



Math Anxiety, Math-self-efficacy, and Math-performance: A Study of Indian School Children

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Abstract

Math anxiety is defined as an apprehension that interferes with performance in mathematics in an adverse manner. The current study aimed at understanding whether math anxiety significantly impacts math self-efficacy, mathematics performance, and STEM-related career selection decisions among school children. This survey-based data was collected from seventh- to twelfth-grade school children (N=200; M=110, F=90) from India. The result indicates that math anxiety significantly predicts math self-efficacy, mathematics performance, and STEM-related career selection among male and female students. There is no gender difference in math anxiety, math performance, and STEM-related career decision-making; however, females are found to be significantly lower in math self-efficacy than male students. Moreover, math self-efficacy partially mediates the relationship between math anxiety and math performance. The study further shows that mathematics performance is not a significant predictor of STEM-related career selection among female students. The future implications of this work in the context of career-decision making in the STEM-related fields are also discussed.

Keywords: career selection, gender, math anxiety, math self-efficacy, STEM