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The Relationship Between Intelligence Mindset and Test Anxiety as Mediated by Effort Regulation

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Abstract

Test anxiety affects a sizable proportion of college students, especially in competitive STEM fields. Prior research has proposed interventions aimed at changing students' implicit beliefs about intelligence (intelligence mindset) to help reduce students' test anxiety, but results have been mixed and the mechanisms underlying this relationship are unclear. We propose that students' beliefs about effort regulation may partially mediate the relationship between intelligence mindsets and test anxiety. We tested our model as an exploratory post-hoc analysis in a small sample of introductory physics students reporting psychological threat in a laboratory study. Effort regulation was measured as self-reported judgements of persistence in the face of difficulty and test anxiety was measured on a problem by problem basis during a laboratory physics assessment. Students' intelligence mindset at pretest was a significant predictor of test anxiety at posttest, and this relationship was mediated by self-reported effort regulation. We discuss potential implications of these findings for mindset-based interventions aimed at reducing test anxiety.