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Assessing the psychometric properties of students' MOOC - efficacy measurement model

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Abstract

Author keywords

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Abstract

Massive Open Online Courses (MOOCs) have been identified as a potential innovation for improving teaching and learning. This research aims to develop and evaluate a measurement model of students' MOOC - efficacy. The study conceptualized students' MOOC - efficacy in four dimensions of information searching, making queries, MOOC learning, and MOOC usability. Data were collected with a 23 items questionnaire whose reliability indexes ranged from 0.822 to 0.890, identified from university students who have had some experience with MOOCs and who willingly volunteered to participate in the research (N=1,524). A sample of 623 respondents was drawn through simple random sampling. The Confirmatory Factor Analysis (CFA) was adopted for data analysis. The findings designate that four-dimensional students' MOOC - efficacy measurement model achieved an acceptable level of fit (RMSEA = 0.061, CFI = 0.935 and a normed chi-square, $\chi^2/df = 3.322$). All statistics provide empirical evidence that the students' MOOC - efficacy measurement model is psychometrically sound in terms of validity and reliability. The measurement model of students' MOOC - efficacy provides further insights into what works in an open online environment which may be used to fulfill learners' needs and preferences. © Universiti Putra Malaysia Press

Author keywords

Confirmatory Factor Analysis (CFA); Measurement model; MOOC - efficacy; Reliability; Validity

**Topic name**

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