Modeling the relationship between motivational beliefs, cognitive learning strategies and academic performance of Mathematics teacher-trainees

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Abstract

Self-regulated learning refers to the conscious planning, monitoring, and evaluation of one's own learning through use of appropriate behavioral, meta-cognitive and cognitive strategies to enhance academic performance. Self-regulated learners are highly motivated, use a variety of learning strategies in achieving their academic goals and as such are high achievers. Although self-regulated learning has received much attention over the past decades, research on how teacher-trainees regulate their own learning has been scarce and especially in third world countries. Lack of research in this aspect has not only created a knowledge gap but also compromised efforts to tackle to challenge of poor academic performance among teacher trainees. In this study, we examined the relationship between motivational beliefs, cognitive learning strategies and academic performance among Mathematics teacher-trainees in Uganda. The sample comprised of 689 undergraduate students randomly selected from eight universities across Uganda. Data was collected using the Motivated Strategies for Learning Questionnaire (MSLQ) and analysed using structural equation modeling. A structural equation model indicated that cognitive learning strategies mediated the relationship between motivational beliefs and academic performance of these undergraduate teacher-trainees. Motivational beliefs influenced student's performance through enhancing their critical thinking and organization learning strategies. Therefore, there is need to enhance leaner's ability to adopt adaptive learning strategies in-order to enhance their academic achievement at the university.

Keywords: Self-Regulated Learning, Mathematics Teacher-Trainees, MSLQ