

Attitude towards science teaching of student teachers

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Abstract

This research paper focuses on attitude towards science teaching of student teachers in cuddalore district. 240 students – teachers were taken as the sample of the study using random sampling technique. Mean, SD, and 't' test were used for analyzing the data. The result exposed that the student teachers in their attitude towards science teaching is high.

I. INRODUCTION

Attitude is the way a person views something or tends to behave towards it, often in an evaluative way (**Cobuild Advanced English Dictionary, 2010**).

Scientific attitude is really a composite of a number of mental habits, or of tendencies to react consistently in certain ways to a novel or problematic situation. These habits or tendencies include accuracy, intellectual honesty, open-mindedness, suspended judgment, criticalness, and a habit of looking for true cause and effect relationships. It is a cognitive concept; scientific attitudes are normally associated with the mental processes of scientists. These habits are important in the everyday life and thinking, not only of the scientist, but of everyone.

Bhaskara Rao (1989) stated that the most useful scientific attitudes are open mindedness, critical mindedness, respect for evidence, suspended judgment, intellectual honesty, willingness to change opinion, search for truth, curiosity, rational thinking, etc.

Attitude towards science teaching: Moore (1970) has rightly defined “attitude towards science is the generalized attitude towards the universe of science content and being measured in terms of its favorableness estimated from the scores obtain by the subject an attitude scale towards science”.

II. NEED AND SIGNIFICANT OF THE STUDY

In a world where science plays important roles in society, as they do today its essential that educated people posses basic understanding of science in order to make informed decision in their daily lives and to function effectively. Thus basic knowledge of science becomes essential for each and everyone in the society, it is the central concern of science education in its entire ramification both in the formal institution as well as the mass media. The science attitude is not the one that simply comes with maturity, must be encouraged, practiced and emphasize during the learning process. Careful planning is one of the most helpful ways of giving students in the development of such an attitude. A course study or a syllabus need not be confining, but such guides can offer many needed ideas concept and facts that will aid teacher and pupil with their planning.

III. REVIEW OF RELATED STUDIES

Uyanik, Gökhan. (2016). this study is to investigate the attitudes of the primary school teacher candidates towards teaching profession and self-efficacy beliefs in teaching science. The research was conducted with a survey model. The sample of the study consisted of 182 teacher candidates who were studying at the 2015-2016 spring term from Kastamonu University, at Faculty of Education in Elementary Teacher Training program at the first and fourth years of university level. Scale of Self-Efficacy Beliefs towards Science Teaching and Scale of Attitudes towards to Teaching Profession were used as data gathering tools. Independent t-testing and Pearson's Correlation Coefficients have been used in analyzing the data. According to findings, there was a significant difference between the freshman and senior students on the self-efficacy scaling related to teaching the science in favor of the senior students. In addition, it was also been discovered that there was also statistical difference in favor of the senior students compared to the freshman students on attitude scale towards to the teaching profession. It has also found that there was a statistical intermediate positive relationship between the self-efficacy of teaching the science and the attitudes towards teaching profession at the teacher candidates, who were studying at the first year of the university. However, it was discovered that there was a higher probability positive relationship between the self-efficacy beliefs and the attitudes to the teaching profession of teacher candidates, who were at the last year of the university.

Erdogan, Sezen Camci. (2017). The purpose of this study is to determine science teaching attitudes and scientific attitudes of pre-service teachers of gifted students due to gender and grade level and also correlation among these variables. It is a survey study that the group is 82 students attending Gifted Education undergraduate level. Data is

gathered by Scientific Attitude Inventory, SAI II and Science Teaching Attitude Scale. Then data is analyzed by independent samples t test, ANOVA, correlation and regression statistical methods. As conclusion, there is a significant difference due to grade level and there is a high correlation between scientific attitudes and science teaching attitudes. In this context it is recommended that learning environment which positively affects scientific attitudes and science teaching attitudes should be organized.

IV. OBJECTIVES OF THE STUDY

- To study the attitude of student teachers towards science teaching.
- To study the difference in the level of attitude towards science teaching of male and female student teachers..
- To study the difference in the level of attitude towards science teaching of student teachers residing in rural and urban area.
- To study the difference in the level of attitude towards science teaching of student teachers in under graduate and post graduate.

