A STUDY OF INTEREST AND ACHIEVEMENT OF STUDENTS IN MATHEMATICS AT UPPER PRIMARY STAGE IN RURAL AND URBAN PRIVATE SCHOOLS

Kanchan Khatreja*

ABSTRACT

The study focussed on students' mathematics achievement and their interest in mathematics as well as on the relation between two constructs. Present study was conducted in 4 schools on 100 students of class 8th of two rural private schools and two urban private schools of Gurgaon city. In particular the result shows that the development of an individual students achievement of grade 8 depends on the achievement level of the specific classroom and therefore, on the specific mathematics instruction. Interest in mathematics could be regarded a predictor for mathematics achievement. Moreover, findings of the research suggest that the students show hardly any fear of mathematics independent of their achievement level. Data was analyzed by using't' test and co-efficient of correlation. Result showed that there is no significant difference in the Interest and academic achievement of students of rural and urban private schools towards learning Mathematics. There is slightly less correlation in the interest towards learning Mathematics and Achievement of students of rural and urban private schools.

Key words: *Mathematics, Interest towards mathematics, Achievement, Upper primary, Rural and Urban Private Schools.*

INTRODUCTION

Mathematics is taught as an important subject in the school. In real sense mathematics is a science of space and quantity helping us in solving the problems of life needing numeration and calculations. It provides opportunity for the intellectual gymnastic of the man's inherent powers. It is an exact science and involves high cognitive abilities and powers. It is in this sense that Courant and Robbins once tried to define Mathematics in the following way:

"Mathematics as an expression of the human mind reflects the active will, the contemplative reason, and the desire for aesthetic perfection. Its basic elements are logic and intuition, analysis and construction, generality and individuality."

Mathematics is taken as a chest filled up with so many valuable tools concerning with the operations like measuring, weighing, counting etc. and helps in proper understanding of the nature's work and complicated problems of life by converting them into its language of signs and symbols. Benjamin Franklin said "What science can there be nobler, more excellent, more useful for men, more admirable, high and demonstrative than that of Mathematics."

Mathematics now dominates almost every field of one's activities. In this age of science and technology, it has permeated through the human life in such a way that, it has now become every man everyday concern. Mathematics disciplines the mind, systematizes ones thought and reasoning. The subject has also rich potentialities of affording true enjoyment to its students. Mathematics is an important subject in school curriculum. It is more closely related to one's daily life as compared to other subjects. Except one's mother tongue there is no other subject which is more closely related to one's daily life as mathematics. Mathematics is considered to be the father of all sciences. Its knowledge is necessary for every person. Our needs remain incomplete without it. A Mathematics teacher who has to teach Mathematics all the time should realize that Mathematics is useful and qualitative so that he has full confidence in Mathematics and can develop confidence among his students also. He should tell the importance of Mathematics to the

*KIIT College of Education, Gurgaon, Haryana

students as well as parents and try to satisfy them.

A teacher has to recognize that till what level necessities of modern citizens are fulfilled by Mathematics and he should also acknowledge parents with this fact. When he will know the value of Mathematics, he will automatically gain success in his work. He will get to know what are the aims and objectives of Mathematics teaching and what the importance of Mathematics in reality is. Mathematics is an important subject and task of Mathematics teacher is also very important.

It is widely agreed that Mathematics and Science are highly significant aspects of education. They enrich our understanding of the world, enabling us to develop and communicate our ideas and apply them in our social lives and, in the long term, they contribute to our success in work and in society at large. 'Success' should not only be measured in terms of achievement in examinations, but also in terms of individuals' interest, motivation, confidence and enjoyment elements that are important throughout childhood and indeed throughout life. Yet for all its importance it is clear that many children continue to experience problems in their experiences of learning mathematics. In assessing Mathematics performance and potential of students, interests towards Mathematics and Mathematics learning are frequently cited as factors contributing to success. Several studies have shown that interests are conductive to good performance. In the present study the researcher prepared an interest questionnaire to find out the interest in mathematics and studied its relationship with mathematics achievement.

