Overcoming the Perception of "Bad at Math"

Dr. Naneta M. Panit
Bachelor of Secondary Education major in Mathematics., Biliran Province State University, Biliran 6566, Philippines
Corresponding Email: naneta.panit@bipsu.edu.ph

The idea that someone is "bad at math" has long been accepted as a personal trait, but in truth, it is a mindset shaped by fear, early academic experiences, and environmental influences. This perception often leads to math anxiety, an emotional and mental response that causes individuals to feel stress, panic, or helplessness when faced with numbers or calculations. However, being bad at math is not an identity. It is a belief that can be changed, and when addressed properly, students can begin to view mathematics not as a threat, but as a skill that can be learned and improved over time.

Math anxiety commonly originates from early classroom experiences. According to Mangarin and Caballes (2024), when children encounter teaching methods that are rigid or disconnected from their interests, they may struggle to understand fundamental concepts. As a result, they associate math with failure and embarrassment. In many cases, these feelings are worsened by social pressures or critical remarks from teachers or classmates. Students who hear laughter after making a mistake or feel judged when they cannot immediately find the correct answer tend to withdraw. Over time, they avoid math-related activities altogether, not due to inability, but to protect themselves from the fear of failure.

This anxiety is often reinforced by social narratives that claim math is only for those with "natural talent." phrases like "I'm not a math person" or "some people are just born good at numbers" send the message that math ability is innate and fixed. When repeated often enough, these statements discourage effort and learning. Moreover, parents and teachers may unknowingly pass on their own math insecurities to students. A parent's casual admission of struggling with math or a teacher's impatience in class can cause students to internalize the belief that they are not capable.

The psychological impact of math anxiety is significant. It affects how students see themselves, not just in relation to math, but in their overall academic confidence. Learners with math anxiety often feel distressed and experience low self-worth. They may avoid studying for math exams, delay doing assignments, or even choose career paths that require less mathematical knowledge. Academically, this avoidance can lead to missed opportunities. Research has shown that students with math anxiety are less likely to pursue higher-level math courses, limiting their options in fields such as engineering, business, and the sciences (Audrey & Leslie, 2023).

Math-specific anxiety may have distinguishable factors, and taking these factors into account may better illuminate the relationship between anxiety and

mathematics performance (Lukowsi et al., 2019). While understanding these factors is important, it is equally essential to recognize that math performance is not a fixed trait. Given the right tools, mindset, and support, students can shift from fear-driven avoidance to engaged participation in mathematics.

Addressing math anxiety requires a multi-dimensional approach. First, learners must understand that their fear stems from past experiences, not from a lack of intelligence. A growth mindset is essential. Believing that skills improve through practice and effort can reframe how students approach challenges. Encouraging students to see mistakes as part of the learning process rather than evidence of failure builds resilience and motivation.

Equally important is the role of teachers and parents in creating a supportive learning environment. Instruction should prioritize conceptual understanding over rote memorization, and students should be allowed to use various strategies to solve problems. In mathematics education, the incorporation of suitable software to create visualizations and mathematical representations amplifies students' creativity and problem-solving skills (Inogerio et al., 2024; Voskoglou, 2020). By engaging learners visually and interactively, technology can transform fear into curiosity, and abstract concepts into tangible understanding. Techniques such as deep breathing and mindfulness exercises can also help students manage anxiety during math activities. On a deeper level, cognitive-behavioral strategies like challenging negative self-talk and acknowledging small achievements help restore confidence.

In reality, no one is born "bad at math." The perception is shaped by experience and reinforced by culture, but it can be challenged and changed. Through empathy, proper guidance, and consistent effort, students can overcome their anxiety and realize that mathematics, like any skill, can be mastered. Math should not be a source of fear, but an opportunity to grow.

References

Inoferio HV, Espartero MM, Asiri MS, et al. Coping with math anxiety and lack of confidence through AI-assisted learning. Environment and Social Psychology 2024; 9(5): 2228. Doi: 10.54517/esp.v9i5.2228

Lukowski SL, DiTrapani JB, Jeon M, Wang Z, Schenker VJ, Doran MM, Hart SA, Mazzocco MMM, Willcutt EG, Thompson LA, Petrill SA. Multidimensionality in the Measurement of Math-Specific Anxiety and its Relationship with Mathematical Performance. Learn Individ Differ. 2019 Feb;70:228-235. Doi: 10.1016/j.lindif.2016.07.007. Epub 2016 Jul 19. PMID: 31011280; PMCID: PMC6474340.

Mangarin, Rey & Caballes, Darling. (2024). Difficulties in Learning Mathematics: A Systematic Review. International Journal of Research and Scientific Innovation. XI. 401-405. 10.51244/IJRSI.2024.1109037.

Meador, Audrey & Ramos Salazar, Leslie. (2023). The Effects of Math Anxiety on the Performance of Undergraduate Business Majors Using Self-Efficacy as a Mediator. 35. 147-159.

Voskoglou MG, Salem ABM. Benefits and Limitations of the Artificial with Respect to the Traditional Learning of Mathematics. Mathematics. 2020, 8(4): 611. Doi: 10.3390/math8040611

ARTICLE DETAILS

EIR-0000035; Received: July 22, 2025; Accepted: June 25, 2025; Published: July 27, 2025

CITATION:

Panit, Naneta M. (2025). Overcoming the Perception of "Bad at Math". Education and Industry Review: Essays and Critiques. DOI: 10.62596/eir.bqrg7g62