

Reciprocal Effects between Self-Determined Motivation and Engagement in Mathematics

Tanja Held & Tina Hascher

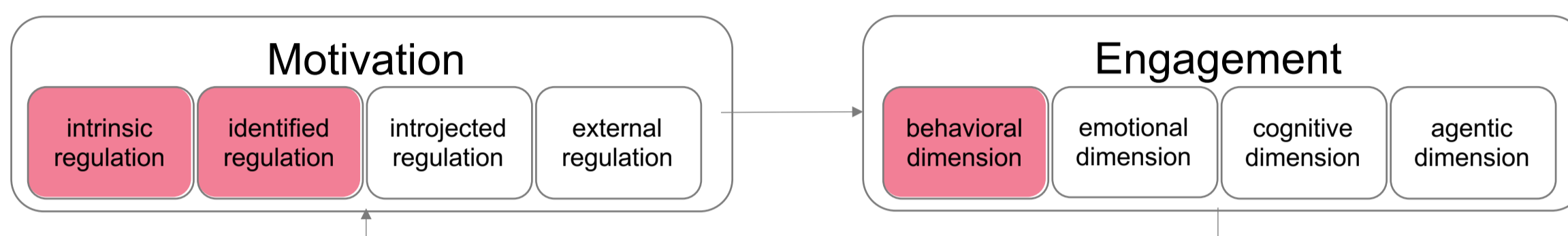
Department of Research in School and Instruction, Institute of Educational Science, University of Bern

- Student motivation and engagement are key requirements for successful learning processes
- Results revealed effects between self-determined motivation and effort, inattention, and procrastination across time
- Motivation influence behavioral engagement, and students' behavioral engagement may also influence future motivation

Theoretical background

Motivation describes goal-directed behavior including all processes for initiating, maintaining, or changing activity (Heckhausen, 2018). Motivation can be conceptualized as the latent cause for engagement as observable behavior (Skinner et al., 2009).

Engagement comprises the extent of active involvement of students in a learning activity and is viewed as a multi-dimensional construct (Reeve, 2012; Reeve & Lee, 2014; Wang & Degol, 2014).



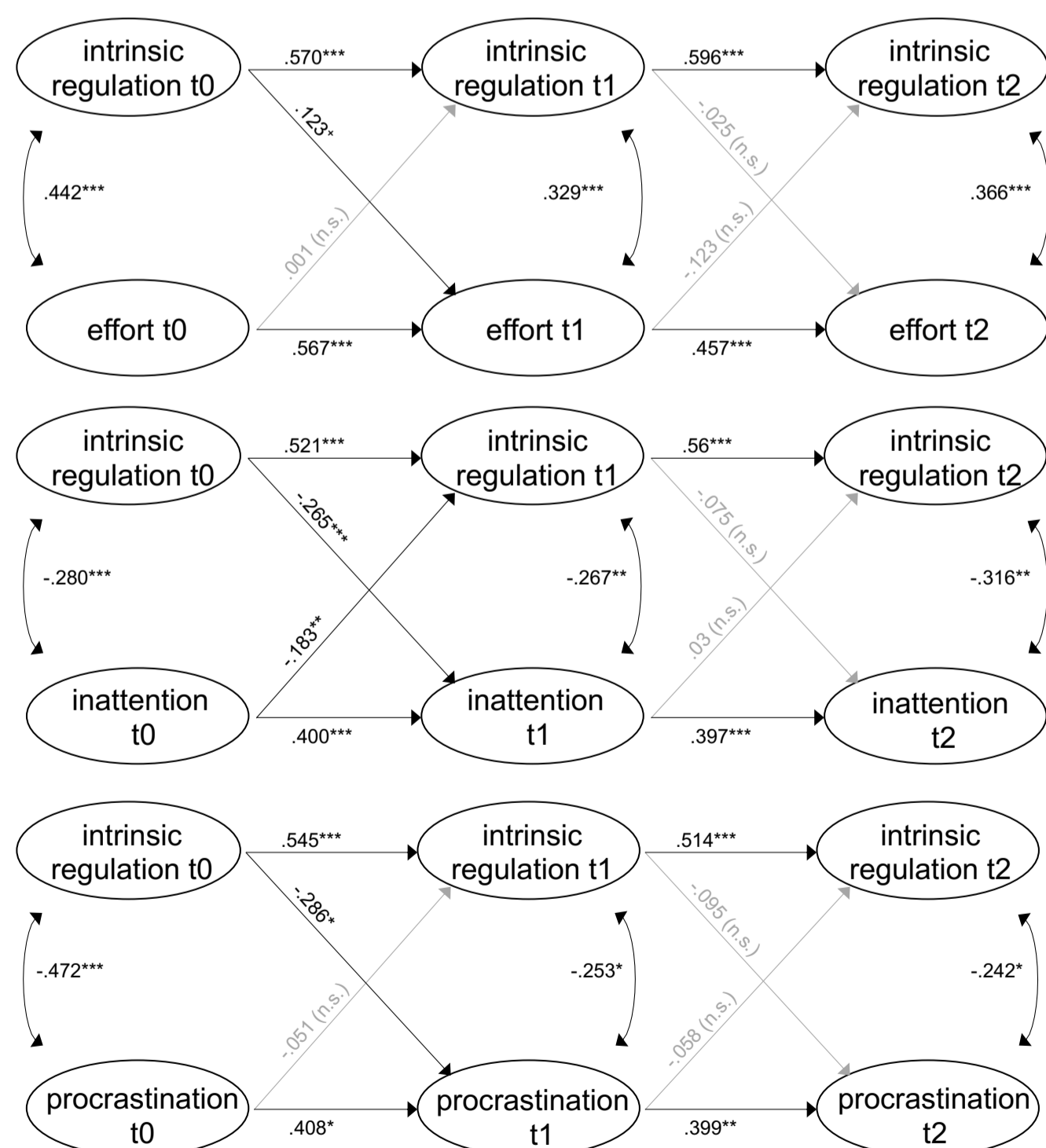
Research Question

Are there reciprocal effects between self-determined motivation (intrinsic and identified regulation) and behavioral engagement (measured by the indicators of effort, inattention, and procrastination) in mathematics in lower secondary education?

Methodology

Data from 348 students in the lowest ability tier of lower secondary education were used. Students completed surveys at three measurement points during Grades 7 and 8 (48.6% male; $M_{\text{age}t0} = 12.75$ years [$SD = .64$]). The present study is part of the project entitled "Maintaining and fostering students' positive learning emotions and learning motivation in maths instruction during early adolescence" funded by the Swiss National Science Foundation.

Results



References and Contact

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