

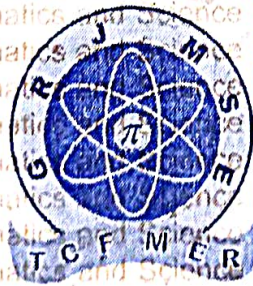
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ATTITUDE OF SECONDARY SCHOOL STUDENTS TOWARDS THE STUDY OF MATHEMATICS

**Sahin Ahmed*

**Abdul Wahed*

ABSTRACT

The main aim of the study is to investigate the attitude of secondary school students towards the study of Mathematics. The area of the study is confined in Goalpara district of Assam. The study adopted purposive and random sampling methods. The purposive selection of six secondary schools two each from rural, semi-urban and urban area is followed by the random sampling of ten students from each school and these yield sixty respondents for the study.

A questionnaire was prepared to collect the necessary information of their attitude toward study of Mathematics. Simple statistical tools were used to analyze the data. The analysis shows that various unscientific methods are used widely by the common students (a sizable number of students) of secondary level to study Mathematics. As a result they gradually lose their self- confidence and self- efficacy towards Mathematics and suffer from fearpsychosis and Mathematics anxiety. The study therefore recommended that teachers should be innovative in handling the instructions of teaching-learning methods in Mathematics.

1. INTRODUCTION :

Anastasi (1957) defines attitude as a tendency to react in a certain way towards a designed class of stimuli. In this study the

**Sahin Ahmed, Department of Mathematics, Goalpara College, Goalpara 783101, Assam, Email: heat_mass@yahoo.in*

**Abdul Wahed, Department of Mathematics (HoD), Bikali College, Dhupdhara, Email: wahedabdul407@gmail.com*

attitude of the students towards mathematics is the tendency to the line of approaches for study of Mathematics. The line of approaches towards study of Mathematics become different according to their attitude. Now a days, it has been a matter of grave concern for Mathematics stake-holders that the level of achievement and commitment of the students to learn Mathematics is reducing day-in day-out.

Which has a great impact in modern science and technology as well as in the field of economy of our country. So the study has a great importance and social value to investigate the cause of aggravation of the environment of Mathematics education. Review of research in mathematics education cite several studies in which the formation of various attitudes and beliefs about Mathematics and their influences on Mathematics achievement have been investigated (Leder,1987; MC Leod, 1992; Reyes,1984). A scientific line of approaches towards study of Mathematics increases the accessibility of the students in the subject and it play a vital role in their achievement. In this study an attempt is being made to find out the line of approaches commonly used by the secondary students towards Mathematics in Goalpara District of Assam. The study revel that a sizable number of students in secondary school use unscientific line of approaches towards study of Mathematics.

1. AIM OF THE STUDY :

(The objectives of the study are set as followsa)

a) To investigate the line of approaches of the secondary students towards study of Mathematics.

b) To examine whether there exists any gender differences in the line of approaches towards study of Mathematics.

2. RESEARCH METHODOLOGY:

The students of Class-x in the high schools and higher secondary schools of Goalpara District constitute the population of the study.

Purposive and multi stage random sampling method is applied to collect necessary information through a questionnaire addressed for the students. In the first stage, three HSLC Examination centers were selected purposively one each from urban, semi-urban and rural area of Goalpara District. In the second stage, 6 Schools were selected randomly taking 2 from each Centre. In the third stage, random sampling method were applied to select 10 students comprising 5 boys and 5 girls from each school and this yield 60 sample units for the study. This study was descriptive in nature and simple statistical tools were applied to analyze the data.

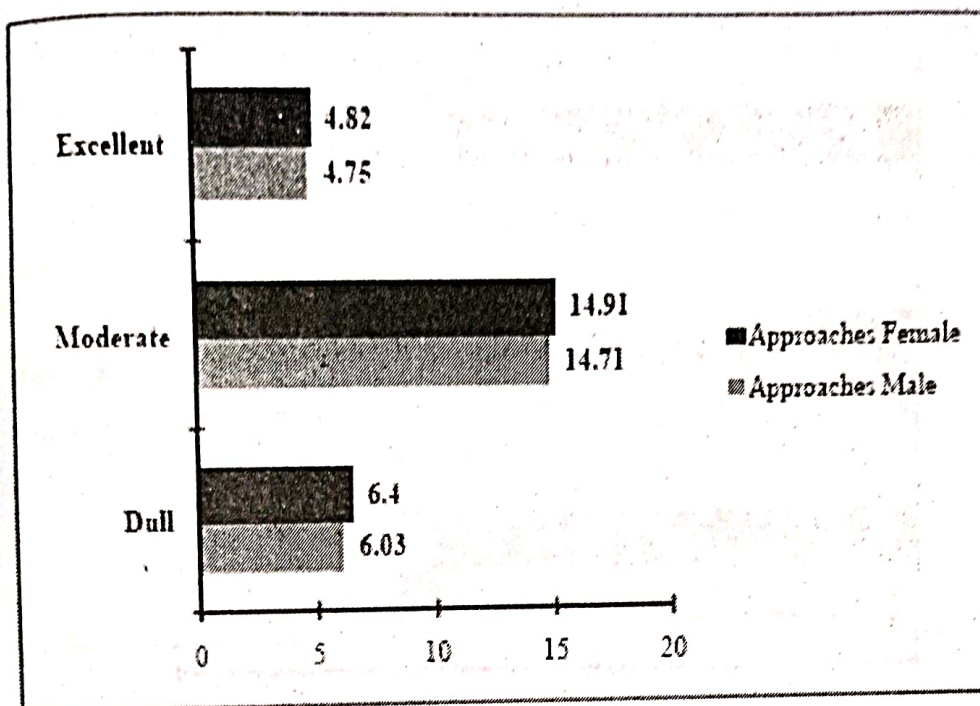
3.Collection and Analysis of Data:

The investigator visited the sample High Schools to collect necessary information. Demonstration were conducted in the classes to fill up the questionnaire prepared for the students. The collected data are systematically arranged in tabular form and then analyzed with simple statistical tools.

