Math Anxiety

Part I: Understanding Math Anxiety

What Is Math Anxiety?

Math anxiety is “feeling of tension and anxiety that interferes with the manipulation of numbers and the solving of mathematical problems in ordinary life and academic situations.”


Part II: The Causes of Math Anxiety

Lack of a Positive Support Network

- Family, friends, teachers

Negative Teaching Experiences

- Authoritative and/or passive teaching style
- Fixed and strict curriculum goals
- Memorization (rather than active learning)
- Individual activities (rather than group problem-solving)

Setting

- The math classroom and/or timed, high-stakes events

Lack of Self-Confidence

- Reluctance to become an active learner and fear of failure

Math anxiety has a negative effect on working memory.
Math anxiety can cause the brain to associate thinking about math with pain.
26 percent of students experience moderate to high levels of math anxiety.
85 percent of students in introductory math classes experience at least mild math anxiety.


Part III: Overcoming Math Anxiety

Self-Reflection
Detail your previous experiences with math and reflect upon how they have they shaped your perceptions of this field.

- How have your family, friends, teachers, and previous math experiences contributed to your views of math?
- If your perceptions are not positive, what could you do to refocus your views?

The “Big” Picture

- Humanity: How has math contributed to human civilizations?
- University: Why does the university require students to demonstrate proficiency in math?
- Academics
  - How does the math course I am currently taking fit into the various “branches” of mathematical studies and why is it significant?
  - How is proficiency in math important for success in other academic courses and my major?
- Relevance: How do we use math skills in everyday life and how might I apply mathematical ideas in my post-collegiate life?

Practice Active Learning Strategies

- Participation: Become an active member of the class.
  - Complete all homework on time.
  - Take focused notes (e.g., definitions, formulas) and review regularly.
  - Ask questions.
  - Contribute to discussions.
  - Practice problem-solving regularly.
- Group Work: Working in groups increases opportunities for dialogue and offers a supportive approach to problem solving.
- Academic Support: Utilize tutoring and Supplemental Instruction (www.uidaho.edu/tcs).

Practice Self-Care

- Deep Breathing
- Stay Calm
- Think Positively
- Focus on Wellness
- Maintain Perspective

Resources