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**A Norwegian out-of-school mathematics project's influence on secondary students' STEM motivation.**

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Summary: Considerable resources are spent on initiatives aiming to increase achievement and participation in science, technology, engineering, and mathematics (STEM). Drawing on focus group interviews and a questionnaire study with participants in ENT3R, a Norwegian out-of-school mathematics program, we investigated why participants attended and stayed in this program and assessed how it influenced participants' STEM motivation. The authors identified 3 aspects of ENT3R highlighted by the participants: The instructors provided good teaching, the instructors created a positive atmosphere, and the instructors engaged in interpersonal relationships. Moreover, drawing on the expectancy-value model, the authors found that ENT3R appeared to influence 5 factors in the model that are important for STEM motivation: expectation of success, interest-enjoyment value, attainment value, utility value, and cost. This study points to the importance of carefully recruited and trained instructors and of flexible, responsively designed extracurricular programs.

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