Student Motivation and Reflection on Midweek Math Training

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The Midweek Math Training (MMT) program is designed to empower and prepare calculus students for exams via weekly peer-led practice exam sessions students can voluntarily attend. MMT draws inspiration from the well-documented positive effects of Supplemental Instruction (Skoglund, Wall, and Kiene, 2018) and repeated exposure to practice exams (Kulik, Kulik, and Bangert, 1984). In each session, students first individually attempt exam-level problems on recent course content. Trained peer facilitators then guide student discussion of appropriate strategies for these problems and test-taking strategies more generally.

In the spring semester of 2024, MMT was used by 61.84% of students in Calculus 1 & 2 before Midterm 1. Many students have expressed anxiety about the course. Math anxious students often avoid working practice problems, particularly practice exam problems (Jenifer, Levine, and Beilock, 2023). We want to know 1) What impact MMT has on student's math anxiety? 2) How do students believe MMT is impacting their understanding, behavior, and relationship with math? 3) Why do students come to MMT?

Methodology

Study participants were recruited through their Calculus classes and MMT. Each week student attendance is taken at MMT each week. Six times through the semester, study participants were sent the same select questions Abbreviated Math Anxiety Scale (AMAS) (Hopko et al, 2003). After each exam, study participant were sent the AMAS and a brief survey about MMT survey. Participants are invited to participate in a 30-minute interview to discuss their relationship with math and MMT. Data is currently in collection and will be ready for analysis spring 2025.

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