Comparative Study Of Achievement Level In Science Subjects Among The Students Of Government Parishadiya Upper Primary Schools And Students Of Aided Junior High Schools Of District Pilibhit.

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ABSTRACT

The Purpose of this study was to compare the achievement level in science subject among the students of Government Prishadiya Upper Primary Schools   and students of Aided Junior High School. The sample size group is 300 students for Government Parishadiya Upper Primary Schools   and 300 students of Aided Junior High School. A test of 20 marks is applied on each student . Stratified random sampling method used for collection of data.Then after calculating the answer and analysing the result by statistical tools and t-test ,the result of the study shows that there is no significant difference in the achievement level in science subject among the students of Parishadiya Upper Primary Schools   and students of Aided Junior High School. It is Possible that the teachers of Government Parishadiya Upper Primary Schools   and Aided Junior High School have similar interest in teaching or the learning level of the students of Government Parishadiya   Upper Primary Schools and students of Aided Junior High School is same.

Introduction:-

After my supportive supervision of Government Parishadiya Upper Primary Schools   of Pilibhit district, it was found that there is a difference in the level of science subjects among the students of Government Parishadiya Upper Primary Schools and students of Aided Junior High School. Achievement tests are used to measure the degree to which examinees can demonstrate acquisition, and in many cases application, of knowledge and skill taught and deemed important for future learning or work.

Problem statement:-

Comparative study of achievement level in science subjects among the students of Government Parishadiya Upper Primary Schools and students of Aided Junior High Schools of Pilibhit district.

Definitional reason for the terms used in the problem:-

1) Pilibhit District:-

Pilibhit is a district under Bareilly division of Uttar Pradesh state in India. It is located near the border of Uttrakhand state in the northern part of the Rohilkhand plateau near the lower Shivalik ranges of the Himalayas. The border of Nepal also touches Pilibhit district. Hindi is main language is mainly spoken in Pilibhit . Apart from Hindi, there are people who also use Bengali, English, Urdu and Punjabi languages. Literacy of Pilibhit is 61%.There are 5 tehsils in Pilibhit and total 7 blocks .

2) Aided Junior High School:-

There are 12 Aided junior high schools in Pilibhit. They also get mid-day meal in the school under the Mid-Day Meal Scheme.

3) Upper Primary Schools :-

There are 291 upper primary co-education schools in Pilibhit. They also get mid-day meal in the school under the Mid-Day Meal Scheme.

4) Achievement level:-

There is a difference in the achievement level between the students of Government Parishadiya Upper Primary Schools and the students of Aided Junior High Schools.

Objectives of the study :-

1:- To study the achievement level of science subjects among students studying in Government Parishadiya Upper Primary Schools and students studying in Aided Junior High School .

2:- To study the achievement level of science subject among students of class 6 studying in Government Parishadiya Upper Primary Schools and students of class 6 studying in Aided Junior High School.

3:- To study the achievement level of science subject among students of class 7 studying in Government Parishadiya Upper Primary Schools and students of class 7 studying in Aided Junior High School

4. To study the achievement level of science subject among students of class 8 studying in Government Parishadiya Upper Primary Schools and students of class 8 studying in Aided Junior High School.

Hypotheses of the study:-

1:- There is no significant difference in terms of achievement level in science subjects between the students studying in Government Parishadiya Upper Primary Schools and students studying in Aided Junior High School .

2:- There is no significant difference in the achievement level of science subjects between the students of class 6 studying in Government Parishadiya Upper Primary Schools and students of class 6 studying in Aided Junior High School.

3. There is no significant difference in the achievement level of science subjects between the students of class 7 studying in Government Parishadiya Upper Primary Schools and students of class 7 studying in Aided Junior High School.

4 There is no significant difference in the achievement level of science subjects between the students of class 8 studying in Government Parishadiya Upper Primary Schools and students of class 8 studying in Aided Junior High School.

Delimitation of the study: Before starting the study of any problem, determining the boundaries of the study can make the process of study accessible and easy. The researcher has delimited his problem in the following ways.

1:-The presented study has been done only on the students of Government Parishadiya Upper Primary Schools and students of Aided Junior High Schools .

2:- The presented study has been done only on the students of Government Parishadiya Upper Primary Schools and students of Aided Junior High School   located in Pilibhit district.

3:- In the presented study, the level available in science subject has been studied.

4:- In the presented study, only 600 students have been selected as samples.

Method:- For the presented study the researcher has used survey method.

Sampling (Sampling Method): - In the presented research, the researcher has used the stratified random sampling method keeping in mind the characteristics of the sample, which is a type of probability sampling.

Sample of the study:- In the presented research, the researcher has selected the students studying in Government Parishadiya Upper Primary Schools of Pilibhit district and students studying in the Aided Junior High Schools as the sample according to the following categories.

