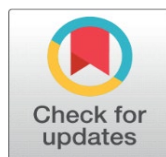
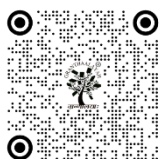


# A STUDY OF THE TEACHING ATTITUDE AND SCIENTIFIC ATTITUDE OF B.ED. STUDENTS STUDYING IN TEACHER TRAINING INSTITUTIONS OF BIJNOR DISTRICT

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## ABSTRACT

The present study entitled “A Study of the Teaching Attitude and Scientific Attitude of B.Ed. Students Studying in Teacher Training Institutions of Bijnor District” was conducted to examine the teaching attitude and scientific attitude of B.Ed. students and to compare these attitudes on the basis of gender (male/female) and locality (rural/urban). The study was delimited to teacher training institutions of Bijnor district. The survey method was employed for the present research. The population consisted of all B.Ed. students studying in teacher training institutions of Bijnor district. A sample of 200 students was selected through stratified random sampling technique, including 120 male and 80 female students, as well as 100 rural and 100 urban students. For data collection, the standardized Teaching Attitude Scale developed by Dr. S. P. Ahluwalia and the standardized Scientific Attitude Scale developed by Dr. Shailaja Bhagwat were used. Mean, standard deviation, and t-test were applied for statistical analysis of the collected data. The findings of the study revealed that there was no statistically significant difference in the teaching attitude of B.Ed. students on the basis of gender and locality. Similarly, no significant difference was found in the scientific attitude of B.Ed. students on the basis of gender and locality. Although slight differences in mean scores were observed, the obtained t-values were not significant at the 0.05 level. The results indicate that gender and locality do not significantly influence the teaching attitude and scientific attitude of B.Ed. students. The study highlights that teacher training programmes are equally effective for students belonging to different genders and localities. It emphasizes the need for providing equal educational opportunities, strengthening scientific thinking, logical reasoning, and positive teaching attitude among all prospective teachers. The findings of the study may prove useful for teacher educators, curriculum planners, and policymakers in improving the quality of teacher education and promoting balanced educational development.

**Keywords:** Teaching Attitude, Scientific Attitude, B.Ed. Students, Teacher Training Institutions, Gender Differences, Rural and Urban Background, Teacher Education, Scientific Thinking, Educational Research, Prospective Teachers

## 1. INTRODUCTION

Nature has endowed human beings with a unique distinction from other living beings, due to which they have the freedom to transcend the control and limitations of nature. When a person transcends in an upward or higher direction, it leads to progress; but when this transcendence is in a downward direction, it results in decline. The objective of education is to promote the upward development of human beings, and education is an important process in the development of human civilization.

Therefore, since the beginning of human development, the need for education has existed in society, and from ancient times to the present it has continued in one form or another. In the modern context, people often understand education merely as the ability to read, write, and obtain employment, but education cannot be confined to such a narrow scope. Explaining the importance of education, Dr. S. Radhakrishnan stated, "Education is not merely a means of citizenship training or a platform for ideas, nor is it only a means of livelihood. It is an initiation into spiritual life and a training of the human soul engaged in the search for truth."

Thus, education is the foundation of the holistic development of human beings, and it can certainly be seen as a means of adapting ancient patterns of life to the new requirements of time and establishing harmony in life.

## **2. SIGNIFICANCE OF THE PRESENT STUDY**

At present, the need for educational reform has been continuously felt for a long time. Society requires teachers who are of good character, mentally healthy, intelligent, and value-oriented citizens. If a teacher possesses these qualities, only then can he or she transfer attributes such as good character, honesty, duty-consciousness, and a sense of sacrifice to students. This would lead to improvement in the education system and accelerate national development. Therefore, through this study, the researcher hopes to identify the necessary factors, obtain suggestions for improving the educational level, and encourage commitment and dedication towards the teaching profession. This research will contribute not only to the development of B.Ed. students but also to the entire teaching community, thereby bringing the desired improvement in teachers' teaching attitude and scientific attitude. This problem is new in nature and is related to B.Ed. students. It is expected that this study will lead to qualitative improvement in teacher education.

### **2.1. STATEMENT OF THE PROBLEM**

A Study of the Teaching Attitude and Scientific Attitude of B.Ed. Students Studying in Teacher Training Institutions of Bijnor District.

## **3. OBJECTIVES OF THE STUDY**

- 1) To determine the teaching attitude of B.Ed. students.
- 2) To conduct a comparative study of the teaching attitude of B.Ed. students on the basis of gender (male and female) and residential background (rural and urban).
- 3) To determine the scientific attitude of B.Ed. students.
- 4) To make a comparative study of the scientific attitude of B.Ed. students on the basis of gender (male and female) and locality (rural and urban).

