

Perceptions of Mentors' Impact on the Success of Mentees

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Graduate students in the mathematical sciences are responsible for the teaching of many undergraduate math courses in doctoral institutions (Eller, 2017). To that end, it is highly beneficial to make sure that these graduate teaching assistants (GTAs) are adequately prepared to take on the task of instructing a course. Peer mentors are a key resource in helping these less experienced GTAs to grow in both their teaching and research responsibilities associated with being in a graduate program (Flores-Scott & Nerad, 2012).

Literature Review

Research has shown that participants in graduate student peer-mentoring programs obtain benefits in many different domains including academic, social, psychological, and career development, and mentoring can attend to many of the diverse needs of graduate students (Lorenzetti et al., 2019; Liu et al., 2022). These mentoring relationships work in both directions with knowledge sharing, exploring different perspectives, and giving and receiving feedback (Lorenzetti et al., 2020). In our poster, we discuss mentees' and mentors' perceptions of the benefits mentoring can provide in a teaching-oriented peer mentorship program.

Data, Methods, and Results

As part of our multifaceted and multi-institution GTA training program, *Promoting Success in Undergraduate Mathematics through Graduate Teacher Training (PSUM-GTT)* (Harrell-Williams, et al., 2020; Manzanares, et al., 2024), GTAs participated in peer mentoring. Each mentor was at least a third-year doctoral student in a Mathematical Sciences program at one of the three institutions and was assigned one mentee (sometimes two). Each semester GTAs completed online surveys about their experiences with teaching and mentoring. This poster presents results from survey data from Fall 2019-Spring 2023 and is a follow-up to a conference proceedings paper (Funkhouser, et al., 2021) reporting preliminary first year results. Specifically, mentors were asked how significant they thought their mentoring was to their mentee's success as an educator, and mentees were asked how significant they thought their mentor was to their success as a GTA, both on a scale of 1-5. Across all three institutions and every year, mentees rated the assistance they got from their mentor higher ($mean=3.68$, $SD=0.34$) than the mentors rated themselves as being successful in mentoring their mentees ($mean=2.84$, $SD=0.30$). We will situate these results within a discussion of mentoring self-efficacy and how peer mentoring models can provide specific support for their mentors.

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