

1154-N5-1020 **Paul Regier*** (paulregier@ou.edu). *Creativity-fostering instruction's impact on student motivation and self-efficacy in upper-level undergraduate mathematics courses.*

There is a need to better understand the role creativity can play in facilitating cognitive and affective aspects of students' mathematical development. To study the impact of creativity on student motivation and self-efficacy in upper-level mathematics classrooms, a large-scale (n=300) quantitative research study was designed utilizing: (1) a new instrument for measuring student perception of creativity-fostering mathematics instruction, (2) an adaptation of the academic motivation scale toward mathematics, and (3) the self-efficacy for proving scale. Analysis of these three instruments will be presented to discuss their validity and reliability, as well as the results of hierarchical linear modeling to study multi-level influences of creativity-fostering instruction on pre/post semester changes in student motivation and self-efficacy for proving. (Received September 12, 2019)