## **4. HYPOTHESES OF THE STUDY**

- 1) There is no significant difference in the teaching attitude of B.Ed. students on the basis of gender (male and female).
- 2) There is no significant difference in the teaching attitude of B.Ed. students on the basis of residential background (rural and urban).
- 3) There is no significant difference in the scientific attitude of B.Ed. students on the basis of gender (male and female).
- 4) There is no significant difference in the scientific attitude of B.Ed. students on the basis of locality (rural and urban).

## **5. DELIMITATION OF THE STUDY**

This study on the teaching attitude of B.Ed. students in Bijnor district has been conducted in the context of Bijnor district only. In this study, male and female B.Ed. students studying in teacher training institutions have been included. The present research includes only rural and urban teacher training institutions.

## 6. METHOD AND PROCEDURE

In the present research, the researcher used the survey method.

### 6.1. POPULATION AND SAMPLE

In the present study, all students studying in teacher training institutions of Bijnor district were selected as the population. Out of these, 200 students were selected as a stratified sample by random sampling method. Among them, 100 rural students and 100 urban students were included in the sample. Additionally, 120 male students and 80 female students were included in this study.

### 6.2. RESEARCH TOOL

For the present research, a standardized Teaching Attitude Scale developed by Dr. S. P. Ahluwalia was used to measure teaching attitude and a standardized Scientific Attitude Scale developed by Dr. Shailaja Bhagwat was used to measure Scientific Attitude.

### 6.3. STATISTICAL ANALYSIS

For the analysis of data in the study, the mean and standard deviation of the scores were calculated on the basis of students from each category and area. Thereafter, the t-test was computed on the basis of obtained scores to determine the level of significance.

## 7. RESULTS AND CONCLUSIONS

According to the objectives of the study, the data were analyzed. Thereafter, the t-test was calculated on the basis of the obtained data, and the results obtained are presented in the following table.

### Results of t-test for Teaching Attitude on the Basis of Gender

Table 1

Table 1 Teaching Attitude of B.Ed. Students on the Basis of Male and Female Groups					
Dimension	Number	Mean	S.D.	t-value	significance
Male	120	268.34	16.86	0.71	Not significant
Female	80	266.12	24.25		

From the observation of Table No. 1, it is evident that the difference between the means of both groups is slightly in favor of males (268.34) compared to females (266.12), but the difference is very small. The standard deviation indicates greater variability among females. The t-value (0.71) is very low, which shows that this difference is not statistically significant. Hence, no significant difference was found in the teaching attitude of male and female B.Ed. students. Therefore, it can be concluded that there is no statistically significant difference in the teaching attitude of male and female B.Ed. students. Accordingly, Hypothesis No. 1, "There is no significant difference in the teaching attitude of B.Ed. students on the basis of gender (male and female)," is accepted, indicating that gender does not have any significant effect on teaching attitude.

### Results of t-test for Teaching Attitude on the Basis of Area

Table 2

Table 2 Teaching Attitude of B.Ed. Students on the Basis of Rural and Urban Background					
Dimension	Number	Mean	S.D.	t-value	significance
Rural	100	271-77	14-45	Jan-16	Not significant
Urban	100	274-62	19-95		

From the observation of Table No. 2, it is evident that the difference between the means of both groups shows that the mean of rural students (271.77) is slightly lower than that of urban students (274.62), but the difference is very small. The t-value (1.16) is also very low, indicating that this difference is not statistically significant. Hence, no significant difference was found in the teaching attitude of rural and urban B.Ed. students. Therefore, it can be concluded that there is no statistically significant difference in the teaching attitude of rural and urban B.Ed. students. Accordingly, Hypothesis No. 2, "There is no significant difference in the teaching attitude of B.Ed. students on the basis of rural and urban background," is accepted, indicating that area does not have any significant effect on teaching attitude. Thus, it can be said that on the basis of area (rural/urban), there is no significant difference in teaching attitude. Students of both groups were found to have a similarly positive attitude towards teaching, which indicates the balanced development of the education system.

### Result of t-test on Scientific Attitude Based on Gender

**Table 3**

Table 3 Scientific Attitude of B.Ed. Students on the Basis of Male and Female					
Dimension	Number	Mean	S.D.	t-value	significance
Male	120	181.54	13.25	1.73	Not significant
Female	80	184.67	11.35		

From the above Table No. 3, it is evident that there is a slight difference in the mean scores of scientific attitude between male and female B.Ed. students. The mean score of female students (184.67) is higher than that of male students (181.54), which indicates that female students possess comparatively higher scientific attitude. However, the obtained t-value is 1.73, which is lower than the required significant value at the 0.05 level. Therefore, the difference is not found to be statistically significant. This means that there is no real significant difference in the scientific attitude of male and female B.Ed. students. Hence, the hypothesis, "There is no significant difference in the scientific attitude of B.Ed. students on the basis of gender (male and female)," is accepted.