Table-1 Average Scoring of Responses (ASR) for Different Approaches to the Study of Mathematics

(Range of scoring : From 1 to 10)

SL. No.	Approaches	ASR for 60 students		Classification of Approaches	
		Male	Female	M	F
a	Parrot type cramming	3.57	3.95	Dull (a+b)	
b	Only reading	2.46	2.45	M	F
				6.03	6.40
c	Writing practice	9	8.5	Moderate (c+d)	
d	Practice with the help of solved problems	5.71	6.41	M	F
				14.71	14.91
e	Practice without help of solved problems	4.75	4.82	Excellent (e)	
				M	F
				4.75	4.82

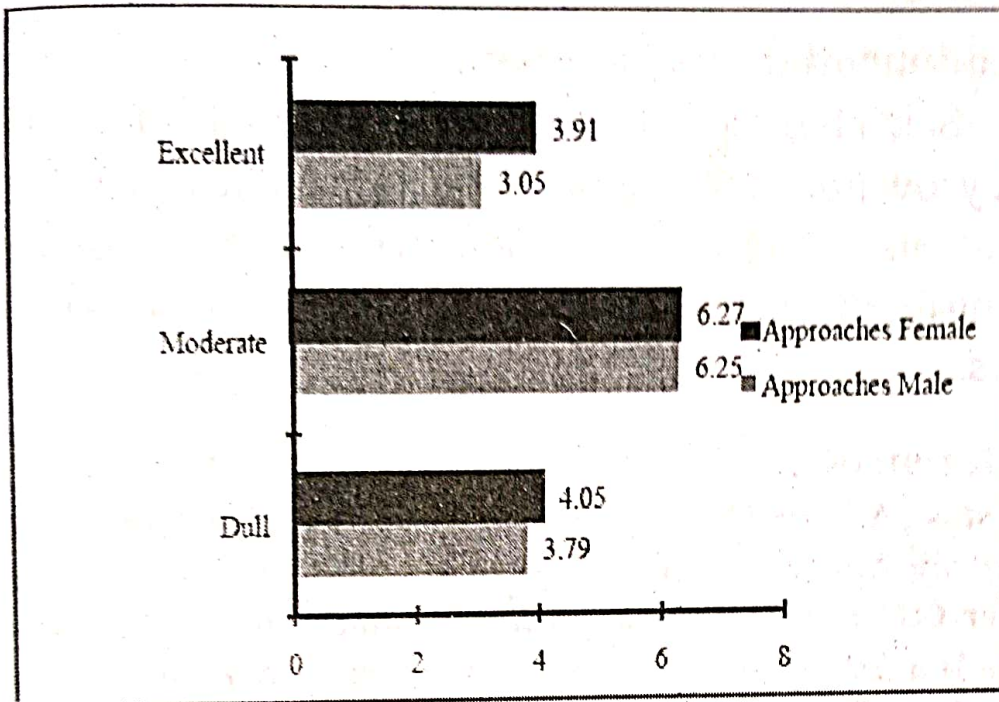


(Bar diagram for Table-1)

Table-1 shows the average scoring of the students towards different approaches to practice Mathematics. Irrespective of the genders the score is minimum for excellent approach and maximum for moderate. Whereas the score for dull approaches lies between them. In other words $\text{Excellent} < \text{Dull} < \text{Moderate}$

Table-2 :ASR for different approaches to Remember Mathematical Formulae
(Range of scoring : From 1 to 10)

SL. No.	Approaches	Classification of Approaches	ASR for 60 students	
			Male	Female
a	Repeatedly reading	Dull	5.61	5.23
b	Repeatedly writing	Moderate	6.89	7.5
c	Hanging the formula chart on the wall in front of me	Excellent	5.86	5.08



(Bar diagram for Table-3)

Table-3 reveals that average scoring of the students towards the different approaches to conceptualize Geometry can be put in increasing order as follows-

$$\text{Excellent} < \text{Dull} < \text{Moderate}$$

5. Findings of the study:

The study reveals that the students both male and female practice a Sizable number of dull approaches towards study of Mathematics. It also witnesses maximum moderate approaches of the students towards the practice of Mathematics, whereas it is minimum for excellent. It is found that there is no significant difference between the male and female students in practice of different approaches towards study of Mathematics.

6. Conclusions:

The Secondary students widely use unscientific approaches towards study of Mathematics irrespective of male and female.

7. Recommendation of the Study:

Scientific approaches increase self-confidence and self-efficacy towards Mathematics and it prevent fear-psychosis of the students. Therefore, the teachers should be innovative in handling the instructions of teaching-learning methods in Mathematics.

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