Number of students included in the jury

Serial number	category	Number
1	Students studying in Government Parishadiya Upper Primary Schools	300
2	Students studying in Aided Junior High Schools	300
	Total	600

Variables used in the study and their control:-

A variable is that aspect of a phenomenon which, by its presence, affects another phenomenon or process that is being studied. Variables are given utmost importance in research work. The nature of variables is quantitative. The hypothesis determines the roles of the variables.

The roles of variables keep changing according to research. The variables used in the present study are as follows.

1:- Independent Variable:-

Independent variable is the variable which is active in an environment, it is the factor which is measured and its effect is studied through experiment.

In the presented research, the variables are   Aided Junior High School and Government Parishadiya Upper Primary Schools of Pilibhit district. Because the researcher has increased or decreased them to relate them to the problems.

2:- Dependent Variable:-

The dependent variable depends on the independent variable. The dependent variable is mostly obtained as a process variable. It is studied and measured for the effect of the independent variable on it. It is called a dependent variable because it depends on the independent variable. In the present research, the level available in science subjects among boys and students is the dependent variable.

Instrument selection:-

To study the applied research problem, the researcher himself has constructed the test in which items have been used. And took the help of experts. The total number of questions in the Science Achievement Test is 20 and each question carries 1 mark. The time given is 40 minutes.

Statistical methods used:-

Often statistical methods are used to critically study the research work, due to which the results and conclusions are presented in a reliable and valid form. The following statistical methods have been used to analyze and discuss the data of the present study.

1-**Mean**:- Mean is also called average in mathematics and its other name is arithmetic mean.

$$\text{Mean} = \frac{\Sigma x}{N}$$

2:-**Standard Deviation = (S.D./ σ):-**

$$\sigma = \sqrt{\frac{\Sigma x^2}{N} - \left(\frac{\Sigma x}{N}\right)^2}$$

t-test

t- test is used to test the significance of two groups.

$$t = (M1 - M2)/SED$$

M1 = first group mean

M2 = second group mean

SED=Standard error of difference between the two groups.

The value of SED is determined from the following formula.

$$SED = \sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}$$

$\sigma 1$ =standard deviation of the first group

$\sigma 2$ = Standard deviation of the second group

N1= Number of units of the first group

N2= Number of units in second group

Analysis and interpretation of data:-

In the presented research, the data has been analyzed and interpreted with the help of students marks in the study of achievement level in science subjects among boys and students of Aided Junior High School and Government Parishadiya Upper Primary Schools of Pilibhit district in the following manner :-

Table 1.1

Mean, standard deviation and t-value of students studying in Government Parishadiya Upper Primary Schools and students studying in Aided Junior high school –

Group	Number	Mean	Standard Deviation	T Value	Result
Government Parishadiya Upper Primary Schools Students	300	M1=12.07	15.36	0.16	Not significant
Aided Junior high school Students	300	M2=9.55			
			$t_{0.05}$=1.96, $t_{0.01}$=2.33		

It is clear from the above table that the mean value of students studying in Government Parishadiya Upper Primary Schools and students studying in Aided junior high school is 12.07 and 9.55 respectively and their standard deviation is 15.36. Their t-value is 0.16 which is less than the table value 1.96 & 2.33 on degree of freedom 598. Hence we conclude that there is no significant difference in the achievement level of science subjects between the students studying in Government Parishadiya Upper Primary Schools and students studying in Aided junior high schools. This may be because teachers of Government Parishadiya Upper Primary Schools and teachers of Aided junior high schools have equal interest in teaching or the learning level of the students should be the same.

Therefore, the above hypothesis is accepted that there is no significant difference in the achievement level of science subjects between the students studying in Government Parishadiya Upper Primary Schools and students studying in Aided junior high schools.

Above finding are correlate with the finding of *Danjuma, Badatunde* (2019) that there is no significant difference between the academic performance of private and public schools students in basic science.

Table – 1.2

Mean, standard deviation and t-value of class 6 students studying in Government Parishadiya Upper Primary Schools Student and class 6 students studying in Aided Junior high schools –

Group	Number	Mean	Standard Deviation	T Value	Result
Government Parishadiya Upper Primary Schools Students	100	M1=8.38	10.76	0.14	Not significant
Aided Junior high school Students	100	M2=6.84			
			$t_{0.05}$=1.97, $t_{0.01}$=2.60		

It is clear from the above table that the mean score of class 6 students studying in Government Parishadiya Upper Primary Schools and class 6 students studying in Aided junior high school is 8.38 and 6.84 respectively and their standard deviation is 10.76 . Their t-value is 0.14 which is less than the table value 1.97 & 2.60 on degree of freedom 198. Hence we conclude that there is no significant difference in the achievement level of science subjects in class 6 students studying in Government Parishadiya Upper Primary Schools and class students studying in Aided junior high schools have no significant difference.This may be because teachers of Government Parishadiya Upper Primary Schools and teachers of Aided junior high schools have equal interest in teaching or the learning level of the students should be the same.