V. HYPOTHESES

- There is no significant difference between the attitude towards science teaching of male and female student teachers
- There is no significant difference between the attitude towards science teaching of student teachers residing in rural and urban area
- There is no significant difference between the attitude towards science teaching of student teachers in under graduate and post graduate

VI. SCHEMATIC PRESENTATION OF THE DESIGN

Sl. No.	Type	Sources
1.	Nature of research	Normative Survey
2.	Variables	Attitude towards Science Teaching
3.	Tool used	Attitude towards Science Teaching questionnaire
4.	Sampling Technique	Random sampling
5.	Size of the sample	240 is drawn from student-teachers from various college of Education in cuddalore District.
6.	Sub Sample	
	Gender	(a) Boys- 102 (b) Girls-138
	Locality	(a) Rural -160 (b) Urban - 80
	Level of study	(a) Under Graduate-173 (b) Post Graduate-67
7.	Statistical techniques used	Descriptive Analysis and Differential Analysis

VII. DATA ANALYSIS

7.1 Descriptive Analysis

Table 1: Showing Mean and Standard Deviation of attitude towards student teachers

Group	N	Mean	SD
Student Teacher	240	169.8	25.43

The table above describes the mean and standard deviation of student-teachers in attitude towards science teaching. As per the Attitude towards Science Teaching questionnaire, the maximum score is 250. It is observed from the table in the mean score is 169.8 of student teachers in their attitude towards science teaching is high.

7.2 Differential Analysis

Hypothesis – 1: *There is no significant difference between the attitude towards science teaching of male and female student teachers*

Table 2: Showing Mean and Standard Deviation of male and female student teachers in their attitude towards science teaching
 Max. Score: 250

Group	N	Mean	SD	't' Value	Results at 0.05 level
Male	102	169.51	24.88	0.8789	NS
Female	138	170.01	25.92		

Hypothesis – 2: *There is no significant difference between the attitude towards science teaching of student teachers residing in rural and urban area*

Table 3: Showing Mean and Standard Deviation of rural and urban student teachers in their attitude towards science teaching
 Max. Score: 250

Group	N	Mean	SD	't' Value	Results at 0.05 level
Rural	160	168.78	25.67	0.3742	NS
Urban	80	171.85	24.95		

Hypothesis – 3: *There is no significant difference between the attitude towards science teaching of student teachers in under graduate and post graduate*

Table 4: Showing Mean and Standard Deviation of under graduate and post graduate student teachers in their attitude towards science teaching.
 Max. Score: 250

Group	N	Mean	SD	't' Value	Results at 0.05 level
under graduate	173	169.19	25.25	0.5541	NS
post graduate	67	171.39	26.02		

VIII. FINDINGS OF THE STUDY

- The mean score of student teachers in their attitude towards science teaching is high.
- It is observed that there is no significant difference between the attitude towards science teaching of male and female student teachers.

- It is inferred that there is no significant difference between the attitude towards science teaching of student teachers residing in rural and urban area.
- It is found that there is no significant difference between the attitude towards science teaching of student teachers in under graduate and post graduate.

IX. CONCLUSION

The purpose of the present investigation was to study about attitude towards science teaching of student teachers. The study is sure to find some usefulness in the field of education and findings of the study can serve as a database for further research.

X. REFERENCES

- [1] Uyanik, Gökhan. (2016). "Investigation of the Self-Efficacy Beliefs in Teaching Science and Attitudes towards Teaching Profession of the Candidate Teachers", Universal Journal of Educational Research, v4 n9 p2119-2125.
- [2] Erdogan, Sezen Camci. (2017). "Science Teaching Attitudes and Scientific Attitudes of Pre-Service Teachers of Gifted Students", Journal of Education and Practice, v8 n6 p164-170.
- [3] Ajzen, I and F, Schbein M, (1980), Understanding attitudes and predicting social behavior, New Jersey Prentice Hall.
- [4] Koballa, T. R. Jr. (1988). Attitude and related concepts in science education. Science Education, 72, 115-126.
- [5] Morrell, P. D., & Lederman, N. G. (1998). Students' attitudes toward school and classroom science: Are they independent phenomena? School Science and Mathematics, 98(2), 76-83.
- [6] http://www.answers.com/Q/What_is_scientific_attitude
- [7] <https://www.reference.com/science/scientific-attitudes-cc15df0f0a167279>
- [8] <https://www.collinsdictionary.com/us/dictionary/english/attitude>

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