

# A STUDY OF COMPARISON BETWEEN SCIENCE AND ARTS TEACHERS IN RELATION TO THEIR TEACHING APTITUDE

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## ABSTRACT

*Though there has been the importance of education in all the places and ages, its importance has become more and more necessary in the democratic society of today. Along with this, there is a great need of special kind of education for the development of science and technology. But it is felt that there is scarcity of suitable education and good teachers. In this reference it may be said that somewhere there is any defect in the selection of teachers and management of education. If there are good schools, good atmosphere in those schools, good material aids and able and expert teachers, there is no reason that our education is not impressive. This will cause the development of nation and society and feeling of happiness and prosperity will take place in human beings. After study on the basis of data analysis, it can be concluded that the Science teachers are better than their Arts compatriots.*

**Key Words:** *Science Teachers, Arts Teachers and Teaching Aptitude*

## INTRODUCTION:

The debate of Science Vs Arts and which one outwits the other is an eternal one. If science is about fact, art is about fiction and debates. If Science delves into the world and beyond, Arts is about searching within. Well does this debate sound an interesting one! However, for many reading the article, this debate will hardly make any sense and instead it would be asked to not even probe it further. Why? For a few 'ignorant' ones the debate hardly makes any sense in India. Most of the students either have aspirations of becoming an engineer, scientist or a doctor or therefore have no choice but to opt for science stream at the 10+2 level. Some opt for science voluntarily, others have it thrust upon them while still others choose it since it's the happening stream in India and friends have opted for it. When we think of education as essential for our existence and prosperity envisaged by the nation, our attention is focused on the 'Teacher' who is the master key and if well prepared and qualified, can unlock the doors of knowledge, as well as of material uplift of the people of India. Teachers, therefore, may be significant people in the lives of their student's and they may influence the developments of these students in important way.

In this view, it is considered necessary to study scientifically the relationship between the teaching aptitude and teachers. Such a study is also very important due to established correlation between

teaching aptitude and student's academic achievement. This can work as a powerful criterion for the selection of teachers and can help the administrators in recruiting better teachers.

### **Objectives:**

It is essentially admitted fact that objective for any investigation has got very important role to find out salient and adequate findings. The objective is so framed that the investigator may not go away from the path of researching purposes. The objective of this particular study is **“To ascertain the significant difference between Science and Arts teachers in field of teaching Aptitude.”**

### **Hypothesis:**

There is a significant difference between the Science and Arts teachers of the sample in the area of Teaching Aptitude.

### **Sample:**

In this study 160 teachers have been taken from 54 schools on the basis of randomization. All the schools are located in rural areas. Only government schools run by Basic Shiksha Parishad are included for the collection of data. It has been noticed that female teachers are not available in good number in the schools. Hence in the sample the number of male and female teachers is different.

### **Teaching Aptitude Test Tool:**

This test is meant for measuring the aptitude towards teaching profession. The scale has 10 sub tests and total of 150 items. Each sub-test contains 15 items. There is no time limit for the test but generally the examinees complete it within 30 minutes. The test has the following area belonging to each of the ten sub-tests:

1. Co-operative Attitude
2. Kindliness
3. Patience
4. Wide Interest
5. Fairness
6. Moral Character
7. Discipline
8. Optimism
9. Scholarly Tests
10. Enthusiasm

**Classification of Science and Arts Teacher:**

In the study 50 Science teachers and 110 Arts teachers have been taken on the basis of sample randomly. Both male and female science and arts teachers are included in the data sample.

**TABLE- 1A**  
**Frequency Distribution of TAT scores of Science Teachers**

N-50

| Class interval | Frequencies | F% | Cumulative Frequencies | CF% | Smooth Frequencies |
|----------------|-------------|----|------------------------|-----|--------------------|
| 195-209        | 2           | 4  | 50                     | 100 | 1.33               |
| 180-194        | 2           | 4  | 48                     | 96  | 4.67               |
| 165-179        | 10          | 20 | 46                     | 92  | 7.67               |
| 150-164        | 11          | 22 | 36                     | 72  | 12.33              |
| 135-149        | 16          | 32 | 25                     | 50  | 11                 |
| 120-134        | 6           | 12 | 9                      | 18  | 7.67               |
| 105-119        | 1           | 2  | 3                      | 6   | 3                  |
| 90-104         | 2           | 4  | 2                      | 4   | 1                  |
| 75-89          | 0           | 0  | 0                      | 0   | 0.67               |

**TABLE -1B**  
**Central Tendency & Variability of TAT scores of Science teachers**

| Group    | N  | Mean  | Mdn   | Mode  | SD   | SEm  | Skw  | Ku   | Q1    | Q3  |
|----------|----|-------|-------|-------|------|------|------|------|-------|-----|
| Sci. Trs | 50 | 151.3 | 149.5 | 145.9 | 22.2 | 3.14 | 0.24 | 0.27 | 137.8 | 167 |

Frequency distribution of Science teachers of whole sample is shown in the table (1a). Here highest frequency is 16 which lie in the middle in the (135-149) class-interval and lowest frequencies are on the both externs of the class-intervals. Clearly the highest frequencies are in the middle and lowest in the either sides which indicate normal distribution of sample.

