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Understanding Women's Success in Physics through Self-Efficacy

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The underrepresentation of women in physics has been well documented and is a source of concern for both policy makers and educators. Considerable research has shown a connection between students' confidence in their ability to perform well (also known as self-efficacy) and persistence in science fields. In this presentation I will build from research that suggests men and women draw from different types experiences when evaluating their self-efficacy. I will demonstrate through a logistic regression analysis that self-efficacy is a positive predictor of success for women and men in introductory physics, and that the sources these students draw upon differ by gender. Through qualitative data, I will also present a variety of ways that students may develop their confidence in their ability to succeed in physics.