Therefore, the above hypothesis is accepted that there is no significant difference in the achievement level of science subjects between the students studying in Government Parishadiya Upper Primary Schools and students studying in Aided junior high schools

Table 1.3

Mean, standard deviation and t-value of class 7 students studying in Aided Junior High School and class 7 students studying in Government Parishadiya Upper Primary Schools –

Group	Number	Mean	Standard Deviation	T Value	Result
Government Parishadiya Upper Primary Schools Students	100	M1=14.46	17.26	0.28	Not significant
Aided Junior high school Students	100	M2=9.59			
			$t_{0.05}$=1.97, $t_{0.01}$=2.60		

It is clear from the above table that the mean score of class 7 students studying in Government Parishadiya Upper Primary Schools and class 7 students studying in Aided junior high school is 14.46 and 9.59 respectively and their standard deviation is 17.26 . Their t-value is 0.28 which is less than the table value 1.97 & 2.60 on degree of freedom 198. Hence we conclude that there is no significant difference in the achievement level of science subjects in class 7 students studying in Government Parishadiya Upper Primary Schools and class students studying in Aided junior high schools have no significant difference.This may be because teachers of Government Parishadiya Upper Primary Schools and teachers of Aided junior high schools have equal interest in teaching or the learning level of the students should be the same.

Therefore, the above hypothesis is accepted that there is no significant difference in the achievement level of science subjects between the students studying in Government Parishadiya Upper Primary Schools and students studying in Aided junior high schools

Above finding are correlate with the finding of *Danjuma, Badatunde* (2019) that there is no significant difference between the academic performance of private and public schools students in basic science.

Table 1.4

Mean, standard deviation and t-value of class 8 students studying in Aided Junior High School and class 8 Students Studying in Government Parishadiya Upper Primary Schools –

Group	Number	Mean	Standard Deviation	T Value	Result
Government Parishadiya Upper Primary Schools Students	100	M1=13.67	18.24	0.07	Not significant
Aided Junior high school Students	100	M2=12.22			
			$t_{0.05}$=1.97, $t_{0.01}$=2.60		

It is clear from the above table that the mean score of class 8 students studying in Government Parishadiya Upper Primary Schools and class 8 students studying in Aided junior high school is 13.67 and 12.22 respectively and their standard deviation is 18.24 . Their t-value is 0.07 which is less than the table value 1.97 & 2.60 on degree of freedom 198. Hence we conclude that there is no significant difference in the achievement level of science subjects in class 8 students studying in Government Parishadiya Upper Primary Schools and class students studying in Aided junior high schools have no significant difference.This may be because teachers of Government Parishadiya Upper Primary Schools and teachers of Aided junior high schools have equal interest in teaching or the learning level of the students should be the same.

Therefore, the above hypothesis is accepted that there is no significant difference in the achievement level of science subjects between the students studying in Government Parishadiya Upper Primary Schools and students studying in Aided junior high schools

Above finding are correlate with the finding of *Danjuma, Badatunde* (2019) that there is no significant difference between the academic performance of private and public schools students in basic science.

Conclusions of the study:-

1-There is no significant difference in the achievement level of science subjects between students studying in   Government Parishadiya Upper Primary Schools and students studying in Aided Junior High School .

 2- There is no significant difference in the achievement level of science subjects between the students of class 6 studying in Government Parishadiya Upper Primary Schools   and students of class 6 studying in the Aided Junior High School.

3- There is no significant difference in the achievement level of science subjects between the students of class 7 studying in Government Parishadiya Upper Primary Schools   and students of class 7 studying in the Aided Junior High School.

 4- There is no significant difference in the achievement level of science subjects between the students of class 8 studying in Government Parishadiya Upper Primary Schools   and students of class 8 studying in the Aided Junior High School..

Educational implications :-

1:- **From the teachers' point of view:-** Teachers play an important role in building the future of the nation. The progress of any nation is based on an educated society. Students of Upper Primary education and secondary education will also benefit from the present research work because when students develop their interest. Only then they chooses a subject suitable to him. He will be able to grasp the subject matter with concentration in the class due to which the teacher will not face the problem of in discipline and he will be able to do proper teaching work.

2) **From the point of view of parents and guardians –** When parents and guardians become aware of the mental ability of the child. So they will motivate them to choose and study subjects according to their ability which the child deserves.

3) **From the point of view of directors and counselors: -** This study is also very useful for the directors and counselors because when the counselors will know about the child's educational interest and when they will recognize his mental abilities, then only they will be able to select suitable subjects and will be able to provide suggestions and consultation regarding further direction.

 4) **Suggestions for future research :-**

Although the researcher has completed his research scientifically and objectively, but he cannot be proud that this is an ideal research. There were many limitations in the present research and there is enough area for its support. Hence the follow in g suggestions are presented for future research. So that the authenticity of the results of the presented research can be proved.

1- Survey method has been used in the presented functional research. in this study, conclusions can be obtained by studying the knowledge of experimental method.

2- The presented research can also be done on students studying in secondary schools.

3- The presented study can also be done with D.El.Ed students.

4- The proposal study can also be done on the students studying in Kendriya Vidyalaya.

Gratitude:-

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