EXAMINING TEACHER ACCEPTANCE OF LEARNING ANALYTICS IN A HIGHER EDUCATIONAL INSTITUTE: A STRUCTURAL EQUATION MODELLING EXPLORATION

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ABSTRACT

Learning analytics has shown promising potential in helping teachers keep track of students' e-learning activities. It can be used to assist teachers in decision-making regarding teaching strategies and courses or curriculum design. However, teachers may not actually utilise this technology in their classes. Therefore, a deeper understanding of teachers' perception of learning analytics use is needed. This study analysed teachers' perceptions of using learning analytics in their teaching by applying the Technology Acceptance Model (TAM) as the fundamental theory. 178 teaching staff from one polytechnic public university completed an electronic questionnaire. Data collected was analysed by using structural equation modelling. The results showed that perceived usefulness and satisfaction were two main factors for teachers' eventual intention to continue using learning analytics in their future teaching. A relatively novel construct for teachers' information and communication technology (ICT) competence for instructional design was introduced to the TAM. It was found that although the competence factor did not significantly and directly affect the behavioural intention to use learning analytics, it was highly influential to the perceived ease of use. This may mean that professional development programs focusing on instructional design topics, particularly with applications of ICT or e-learning, could increase the use of learning analytics among teachers through mediators, which may eventually induce positive effects to students' learning.

Keywords: learning analytics, technology acceptance model, ICT, instructional design, structural equation modelling