### Result of t-test on Scientific Attitude Based on Locality

**Table 4**

Table 4 Scientific Attitude of B.Ed. Students on the Basis of Rural and Urban Areas					
Dimension	Number	Mean	S.D.	t-value	significance
Rural	100	185.4	10.95	1.44	Not significant
Urban	100	182.98	12.78		

From the above Table No. 4, it is evident that there is a slight difference in the mean scores of scientific attitude between rural and urban B.Ed. students. The mean score of rural students (185.40) is slightly higher than that of urban students (182.98), which indicates that rural students possess comparatively higher scientific attitude. However, the obtained t-value is 1.44, which is lower than the required significant value of 1.97 at the 0.05 level. Therefore, the difference is not found to be statistically significant. This means that there is no significant difference in the scientific attitude of rural and urban B.Ed. students. Hence, the null hypothesis, "There is no significant difference in the scientific attitude of B.Ed. students on the basis of locality (rural and urban)," is accepted.

## 8. FINDINGS OF THE STUDY

On the basis of statistical analysis and interpretation of the collected data, the following findings were obtained:

- 1) No significant difference was found in the teaching attitude of male and female B.Ed. students studying in teacher training institutions of Bijnor district. Although the mean score of male students was slightly higher than that of female students, the obtained t-value (0.71) was not significant at the 0.05 level.
- 2) No significant difference was found in the teaching attitude of rural and urban B.Ed. students. The mean score of urban students was slightly higher than that of rural students, but the obtained t-value (1.16) was not statistically significant.

- 3) No significant difference was found in the scientific attitude of male and female B.Ed. students. Female students showed a comparatively higher mean score in scientific attitude, but the obtained t-value (1.73) was not significant at the 0.05 level.
- 4) No significant difference was found in the scientific attitude of rural and urban B.Ed. students. Rural students obtained a slightly higher mean score than urban students, but the t-value (1.44) was not statistically significant.
- 5) The study indicates that B.Ed. students, irrespective of gender and locality, possess almost similar teaching attitude and scientific attitude.
- 6) The findings suggest that teacher training institutions of Bijnor district are providing a comparatively balanced educational environment to all students.
- 7) The non-significant differences reveal that factors such as gender and locality do not create any major variation in the teaching attitude and scientific attitude of B.Ed. students.

## 9. RESULTS OF THE STUDY

- 1) The calculated t-value (0.71) for teaching attitude on the basis of gender was found to be not significant. Therefore, the null hypothesis stating that "There is no significant difference in the teaching attitude of B.Ed. students on the basis of gender" was accepted.
- 2) The calculated t-value (1.16) for teaching attitude on the basis of locality was not significant. Hence, the null hypothesis regarding rural and urban students was accepted.
- 3) The calculated t-value (1.73) for scientific attitude on the basis of gender was also not significant. Therefore, the null hypothesis was accepted.
- 4) The calculated t-value (1.44) for scientific attitude on the basis of locality was found to be not significant. Thus, the null hypothesis was accepted.
- 5) All four hypotheses of the study were accepted because the obtained t-values were lower than the required table value at the 0.05 level of significance.

## 10. CONCLUSION OF THE STUDY

The present study concludes that there is no statistically significant difference in the teaching attitude and scientific attitude of B.Ed. students on the basis of gender and locality in teacher training institutions of Bijnor district. Both male and female students were found to possess almost similar attitudes toward teaching and scientific thinking. Similarly, rural and urban students also demonstrated nearly equal levels of teaching attitude and scientific attitude.

The study further concludes that the teacher education programme plays an important role in developing positive professional attitudes and scientific outlook among prospective teachers irrespective of their background. The balanced results indicate that teacher training institutions are functioning effectively in providing equal educational opportunities and learning experiences to students belonging to different genders and localities. It can also be inferred that teaching attitude and scientific attitude are essential qualities for effective teaching, and teacher education programmes are contributing positively toward the development of these qualities among B.Ed. students.

## 11. EDUCATIONAL IMPLICATIONS

- 1) Teacher training institutions should continue to provide equal educational opportunities to all students irrespective of gender and locality.
- 2) The curriculum of B.Ed. programmes should emphasize the development of positive teaching attitude and scientific outlook among future teachers.
- 3) Teacher educators should adopt learner-centered and activity-based teaching methods to strengthen professional competencies.
- 4) Workshops, seminars, science-based activities, and practical teaching experiences should be organized regularly to promote scientific attitude among teacher trainees.

- 5) Guidance and counselling services should be provided to help students develop confidence, professional ethics, and positive attitudes toward teaching.
- 6) Educational institutions should encourage critical thinking, creativity, and problem-solving abilities among teacher trainees.
- 7) The findings of the study may help curriculum planners, policymakers, and teacher educators in improving the quality of teacher education programmes.
- 8) Equal participation of rural and urban students as well as male and female students should be encouraged in academic and co-curricular activities to maintain balanced professional development.
- 9) Teacher education programmes should focus on holistic development so that future teachers become professionally competent, scientifically oriented, and socially responsible.

## **CONFLICT OF INTERESTS**

None.

## **ACKNOWLEDGMENTS**

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