



ATTITUDE AND CONCERN OF SECONDARY SCHOOL STUDENTS TOWARDS MATHEMATICS

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ABSTRACT

The aim of the present study is to find out the perception of secondary school students towards mathematics. To serve this objective a sample of 120 students were selected by purposively across the school of Baripada town of Mayurbhanj district of Odisha. To collect the data from selective sample, a self-developed attitude scale towards mathematics (ASM) was used. The findings revealed that there is a significant difference between boys and girls secondary school students on their attitude towards mathematics. Further, the urban students were more positive attitude towards mathematics as compare to rural students.

Keywords: *Attitude, secondary school students, mathematics*

1. INTRODUCTION

Mathematics occupies a very important place in school curriculum. A continuous advancement in educational research based on mathematics and technology has led to the greater application of mathematics in contemporary societies. Mathematics achievement is interrelated with other factors like families and students (Singh, Granville and Dika, 2002). Mathematics education can no longer be considered a matter of filling a student with subject matter but its practical ability is more important for students. Mathematical achievement is influenced by home environment and society. The mathematics education of a student in school should be concerned with history, the process and the application of mathematics to our present day problem.

Today teaching learning process is mostly focused on the pre-digested facts, rules, theories, and principles for which attitude, perception and concern of the students is paramount important. Curiosity and drive for continued learning are dependent on attitudes and emotions. The prime objective in individualistic perspective is the cultivation of scientific temper which include a spirit of inquiry, a disposition to reason logically and dispassionately, a habit of judging beliefs. It is also expected of mathematics education that it would give individual a firm grasp on concepts and processes of mathematics and impart to them the ability to use the scientific method of problem solving. It is needed to enquire about the present mathematics education in school that causes the students to lose their enthusiasm for mathematics. A study carried out by Maria de Lourdes (2012) revealed that, in general, students held positive attitudes towards mathematics and also highlighted the main effects of grade and math achievement on these attitudes. No gender effect was identified although the girls showed a continuous decline in attitudes the further they progressed in school.

The present study tried to find out the attitude of high school students towards mathematics.

OBJECTIVES OF THE STUDY

1. To study the attitude of high school students towards mathematics.
2. To study the attitudinal difference between boys and girls students towards mathematics.
3. To study the attitudinal difference between rural and urban high school students towards mathematics.

HYPOTHESES OF THE STUDY

1. There exists a positive attitude of high school students towards mathematics.
2. There exists no significant difference boys and girls with regard to attitude towards mathematics.
3. There exists no significant difference between rural and urban high school students' attitudes towards mathematics.

2. RESEARCH METHODOLOGY

As per the nature of the study, descriptive study. The high school students studying in various schools of Mayurbhanj district of Odisha constituted the population of the present study. The investigators purposively selected 120 (70 boys and 50 girls) students from eight (four each) government and private high schools belonging to urban and rural areas. The sampling was done in two stages i.e. in the first stage selections of schools

and in the second the selection of subjects for the study. In the present study, the investigators used self-developed "Attitude towards Mathematics Scale (ASM). The scale is highly reliable and valid.

3. ANALYSIS AND INTERPRETATION

Table-1

SIGNIFICANCE OF DIFFERENCE IN MEAN ATTITUDE SCORES BETWEEN BOYS AND GIRLS HIGH TOWARDS MATHEMATICS

Groups	N	M	S.D.	t-ratio	Level of significance
Boys	70	134.39	10.05	2.03	.05
Girls	50	130.08	11.01		

Table-1 denoted that the mean scores of attitude towards mathematics of boys and girls high school students are 134.39 and 130.08 with SDs 10.05 and 11.01. The t-ratio came out from above two groups is 2.03 which is significant at .05 level of significance. That means there is a significant difference exist between boys and girls attitude towards mathematics. Thus, the hypothesis-1 that 'there is exist a significant difference between boys and girls students on attitude towards mathematics subject' is retained.

Table-2

SIGNIFICANCE OF DIFFERENCE IN MEAN ATTITUDE SCORES BETWEEN URBAN AND RURAL HIGH TOWARDS MATHEMATICS

Groups	N	M	S.D.	t-ratio	Level of significance
Urban	60	125.14	11.05	3.26	.01
Rural	60	128.03	10.01		

Table-2 denoted that the mean scores of attitude towards mathematics of urban and rural school students are 125.14 and 128.03 with SDs 11.05 and 10.01. The t-ratio came out from above two groups is 3.26 which is significant at .01 level of significance. That means there is a significant difference exist between urban and rural areas high school students attitude towards mathematics. Thus, the hypothesis-2 that 'there is exist a significant difference between urban and rural areas students on attitude towards mathematics subject' is retained.

4. DISCUSSION AND CONCLUSION

The findings and conclusion of the study indicates that the maximum high school students have positive attitude towards mathematics. Therefore the researchers suggested that parents and teachers should take some step to make more conducive environment for learning mathematics, so that, students should give more value to mathematics in the daily life. Further, findings of the study indicate that high school boys' students have more attitudes towards mathematics than the girl's students. Adequate opportunities should be given to the high school girls students so that they can also develop a better attitude to the study. So far as findings based on difference between urban and rural high school students on attitude towards mathematics indicates that there is a significant difference between the above two groups. Again, the study found that, urban high school students have more positive attitude towards mathematics than their rural counter parts. That means, high school students belonging to rural areas do not have adequate facilities to study mathematics. So, special attention should be made to develop attitude towards mathematics among the rural students for promoting mathematics education in target areas.

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