Math Help Centers: Factors that Impact Student Perceptions and Attendance

Christine Tinsley
University of Oklahoma

Beth Rawlins
University of Oklahoma

Deborah Moore-Russo
University of Oklahoma

Milos Savic
University of Oklahoma

Mathematics help centers have become more common in post-secondary education, but there is scant research on them. In this study we use data from 1088 students over six academic semesters and grounded theory analysis techniques to study and draw initial conclusions on student perceptions of and reasons for attending a math center.

Keywords: tutoring, university mathematics, support services, help center

Mathematics help centers (or "math centers") typically aim to support undergraduate students in the mathematics courses they take during their freshman and sophomore years of study. These facilities are where students receive a) tutoring, b) access to print resources, c) guidance on use of digital devices and platforms used in mathematics courses, and d) pre-exam review sessions. The increased attention to math centers is evidenced by the new working group in RUME and by a recent handbook for math center directors, which had contributors from 31 institutions ranging from two-year community colleges to liberal arts institutions to large research universities (Coulombe, O'Neill & Shuckers, 2016). This study is an initial foray to consider students' perceptions of and reasons for attending a math center. More specifically, the following open research questions guided the study: *What do students expect from a math center? What are their perceptions of a math center? What impacts students' attendance at a math center?*

This study reports on responses to an online survey with items specifically related to a math center. It was administered over six academic semesters to 1088 students at a large, research university in the southwest United States. The research team used inductive techniques and constant comparison to consider factors that impact students' perceptions of and attendance at a math center.

All quantitative results of the study including information on the sample and the most frequent responses will be reported. Primary findings suggest that math center factors that impact students typically involve the number of staff and student interactions with staff. However, students also commented on issues related to their courses and instructors (e.g., desire for a high grade, perception of instructor deficiencies). Based on the results the research team will offer an initial explanation of the interrelated factors that impact student perceptions of and attendance at a math center in light of expectations of both a) the math center and b) students' courses and instructors.

References

Coulombe, G., O'Neill, M., Shuckers, M. (2016). A Handbook for Directors of Quantitative and Mathematics Support Centers. Tampa, FL: *University of South Florida*.