

# MATHEMATICS PHOBIA AMONG SECONDARY SCHOOL STUDENTS

Author Name: Arifa Sultana Designation: Assistant Professor Derpartment: Education Organization: Rajnagar Mahavidyalaya, Rajnagar, Birbhum, West Bengal, India.

Abstract: The main objectives of this study were to explore the status of Mathematics phobia at secondary school level and also to compare the Mathematics phobia between male and female secondary school students at secondary school level. For this Descriptive survey method of research was used. In the present study the sample included 120 students of class IX from both female and male by the random sampling technique was used. The results showed that the maximum Mathematics Phobia exists among students. The female student has had higher Mathematics Phobia in comparison to male students which is a very big concern.

Index Terms – Mathematics, Phobia, Mathematics Phobia, Secondary Students

## Introduction:

Mathematics is the universal topic and used for everyone in your life. Mathematics is most useful for each secondary school student. That is why most of the people duly lay great emphasis on Mathematics as a school subject, but the present scenario is different. Many studies showed that students has phobia regarding Mathematics. Phobia means an irrational fear or a complex combination of the feeling of fear, apprehension and worry often accompanied by physical sensations such as palpitations. Phobia among students in learning Mathematics is loosely regarded as feelings of fear, avoidance and dread when dealing with any situation relating to Mathematics. Mathematics phobia as a feeling or tension and anxiety that appears when someone is engaged in the manipulation of figures to solve Mathematical problems in both academic and daily-life situation. It is easy to forget math equations and to lose confidence when one is experiencing Mathematics phobia.

### Need of the Study:

The students are often termed as "phobic" even though their phobia may be limited to a particular area of study such as language, Mathematics, science or any other school subject. Compared to phobia in any area, phobia in Mathematics is more common. It has labeled Mathematics as dreadful subjects.

The 'phobia' in Mathematics may consist of children who are not dull but are of average or even with superior ability in other subjects. 'Sometimes mere 'fear psyche' or 'phobia' makes an average, good or even superior intelligent student escape mathematical exercise and score very unsatisfactory. To affect the secondary result Mathematics plays a crucial role. In every year there were most of the students who fail in Mathematics. Whatever may be the cause, the failure or dropout of such children is of a maximum concern for developing country like ours. Because it is a great loss of human resources. Secondly, unless the problem of phobia is taken care of no school, curriculum reforms will be meaningful. Thirdly, wastage in school has lately become a matter of grave concern. At this level wastage is exceptionally higher in our country.

High incidence of wastage and stagnation is one of the obstacles to the goal of universalization of education. As some of the students don't like the subject of Mathematics, they dropout. It adds feathers to the existing incidence of wastage and stagnation.

So this study is very useful at secondary stage of schooling for students, which have significant from the point of view of educational and vocational planning. But what is the status of Mathematics Phobia among boys and girls of West Bengal? It is a matter of investigation. This study is not only significant for the present but also for the future development of students of West Bengal.

#### **Objectives of the Study:**

These were the following objectives for this study

1. To find out students having with Mathematics phobia at secondary school level

2. To compare the Mathematics phobia between male and female secondary school students at secondary school level.

#### **Research Questions of the study:**

These was the following research question

1. Is there any students having phobia in mathematics at secondary school level?

### Hypothesis of the study

1. There was no significant difference of Mathematics phobia between male and female students of secondary school level.

## **Delimitations of the study**

The study could be done with all types of schools of Birbhum District but due to lack of time and resources this study will be delimited as follows:

- 1. Only single school subject, i.e. Mathematics will be taken under consideration.
- 2. Only secondary school students studying in 9th class will be taken under consideration.
- 3. Only three schools from Birbhum District will be taken under consideration.

## Methodology of the study:

In this study "Descriptive survey" method of research was used. In the present study population were consisted of students of class IX in Birbhum District. The sample included 120 students of class IX from both female and male. The sample size of present study was comprised of 120 secondary school students. The random sampling technique sample was used for selection of the sample from the population of the present study. In order to carry out the present investigation, the appropriate tool was used, which is "Mathematics phobia scale" developed by the investigator herself. Descriptive statistics such as frequency, percentage, mean, SD, T-test were used for detail analysis and interpretation of the obtained data.

## **Results and Discussion:**

**Objective 1:** To find out students with Mathematics phobia at secondary school level

Serial no	Gender	Percentage	Total
1.	Male	30%	63.33%
2.	Female	33.33%	

## Table 1: Percentage of Mathematics phobia between male and female students

Observation of above table shows that the phobia among female students in Mathematics (33.33%) was higher than the male counterparts (30%). In other language from the serial no- 1 it demonstrated that out of every 100

male students, 30 were phobic in Mathematics. Similarly from serial no-2 it may be said that out of every 100 female students, 33 were phobic in Mathematics.

On the basis of obtained results it shows that there was maximum phobia in Mathematics at secondary school level students.

**Objective 2:** To compare the Mathematics phobia between male and female secondary school students at secondary school level.

Serial no	Gender	N	Mean	SD	t
1.	Male	60	58.83	10.15	0.629
2.	Female	60	<mark>5</mark> 9.69	11.76	

Table 2: Gender Wise Comparison of the phobia Scores

Observation of the above table shows that the obtained 't' value is 0.629 which is not significant at 0.05 level, as the obtained value is lesser than the value require for significance (1.98) at 0.05 level. It means that there is no significant difference of Mathematics phobia between male and female secondary school students. Thus, the null hypothesis stands accepted. It also shows from the table, that in comparison of the Mathematics phobia between male and female students. According to this, we can say that may be there is difference between male and female students.

**Conclusion:** Keeping on view the major findings, the conclusions were drawn that the percentage of phobia among female (33.33%), were higher than their male counterparts (30%). It is may be for different causes, like negligence towards girls education, gender differentiation, female's negative attitude towards Mathematics. So it concludes that out of every 100 students, 63 were having phobia in Mathematics. It is also conclude that there is a significant difference exists among students of secondary school students with reference to their Gender (Male and Female). This indicates that secondary education tends to go to the negative directions due to some easy solvable causes. So in this case student, teacher has to concern.

#### **References:**

[1] Tobias, S. 1990. Math Phobia: An update. NACADA journal, 10 (1).

[2] Khatoon, M. 2011. Computer attitude as a function of gender, type of school, mathematics phobia and mathematics achievement. European Journal of Social Sciences, vol 18, no 3.[3] Zain, Z. 2012. Mathematics Phobia and achievement among secondary school students, American journal of applied sciences, 9(11).