OBJECTIVES OF THE STUDY

The following objectives have been formulated related to the study:

1. To find out the Interest of the students in Mathematics at upper primary stage in rural and urban private schools.
2. To find out Achievement of students in Mathematics at upper primary stage in rural and urban private schools.
3. To find out relationship between Interest and Achievement of students in Mathematics.

HYPOTHESES OF THE STUDY

Keeping in view the above objectives of the study, the following hypotheses have been framed.

(1) There is no significant difference in the Interest of students of rural and urban private schools towards learning Mathematics.

(2) There is no significant difference in Achievement of students in Mathematics of rural and urban private schools.

(3) There is no significant relationship in the interest towards learning Mathematics and Achievement of students of rural and urban private schools.

RESEARCH METHODOLOGY

METHOD

The Normative Survey Method has been used for the collection of the data.

Sample- The sample is comprised to the students of class 8th of two rural private schools and two urban private schools of Gurgaon city. The sample contains 100 students of class 8th.

TOOLS

The investigator used the following tools in the present study.

1. An Interest Questionnaire for school students to check level of Interest in Mathematics.
2. Achievement of students in Mathematics from school record.

STATISTICAL TECHNIQUES EMPLOYED

To arrive at the meaningful results and conclusions of the present study suitable statistical techniques are employed by the researcher. The statistical techniques which are used to analyze the data are as under- Mean, Standard Deviation, t- test and co-efficient of correlation.

ANALYSIS AND INTERPRETATION

Hypothesis -1 There is no significant difference in the Interest of students of rural and urban private schools towards learning Mathematics.

	Rural Students	Urban Students	t-VALUE	Remarks
Mean	83.2	81.04	0.779	Not Significant
Median	88	88		
S.D	11.71	15.17		

Table-1

As seen in above table the calculated value of t is less than the tabulated value at 0.01 level of Significance. Hence, the null hypothesis is accepted. Thus it can be concluded that there is no significant difference in the Interest of students of rural and urban private schools towards learning Mathematics.

Hypothesis -2 There is no significant difference in Achievement of students in Mathematics of rural and urban private schools

	Rural Students	Urban Students	t-VALUE	Remarks
Mean	57.14	76.36	1.36	Not Significant
Median	56.5	78.5		
S.D	22.27	14.42		

Table-2

As seen in above table the calculated value of t is less than the tabulated value at 0.01 level of significance. Hence, the null hypothesis is accepted. Thus it can be concluded that there is no significant difference in Achievement of students in Mathematics of rural and urban private schools.

Hypothesis-3 There is no significant relationship in the interest towards learning Mathematics and Achievement of students of rural and urban private schools

	N	VARIABLE	r-VALUE	Remarks
Rural Students	50	Academic Achievement And Interest	0.234	\ Low Co-relation
Urban Students				

Table-3

As seen in above table calculated r-value is 0.234. It shows that there is low co-relation between Interest and Achievement of students in Mathematics. Hence, Null hypothesis is accepted.

FINDINGS OF THE STUDY

After proper analysis and interpretation of data, the major findings and conclusion of the study are as follows:

1. There is no significant difference in the Interest of students of rural and urban private schools towards learning Mathematics.
2. There is no significant difference in Achievement of students in Mathematics of rural and urban private schools.
3. There is low co-relation between Interest and Achievement of students in Mathematics.

CONCLUSION

A teacher should know the interest of each pupil in the beginning of school years. Instruction should begin at the point of interest of the student and this cannot be accomplished unless these interests are known because a student remembers an event or experience better in which he is interested, but will not learn a lesson properly in which he is not interested. Thus for proper retention, the interest of the student is to be taken into consideration by the teacher. Teaching and learning mathematics are complex tasks. The effect on student learning of changing a single teaching practice may be difficult to discern because of the simultaneous effects of both the other teaching activities that surround it and the context in which the teaching takes place. Thus, as teachers seek to improve their teaching effectiveness by changing their instructional practices, they should carefully consider the teaching context, giving special consideration to the types of students they teach.

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