Math Anxiety in Elementary Students: Examining the Role of Timing, Task Complexity, Task Difficulty, and Strategy Use

The negative relationship between math anxiety (MA) and math proficiency is well-documented (Namkung et al., 2019), but little is known about the conditions under which MA is elicited. Therefore, this project will examine the following research questions: (a) To what extent are there differences in MA across timing (overt and covert) and task type (simple and complex computation)? (b) To what extent are there differences in math performance (MP) across timing and task type? (c) Do student-perceived task difficulty and strategy use relate to MA and MP?

Society for the Study of School Psychology (SSSP) funds will be used for study measures, incentives, and travel to data collection sites and to support undergraduate research assistants to assist with data collection. Several measures will be administered to gather data on students’ MA, MP, and metacognition (i.e., task-specific anxiety, task difficulty, and strategy use) with fourth- and fifth-grade students. The intended outcomes of the study include a greater understanding of the relationships between task type, MA, and MP. Results will serve as pilot data for a comprehensive and targeted grant application to investigate math interventions that incorporate strategy instruction to minimize MA.