

Effects of attitude, self-efficacy beliefs, and motivation on behavioural intention in teaching science

ABSTRACT

Teacher's behavioural intention in teaching science is one of the key determinants of students' learning outcomes. Thus, it is crucial to study which affective domains are contributed to teacher's behavioural intentions in teaching science. The present study aims to investigate the mediating effect of the dimensions of attitudes toward teaching science (i.e., cognitive beliefs, affective states, and perceived control) in the relationship between teacher self-efficacy beliefs and teaching motivation on behavioural intention in teaching science. A quantitative research design was employed upon 127 pre-service science teachers in Malaysia and the PLS-SEM approaches were used for data analysis. The questionnaire in this research was adapted from 'Science Teaching Efficacy Belief Instrument-Form B' (STEBI-B), 'Work Tasks Motivation Scale for Teachers' (WTMST), 'Dimensions of Attitude towards Science' (DAS) and 'Behavioural Intention Scale'. Findings: The data analysis indicated affective states toward teaching science showed a substantial mediating effect in the relationship between teacher self-efficacy beliefs and teaching motivation on behavioural intention in teaching science. Besides, teaching motivation and affective states toward teaching science also showed a significant effect on behavioural intention in teaching science. Teacher self-efficacy beliefs and teaching motivation showed significant effect on two of the dimensions of attitudes toward teaching science (i.e., affective states and perceived control). Implications for Research and Practice: These empirical pieces of evidences provide insights for the education policymakers to formulate a teaching curriculum that focuses more on the development of affective domains specialised in Malaysian teacher education institutions.