Like It or Love It: Exploring Elements Affecting Students’ Mathematical Achievement

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Mathematics achievement, both in high school and early in college, is one of the strongest predictors of college completion. Research has shown that math interest, utility, engagement, self-efficacy, and identity are related to mathematics achievement. Hence, this study uses structural equation modeling to evaluate Ford's (2017) empirical model linking mathematics beliefs and achievement, which expanded on Eccles' model of achievement-related choices (2005) and Middleton's model of mathematics achievement (2013). While Ford and Middleton used a nationally-representative sample of 9th graders, this study focused on a sample of students enrolled in multiple sections of two algebra-focused remedial mathematics courses at a community college near a midsize metropolitan city in the Southern United States.

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