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(casey.george-jackson@louisville.edu). *Success in doctoral mathematics: What do faculty members expect of their students in order for them to be successful and to what do they attribute their own success?*

Although gender disparities at the undergraduate level are narrowing, women and members of racial and ethnic minority groups continue to be underrepresented in doctoral mathematics. In order to better understand issues of persistence and retention for these groups of students, two studies were conducted. The first study examined mathematics faculty members' expectations of successful students, both generally and for members of underrepresented groups. Data were collected through online survey from faculty members involved in a nationwide mentoring program aimed at easing underrepresented students' transitions from undergraduate to graduate mathematics. The second study investigated the reflections and attributions for their own doctoral program success for current mathematics faculty members and compared these responses for male and female respondents. Quantitative data were collected through online survey from a stratified, random sample of mathematics professors in the United States. Similar findings across the two studies include the importance of mentorship and advising, and intrinsic motivation. Comparisons such as these are used in order to provide recommendations for how best to support underrepresented students in attaining advanced degrees in mathematics. (Received September 22, 2015)