

# Finding of Probable Reasons for Students Struggle with Mathematics

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**Abstract:** *Mathematics anxiety has a negative impact on individuals; many students who suffer from mathematics anxiety have little confidence in their ability to do mathematics. Mathematics is incredibly important in our lives and, without realizing it, we use mathematical concepts, as well as the skills we learn from doing Mathematics problems, every day. It is important to conduct a study which can help teachers and parents better understand the underlying issues that may be causing the difficulty in learning Mathematics. This study will help find out the root cause behind the learning challenges faced by students with respect to Mathematics.*

**Keywords:** mathematical concepts

## I. INTRODUCTION

Mathematics anxiety has a negative impact on individuals; many students who suffer from mathematics anxiety have little confidence in their ability to do mathematics. Mathematics is incredibly important in our lives and, without realizing it, we use mathematical concepts, as well as the skills we learn from doing Mathematics problems, every day. It is important to conduct a study which can help teachers and parents better understand the underlying issues that may be causing the difficulty in learning Mathematics.

### 1.1 Objectives

- To identify the underlying factors that contribute to a student's difficulty in understanding mathematical concepts.
- To explore the relationship between student motivation and math success.
- To analyze the effectiveness of math curricula in meeting student's needs.

### 1.2 Scope of the Present Study

The researcher selected the 30 students from the age group of 11 to 13 years studying in Public schools (Mithanagar Public School, BMC school of Siddhartha Nagar) and attending classes at Prayas Charitable Trust, Goregaon. The target population of students included both girls as well as boys.

### 1.3 Research Study

The researcher has adopted **Descriptive Action Research** under Nirmala Memorial Foundation College of Education, Kandivali (E). Primarily, there are three descriptive research methods: Observation, Survey & Case Study. Under descriptive research, **Survey method** has been considered. **Survey research** is defined as "the collection of information from a sample of individuals through their responses to questions / statements". This type of research allows for a variety of methods to recruit participants, collect data, and utilize various methods of instrumentation. Survey research is a unique way of gathering information from a large cohort. Advantages of surveys include having a large population and therefore a greater statistical power, the ability to gather large amounts of information and having the availability of validated models. Thirty students attending classes at Prayas Charitable Foundation Trust were given the paper survey form and the statements were explained to them. They were given time to understand, interpret the statements and select the answer based on their personal opinion. After the survey, forms were collected and analysis was carried out.

**Questionnaires** contained questions like;

1. Mathematics is a tough subject.
2. I feel that some topics of Mathematics are very difficult to understand.
3. I need help to learn Mathematics.
4. I cannot remember the formulae.
5. If I don't understand something I lack interest.
6. I don't feel the urge to practice the sums which are done in school at home.

#### **1.4 Interpretation of the Study**

Majority of students perceive that Math is a tough subject with some topics difficult to understand and need guidance and help to learn them. Due to this, they lack motivation and interest to practice sums at home and hence lag behind in Math. Often they get distracted in class due to disturbances created by friends and lose focus from studies. At the same time, they have an inherent interest in learning mathematical concepts and ideas as they know the importance of application of Math in daily life. Students perceived that Mathematics teachers had a positive attitude toward teaching mathematics and were fully qualified to teach mathematics as far as delivery of the subject matter was concerned. The method of teaching by the mathematics teachers was also appropriate and was fairly justified; Most of them have a neutral opinion regarding memorizing formulae or multiplication tables, too much portion to study, parent's inability to buy reference books or peer influence. This implied that student's negative attitude and perception towards mathematics are the significant factors perceived to be significantly contributing to poor achievement of students in mathematics.

## **II. CONCLUSION**

Based on the research, it can be concluded that Mathematics is built on sequential learning. If a student doesn't fully understand a previous lesson's concept, they are likely to struggle when newer concepts are introduced. Math concepts are like building blocks, and the foundation always needs to be laid before moving forward. If the foundation isn't there, the student will struggle in class and may not fully realize why they are struggling with math when their peers seem to be progressing along.

Unfortunately, many students who are struggling with math feel uncomfortable or embarrassed asking questions in class when their teacher has already moved on to the next lesson. Many students simply don't spend enough time practicing math concepts. Sometimes a student will feel like they understand a concept, but when attempting to solve a problem themselves, they don't know how to begin (or end up struggling through the process). Being good at math is 1% inspiration and 99% perspiration. While natural talents and abilities will give some students an edge, Math is really just about practice. That means that everyone can do well at math, despite what they might believe. Having a 'cando' attitude is the most important factor in math success.

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