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Summary: This study investigates the relationship between subject matter knowledge (SMK) for mathematics teaching and self-reported non-cognitive factors among 201 prospective mathematics teachers (PMTs) in Hong Kong. Participants completed a survey adopted from E. H. Fennema and J. A. Sherman [“Fennema-Sherman mathematics attitudes scales: instruments designed to measure attitudes toward the learning of mathematics by females and males”, J. Res. Math. Educ. 7, No. 5, 324–326 (1976)] were assessed their confidence in learning mathematics (CLM), attitude towards success in mathematics (ASM), mathematics anxiety (MA), effectance motivation in learning mathematics (EMM), while 73 of them were assessed in a written test on their knowledge. The regression analysis suggests that CLM is the main predictor of the performance in SMK compared to MA and EMM. Findings also show that there were statistically significant effects of both gender and program of studies on their performance on MA, EMM and CLM. The results suggest a further investigation of the relationship between beliefs and SMK among PMTs in other contexts. Implications for the current teacher education system in Hong Kong are also discussed.

Classification: C39 C49 C29
Keywords: confidence in learning mathematics; mathematics anxiety; effectance motivation; mathematics subject matter knowledge; prospective mathematics teachers
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