



A STUDY ON XI STANDARD SLOW LEARNER STUDENTS ATTITUDE TOWARDS MATHEMATICS



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ABSTRACT :

The main aim of education is to develop harmonious personality of learner. Education should make pupils fit to live with. In all modern human societies the young are prepared for their future roles through educational process which may be in the form of examination. Schools are always transitional institutions. They prepare pupils for education or for occupation or for family life and so on. Mathematics in the real sense is a science of space and quantity that helps in solving the problems of life needing numeration and calculation. It provides opportunities for the intellectual gymnastic of the man's inherent powers.

KEY WORDS - develop harmonious , Mathematics , provides opportunities.

1. INTRODUCTION:

Teaching of Mathematics essentially helps the students in acquiring essential mathematics knowledge, skills, interests and attitudes. And it is necessary for and helpful in the realisation of the practical or utilitarian value, disciplinary value and cultural value. Mathematics education trains students to make and use measurements and includes the study of computer programming, algebra, statistics, geometry and calculus. Attitude is a mental set or disposition, readiness to respond and the psychological basis of attitudes, their permanence, their learned nature and their evaluative character. It includes object things, peoples, places, ideas or situations. Attitudes are not just a passive result of past experience; instead they impel behaviour and guide its form and manner. The components of attitudes are:

- i) a cognitive component (opinion information or strength of belief or disbelief;
- ii) an affective component (emotional component of like (or) dislike) and
- iii) an action (co nature behavioural component of habit or readiness to respond).

2. NEED FOR THE STUDY:

In every class, there are three types of students: 1. Those who perform very well, 2. Those who never perform well and 3. Those who can perform well; but do not fare well actually. The pupils of the third category may have the general intelligence to do well, but owing to several factors, they do not fare well in mathematics. Special attention will help the pupils of that category to bring out their abilities in full. If this is done in schools, the society may have to lose eminent scholars in mathematics and great mathematicians.

The influence of the teacher on the pupil is not confined to imparting of subject knowledge alone, but goes further to play a part in the total development of the child. The influence of the teacher has been studied on the attitude towards mathematics. In the present curriculum attempt is being made to include Mathematics as an integral part of school education to develop the speed and accuracy in doing numerical problems, an ability for abstract, an ability of logical reasoning, an ability for spatial concepts and so on. However, Mathematics achievement education in schools and colleges largely do not cater to aims and objectives of Mathematics education as specified by many educational commissions and committee. Students, mostly prepare themselves for passing examinations. Further, more the teachers and parents were concerned with relatively low achievement in Mathematics and a number of studies had looked into the causes of such poor performance. Attitude is really the disposition of an individual to learn and to develop some proficiency in some particular area. Actually, it helps to acquire knowledge in a particular area and on the basis of interest, the future performance of a child can be predicted. A child, under the pressure of parents or teachers, selecting a professional course will be a failure in that area without attitude in that field. So it is the responsibility of teachers and parents to guide their children according to their attitude. Modern education must not restrict itself to developing more rote learning, but also nurture the ability of children to produce relevant new meaning to their classroom experiences. Hence, along with promoting educational achievement it is obligatory on the part of the school to equip the child with the skill, of logical thinking and reasoning which will enable him/her to cope effectively with whatever state of world he/ she will encounter later in life. Curriculum which impacts training in these is the need of the hour. Although, there are documentary evidences about the effects of factors like gender, region, stream of study, medium of instruction, type of school management and socio economic status on attitude towards Mathematics, more investigations are necessary.

3. OBJECTIVES:

- a. To investigate the difference of Male and Female due to their Attitude towards Mathematics.
- b. To investigate the difference of Region due to their Attitude towards Mathematics
- c. To investigate the difference of Stream of Study due to their Attitude towards Mathematics
- d. To investigate the difference of Medium of Instruction due to their Attitude towards Mathematics
- e. To investigate the difference scores of Types of Management due to their Attitude towards Mathematics
- f. To investigate the difference of Socio - Economic Status due Attitude towards Mathematics

4. HYPOTHESES OF THE STUDY:

- a. There is no significant difference in Attitude towards Mathematics of XI standard students in Kalaburagi District, owing to differences in their gender, region, stream of study, medium of instruction, type of school management and socio - economic status
- b. There is no significant association between Attitudes towards Mathematics of XI standards students in Kalaburagi District in their gender, region, stream of study, medium of instruction, type of school management and socio- economic status

5. LIMITATIONS OF THE STUDY:

The study was limited to only 10 schools in Kalaburagi District. The study was restricted to four Government schools, three aided and three unaided school from both Rural and Urban areas. The sample was limited to 450 students of XI only. Standardised test materials alone were used in this investigation. The investigation did not develop any psychological tests for investigative purpose.

