

Investigating relationships between self-regulated learning, self-efficacy, and motivation: A structural equation modeling approach

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ABSTRACT

This exploratory study aimed to explore the relationships between self-regulated learning (SRL), self-efficacy (SE), and motivation in a sample of Saudi first-year undergraduates, and this latter may have had a bearing upon the findings. To achieve this aim, the study developed two multidimensional models including SRL, SE, and motivation (an exogenous variable in both models). However, the difference between the models is the directional relationship between SRL and SE. This mixed-methods research included two sequential phases, a qualitative investigation, then, a quantitative study. Semi-structured interviews were conducted on lecturers, first-year undergraduates (who also participated in a diary task), and the students' family members. The themes emerging from the analyses of the qualitative data informed the development of the questionnaire, which was administered on a random, survey, sample of 2174 first-year undergraduates. The conceptual models were verified by testing the measurement model (using confirmatory factor analysis), and then, the structural model (using structural equation modelling). The models fit the data well. It was found that motivation was associated with SRL and SE significantly if the direction of the relationship was from SRL to SE ($\beta = .712^{***}$; S.E = .036; 95% CI [.641, .784]), but it was associated only with SE significantly if the direction of the relationship was from SE to SRL ($\beta = .789^{***}$; S.E = .041; 95% CI [.709, .869]). Although that the literature on SRL and SE has been mainly focusing on the effect of SE on one's regulation, this paper showed that SRL has also an influential role on SE (i.e. reciprocal relationship).

Keywords: First-year undergraduates; Motivation; Self-efficacy; Self-regulated learning.