

Perception of difficulty in learning Mathematics: An analytical study of student attitudes.

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Abstract: Mathematics is an essential part of human life - from daily calculations to complex engineering problems. Yet, many students consider it the most difficult and fear-inducing subject. This paper explores the causes behind students' anxiety toward mathematics and discusses effective strategies to reduce this fear. Based on classroom observations and common teaching experiences, the study identifies factors such as weak conceptual understanding, poor teaching methods, exam pressure, and lack of parental support as major contributors. It also highlights the role of teachers and parents in developing a positive attitude through patience, real-life examples, and encouragement. The paper concludes that mathematics, when taught meaningfully and engagingly, can become a subject of joy rather than fear

Keywords: Mathematics anxiety; Learning difficulty; Student attitude; Conceptual understanding; Teaching methods; Parental role; Foundational Literacy and Numeracy (FLN); Real-life application; Examination pressure; Joyful learning; Positive attitude; New Education Policy (NEP) 2020; Fear reduction strategies; Problem-solving ability; Motivation.

1. Introduction :Mathematics is a universal subject that connects logic, reasoning, and real-life applications. It is a part of our daily routine - whether in managing household expenses or solving scientific equations. Despite its importance, mathematics often evokes fear among students.

When teachers assign math problems, many students become anxious, worrying about making mistakes or being scolded. This study seeks to identify the reasons behind such fear and understand its root causes. It also aims to find ways to make mathematics a more enjoyable and less stressful subject for learners.

2. Objectives of the Study:

1. To identify the major causes of students' fear and weakness in mathematics.
2. To explore the role of teachers and parents in shaping students' attitudes toward mathematics.
3. To suggest practical strategies for making mathematics easier and more engaging.

3. Causes of Students' Weakness in Mathematics:

- a) Lack of conceptual understanding - inability to grasp the fundamental ideas of mathematical operations.
- b) Difficulty in logical and analytical thinking - students often fail to connect mathematical problems with real-life situations.
- c) Forgetting formulas or steps while solving problems due to mechanical learning.
- d) Complex teaching methods - when teaching becomes too abstract or rigid, students lose interest.
- e) Loss of patience when faced with challenging problems.
- f) Unawareness of practical applications - students often fail to see how math applies to real life.

g) Rote memorization - focusing on memorizing instead of understanding blocks creativity and confidence.

4. Strategies to Overcome Fear of Mathematics:

4.1 Use of Real-Life Examples:

To build interest, teachers and parents should relate mathematical ideas to real-life situations. For example: You have Rs 100, and a chocolate costs Rs 25. If you buy one, how much will you have left?

Such examples help children connect numbers with real-world logic.

4.2 Patience and Positive Attitude:

Students should be allowed to make mistakes without fear of punishment. Teachers must patiently re-explain concepts step-by-step until students understand.

4.3 Fun Learning Through Games and Activities:

Mathematics can be made enjoyable using puzzles, number games, and educational apps. Activities like Sudoku or math-based mobile games make learning more interactive and exciting.

4.4 Celebrating Small Successes:

Every small achievement, like correctly solving a problem - should be appreciated. This builds motivation, confidence, and a positive attitude toward mathematics.

4.5 Reducing Examination Pressure:

Parents should avoid creating fear around exams. Instead, they should help children maintain a consistent study schedule.

Example: encouraging one hour of math practice daily to reduce anxiety before tests.

5. Role of Parents in Encouraging Interest in Mathematics:

Parents play a significant role in shaping their children's learning mindset. Every child learns differently, so teaching must adapt to individual styles.

Mathematics should be introduced as a game of logic and creativity, not merely a subject of numbers.

For instance, using simple examples like cutting an apple into two equal parts helps children understand fractions practically.

Parents should also monitor screen time and promote outdoor games such as cricket or badminton to strengthen both mental and physical health, enhancing focus and cognitive skills needed for problem-solving.

6. Discussion:

The findings suggest that fear of mathematics is largely psychological and cultural. The pressure to perform well and the tendency to compare results create unnecessary stress. If the teaching process becomes interactive, students begin to view mathematics as a tool for understanding the world rather than as a threat. Teachers' empathy and parental encouragement together form the foundation for mathematical confidence.

7. Conclusion:

Overcoming the fear of mathematics requires a joint effort from teachers, parents, and students. Mathematics is closely linked with every aspect of life and every academic subject.

With patience, motivation, and effective teaching techniques, all difficulties in mathematics can be resolved.

Though New Education Policy 2020 has brought about the way of effective methods towards realistic conceptions but the curricula and the evaluation methods have to be redesigned on the basis of Foundational Literacy and Numeracy model so as to achieve the targeted goal.

Mathematics is not merely a subject - it is a way of thinking that builds reasoning, problem-solving ability, and confidence. When taught with creativity and care, mathematics transforms from a subject of fear into one of discovery and joy.