6. STUDIES RELATED TO ATTITUDE TOWARDS MATHEMATICS:

Thomas (2006) found that students using on ILS for Mathematics instruction performed better on standardised tests and were more positive towards Mathematics and they worked in co-operative groups than when they worked on the same individually. Xin Ma and Jianymin (2004) found that the achievement demonstrated casual predominance over attitude across the entire secondary school. Gender difference in this casual relationship was not found, but elite status in Mathematics moderated this casual relationship.

7. DESIGN OF THE STUDY:

a. Method of study:

Descriptive methods of study were thought to be appropriate to analyses the impact of Attitude towards Mathematics, related to selected variables are Gender, Region, Type of School Management, Stream of Study, Medium of Instruction and Socio Economic Status.

b. Sample:

The sample constituted of 450 XI standard students drawn from 11 Government, aided and unaided schools in Kalaburagi district. Random sampling was used to select the sample.

c. Tools used:

The tools used for the present study was Mathematics attitude scale prepared and standardized by Dr. C. Dandapani. The data collected for the present investigation was under the category of Mathematics Attitude tool administered to the students by the investigator. After collected and classified, data were subjected to statistical tests of significance using SPSS package for testing the hypothesis. The methods of analysis used 't' test, ANOVA, Chi-square test and Karl Pearson's product Moment.

RELIABILITY AND VALIDITY:

The reliability and the validity of the tool for the present study were computed as 0.70 and 0.83 respectively. The co-efficient of split half reliability was 0.85 and validity with the achievement test in mathematics was determined to be 0.80. The sample for this study was selected randomly. Representative sample of 450 students who had joined in XI standard (English and Tamil Medium) were selected from Government aided and unaided schools.

8. MAJOR FINDINGS OF THE STUDY:

There is no significant difference in Attitude towards Mathematics of XI standard students in Kalaburagi District, owing to differences in their Gender, Region and Medium of Instruction. There is significant difference in Attitude towards Mathematics of XI standard students in Kalaburagi District, owing to differences in their Stream of Study, Types of School Management and Socio Economic Status. There is no significant association between Attitudes towards Mathematics of XI standards students in Kalaburagi. District regarding their Gender and Medium of Instruction. There is significant association between Attitudes towards Mathematics of XI standards students in Kalaburagi District with their Region. Stream of Study, Types of School Management and Socio Economic Status.

9. EDUCATIONAL IMPLICATIONS :

Education is a process of human enlightenment and empowerment for the achievement of a better quality of life. In India, the quality improvement of Mathematics education is the greater need of today. The quality of education can be measured through achievement and psychomotor domains. To achieve this goal, positive Mathematics attitude should be highly motivated to develop their skills like mathematics aptitude, logical thinking, reasoning etc. Mathematics education is crucial to the entire developmental process of the country. Mathematics is poorly taught and badly learnt. It is little more than burdening the mind with dead information, and it could degenerate even into a new superstition. Mathematics has added a new dimension to education and to its role in the life of nation, but central to all this is the quality of education. This finding

should enlighten educational authorities to devise instructional strategies across the curriculum to enhance the Mathematics Attitude of Science students. Also learning experiences provided in the class rooms should include such activities which provide opportunities for students to bring out analogies, to classify, to draw inferences, to arrive at generalizations and so on. The Government as well as Aided educational institutions should take steps to develop the Attitude of students. It is important that Management, Government, Parents and well wishers take active interest in the development of other students. This in turn will go a long way in the uplifting the society.

10. CONCLUSION:

The purpose of the present investigation was to study the mathematics attitude with referent to some selected variables and the study indicated significant relationship among the variables. The study may find some usefulness in the field of mathematics education and the finding of this study may serve as a data base for the future research.

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