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Science Related Attitudes of Upper Primary School Students of Bhiwani District of Haryana

Education

KEYWORDS : Science related attitudes, upper primary schools

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ABSTRACT

In this era of science and technology, attitude of people is changing as the science made our life easier with new inventions. Science is the field of gathering knowledge through investigations. This study was conducted to examine the science related attitude of upper primary school students of Bhiwani district of Haryana.188 students from two schools were selected through random sampling to administer the test and the Test of Science related attitudes was used to test the scientific attitude of students. The major findings were – (i) there is no significant difference between the science related attitudes of rural and urban students (ii) there is no significant difference between the science related attitudes of boys and girls

Introduction

From the earlier times, man has been curious about anything he couldn't understand. Slowly and gradually he developed the scientific method of thinking and of investigating his problems which, today is producing astonishing results. By attempting to apply this method of inquiry to behavioural and social sciences, the fields of psychology, economics, political science, sociology and education have become recognized as sciences. The term *science*, therefore, is now thought of a method or attitude rather than a field of subject matter.

For making the teaching-learning process successful in science, along with development of concepts and skills, attitude have to be developed gradually. Attitude is the term which is being used frequently in daily life. According to Fraser (1981), "There is a considerable consensus of opinion that the promotion of favorable attitude is an important aim of science education. There is confusion about what meaning should be placed on the 'attitude' to science".

Schibeci (1984) has described that science-related attitudes are generally divided into two categories: scientific attitudes and attitude towards science. Bennet (2003) has described that attitude towards science refers to the views of students developed for science as the results of experiences in different environments in the field of science education.

Need for the study

The investigator is working as science teacher educator. She frequently visits the schools and observes the classroom practices. As the word science is considered as attitude rather than subject matter hence it is necessary to examine the scientific attitude. It will affect the teaching-learning process as well as the achievement of the students in respective field. With the developments in science and spread of information through media to distant places, attitudes of people are changing towards science. So the investigator has chosen to study the science related attitude of students of two schools of different areas.

Objectives of the study

- To find out the level of science related attitude of urban and rural upper primary school students of Bhiwani District of Haryana.
- To compare the science related attitude of urban and rural upper primary school students of Bhiwani District of Haryana.
- To compare the science related attitude of urban boys and girls upper primary school students of Bhiwani District of Haryana.
- To compare the science related attitude of rural boys and girls upper primary school students of Bhiwani District of Haryana.

Hypotheses of the study

1. There is no significant difference in science related attitude of urban and rural upper primary school students of Bhiwani District of Haryana.
2. There is no significant difference in science related attitude of urban boys and girls upper primary school students of Bhiwani District of Haryana.
3. There is no significant difference in science related attitude of rural boys and girls upper primary school students of Bhiwani District of Haryana.

Methodology

Sample

Sample of the study consisted of 188 students selected through random sampling from urban and rural areas of Bhiwani District.

Tools and techniques

Test of science related attitudes was used as tool of the study. It consists of 70 items and each item is positive or negative with respect to scoring. For positive items, responses SA,A,N,D,SD are scored 5,4,3,2,1 respectively and for negative items, responses SA,A,N,D,SD are scored 1,2,3,4,5 respectively. Omitted or invalidly answered items are given a score of 3.

Analysis and interpretation of data

In the light of the objectives of the study, the results obtained from the statistical analysis were analysed and interpreted.

TABLE 1

Science related attitude of urban and rural school students

Variable	Sample size	Mean	SD	t value	Level of significance
Urban	106	265.51	20.67	0.3945	*NS
Rural	82	264.15	26.47		

*Not significant

It is clear from the table that there is no significant difference between the mean test scores of urban and rural students. Hence the results supports the hypothesis means there is no significant difference between the science related attitudes of urban and rural upper primary school students.

TABLE 2

Science related attitude of urban boys and girls

Variable	Sample size	Mean	SD	t value	Level of significance
Boys	53	265.635	20.62	0.062	*NS
Girls	53	265.385	20.32		

*Not significant

It is clear from the table that there is no significant difference between the mean test scores of urban boys and girls students. Hence the results supports the hypothesis means there is no significant difference between the science related attitudes of urban boys and girls upper primary school students.

TABLE 3
Science related attitude of rural boys and girls

Variable	Sample size	Mean	SD	t value	Level of significance
Boys	53	270.326	26.60	1.361	*NS
Girls	29	262.108	24.33		

*Not significant

It is clear from the table that there is no significant difference between the mean test scores of rural boys and girls students. Hence the results supports the hypothesis means there is no significant difference between the Science related attitudes of rural boys and girls upper primary school students.

Conclusion

There is no significant difference between science related attitudes of urban and rural students and of boys and girls of Bhiwani district of Haryana. Investigation and experimentation in the science created students interest in Science. Further the discoveries and development leading to quality life made them curious to know about the scientific phenomenas. Scientific phenomenas related to their life experiences made their attitude positive towards Science.

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