban Senior Secondary School's Students

S. No.	Categories	Rural S. S. School's Students			Urban S. S. School's Students		
		N	C. Correlation	Result	N	C. Correlation	Result
1.	Hindi	100	0.24	Sig	100	0.31	Sig
2.	English	100	0.36	Sig	100	0.37	Sig
3.	Mathematics	100	0.38	Sig	100	0.21	Sig
4.	Biology	100	0.25	Sig	100	0.31	Sig
5.	Geography	100	0.28	Sig	100	0.27	Sig
Overall		100	0.52	Sig	100	0.50	Sig

From the below table no – 6 that the correlation between the Creative Learning Style with the five categories of Academic Achievement Test and overall test for Rural Senior Secondary School's Student were significant for both level of confidence 95% and 99% with df 98 and similarly correlation between the score of Creative Learning Style with five categories of Academic Achievement Test and overall Test for Urban Senior Secondary School's Students were also significant for the level of confidence 95% with df 98 due to having more value in comparison to concerned table. It could be inferred that Null hypothesis was rejected. It means the score of Creative learning Style with the five categories of Academic Achievement Test and overall Test for rural Senior Secondary school's Students and Urban Senior Secondary Schools Students had significant relationship.

5. Hypothesis Five: - For the verification of Hypothesis five that "there is no significant relationship between the Academic Achievement and Learning Styles of Science and Arts of Senior Secondary School's Students".

Table No. – 7

The Significance of Correlation between the Creative Learning Style and Academic Achievement of Science and Arts Senior Secondary School's Students

S.No.	Categories	Sc. S.S. School's Students			Arts S.S. School's Students		
		N	C. Correlation	Result	N	C. Correlation	Result
1.	Hindi	100	0.24	Sig	100	0.26	Sig
2.	English	100	0.34	Sig	100	0.38	Sig
3.	Mathematics	100	0.31	Sig	100	0.27	Sig
4.	Biology	100	0.29	Sig	100	0.27	Sig
5.	Geography	100	0.25	Sig	100	0.29	Sig
Overall		100	0.47	Sig	100	0.48	Sig

From the above table No - 7 shows that the correlation between the Creative Learning Style with the five categories of Academic Achievements Test and overall Test for Science Senior Secondary School's Students were significant for the level of confidence 95% with df 98 and similarly, correlation between the Creative Learning Style with the five categories of Academic Achievement Test and overall Test for Arts Senior Secondary Student's were also significant for the level of confidence 95% with df 98 due to having more value in comparison to concerned table. It could be inferred that Null hypothesis was rejected. It means the Creative Learning Style with the five categories of Academic Achievement test and overall test for Science Senior Secondary School's Students and also for Arts Students had significant relationship. Thus, it may be concluded that different categories of Academic Achievements along with overall Academic Achievements was significantly related to Creative Learning Variable.

6. Hypothesis Six: - For the verification of Hypothesis six that there is no significant relationship between the Academic Achievement and Creative Learning Styles of Government and Public Senior Secondary School's Students.

Table No - 8

The Significance of Correlation between the Academic Achievement and Creative Learning Style of Government and Public Senior Secondary School's Students

S.No	Categories	Govt. S. S. School's Students			Pub. S.S. School's Students		
		N	C. Correlation	Result	N	C. Correlation	Result
1.	Hindi	100	0.33	Sig	100	0.26	Sig
2.	English	100	0.39	Sig	100	0.28	Sig
3.	Mathematics	100	0.27	Sig	100	0.29	Sig
4.	Biology	100	0.31	Sig	100	0.24	Sig
5.	Geography	100	0.32	Sig	100	0.31	Sig
Overall		100	0.52	Sig	100	0.47	Sig

From the above table No - 7 shows that the five categories of Academic Achievement Test and Government Senior Secondary School's Students and also Public Senior Secondary School's Students had significant relationship. Thus, it may be concluded that different categories of Academic Achievement along with overall Academic Achievement was significantly related to Creative Learning Style Variable. Hence, Creative Learning Style Variable was an influencing and significant contributing factor in correlating with the different categories of Academic Achievement of Government Senior Secondary School's Students and Public Senior Secondary School's Students.

CONCLUSIONS, IMPLICATIONS & SUGGESTIONS:-

The present researcher reached certain conclusion related to already framed hypothesis against each objective of the research. Investigator expected conclusions or main finding in the form of objectives and hypothesis of this study are given below:-

1. Study revealed that categories of Academic Achievement Test were differing to teach other and all categories influenced the Academic Achievement Test.
2. Study revealed that High and Low Creative learning style Students were differing to each other on all five categories of Academic Achievement Test which exposes that these categories of the Test are influenced by Creative learning Variable of Students of Teacher's Education Institute/School. Study also discovered on the basis of overall Mean score that Academic Achievement of High Creative learning Students was observed highly favorable as compared to their counterpart Low Creative learning Students.

3. The Study revealed that Creative learning of Senior Secondary School's Students were positively relate to different categories of Academic Achievement Test which exposes that different categories of Test were influenced by Creative learning Variable for Male Senior Secondary School's Students and also for Female Senior secondary school's Students. Influence was found more on Male Senior Secondary School's Students than Female Senior Secondary School's Students.
4. Study revealed that Creative learning Style of Senior Secondary School's Students were positively relate to different categories of Academic Achievement Test which exposes that different categories of Test were influenced by Creative learning Variable for Science Senior Secondary School's Students and also for Arts Senior Secondary School's Students. Influence was found more on Arts Senior Secondary School's Students than Science Senior Secondary School's Students.
5. Study revealed that Creative learning of Senior Secondary School's Students were positively relate to different categories of Academic Achievement Test which exposes that different categories of Test were influenced by Creative learning Variable for Rural Senior Secondary School's Students and also for Urban Senior Secondary School's Students. Influence was found more on Urban Senior Secondary School's Students than Rural Senior Secondary School's Students.
6. Study revealed that Creative learning of Senior Secondary School's Students were positively relate to different categories of Academic Achievement Test which exposes that different categories of Test were influenced by Creative learning Variable for Government Senior Secondary School's Students and also for Public Senior Secondary School's Students. Influence was found more on Government Senior Secondary School's Students than Public Senior Secondary School's Students.

EDUCATIONAL IMPLICATIONS OF FINDINGS:-

The significance of any study should be measure from two angles. The importance of the study from academic point of view to know what it has contributed in this sphere? Does it develop any new theory or hypothesis? or has it confirmed any existing theory?

The importance should also be measured from practical point of view, what are the practice utility of the study to whom these findings appeal and from those benefit the finding scan be geared?

The significance of the Present study is not less important from both points of views. Psychologist and educationalists have correlated that Academic Achievement with the various Psychological Independent and Sociological Independent variables of the Secondary and Senior Secondary School's Students. It is necessary for the sociologist to carry the analysis further towards probing into the manner in which the Psychological Independent and Sociological Independent variables enters into a Secondary and Senior Secondary School's Students personality.

SUGGESTIONS FOR FURTHER RESEARCH:-

Due to the importance placed on Academic Achievement of Students of teacher education school and its major determinants, the present study has thrown same light and insight on the some determinants of Academic Achievement, some broad area of the practical importance of such studies is also significant for planners and administrators. To plan of education policies it may provides an important understanding in creating equal chances or in reducing the impact of divergent influences or educational process.

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