Central Tendency and Variation are shown in the table (1b). Mean, Median and Mode are 151.3, 149.5, and 145.9 respectively. S.D. is 22.2, SEM. is 3.14, Sk is 0.24 and Ku is 0.27. These all values show normal distribution.

**TABLE- 2A**  
**Frequency Distribution of TAT Scores of Arts Teachers**

N=110

| Class interval | Frequencies | F%   | Cumulative Frequencies | CF%  | Smooth Frequencies |
|----------------|-------------|------|------------------------|------|--------------------|
| 195-209        | 2           | 1.8  | 110                    | 100  | 1.3                |
| 180-194        | 2           | 1.8  | 10                     | 98.2 | 4.7                |
| 165-179        | 10          | 9.1  | 106                    | 96.4 | 13.7               |
| 150-164        | 29          | 26.4 | 96                     | 87.3 | 24.7               |
| 135-149        | 35          | 31.8 | 67                     | 60.9 | 25.7               |
| 120-134        | 13          | 11.8 | 32                     | 29.1 | 19.7               |
| 105-119        | 11          | 10   | 19                     | 17.3 | 9.7                |
| 90-104         | 5           | 4.5  | 8                      | 7.3  | 6.3                |
| 75-89          | 3           | 2.7  | 3                      | 2.7  | 2.7                |

**TABLE -2B: Central Tendency and Variability of TAT scores of Arts teachers**

| Group    | N   | Mean  | Mdn   | Mode | SD   | SEm  | Skw   | Ku   | Q1    | Q3    |
|----------|-----|-------|-------|------|------|------|-------|------|-------|-------|
| Arts Trs | 110 | 142.1 | 144.4 | 149  | 22.5 | 2.14 | -0.31 | 0.23 | 129.3 | 157.5 |

Table (2a) and Table (2b) show the Frequency Distribution, Central Tendency and Variation on Teaching Aptitude scores of Arts Teachers in whole sample. Maximum numbers of cases lie in the middle of the Class intervals. The cases on both the extremes are decreased gradually. Highest percentage of cases 31.8% lies in (135 -149) class interval. This indicates normal distribution of scores.

Mean is 142.1, Mdn. is 144.4. The difference is minor and does not elect normal. SD. is 22.5 SEM. is 2.14 Sk is - 0.31 and Ku is 0.23. The Frequency Distribution of cases forms negative skewness.

**TABLE -3: Comparison between Science and Arts teachers in teaching aptitude****N=160**

| Group       | N   | Mean  | SD   | Cr  | Sig. Value |        |
|-------------|-----|-------|------|-----|------------|--------|
| Science Trs | 50  | 151.3 | 22.2 | 2.4 | 0.05       | 0.01   |
| Arts Trs    | 110 | 142.1 | 22.5 |     | 1.98*      | 2.61** |

Significant \* Not Significant \*\*

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There is a difference (table3) of 9.2 between the two Means of Teaching Aptitude of Science teachers and Arts teachers. The C.R. value is 2.4, which is higher than tabulated value 1.98 at level 0.05. Statistically it indicates that mean difference is significant. This shows that Science and Arts teachers differ in Teaching Aptitude. The higher Mean score of Science teachers indicates that Science teachers have high Teaching Aptitude in comparison to the Arts teachers. The obtained value of C.R. is less than 2.61 at level 0.01. Therefore at this level the mean difference is not significant.

### **DIFFERENCE BETWEEN SCIENCE AND ARTS TEACHERS IN TEACHING APTITUDE:**

The Study sample of 160 Science and Arts Teachers. The computed mean of Teaching Aptitude scores is found to be falling under the average Teaching Aptitude category according to Teaching Aptitude Test.

Here also the difference is significant to the level of 0.05, which indicates that Science teachers significantly differ from Arts teachers in Teaching Aptitude. On the basis of data analysis, it can be concluded that the Science teachers are better than their Arts compatriots.

### **REFERENCES**

- 1 Chaudhary V M, "A Study of Academic Achievement of the Students of Basic Shiksha Parishad Schools" International Journal of Advancement in Social Science and Humanity, <http://www.ijassh.in>. (IJASSH) 2016, Vol. No. 1, Issue 2, Jul-Dec e-ISSN: 2455-5150, p-ISSN: 2455-7722, PP 60-63.
- 2 Chaudhary V M, "A Comparative Study between Boy and Girl Students in Relation to their Academic Achievement" Multidisciplinary International Journal [www.mijournal.in](http://www.mijournal.in), (MIJ) 2016, Vol. No. 2, Jan-Dec e-ISSN: 2454-924X; p-ISSN: 2454-8103, PP 93-96.