Empirical modeling of information communication technology usage behaviour among business education teachers in tertiary colleges of a developing country

ABSTRACT

This study has empirically tested the fitness of a structural model in explaining the influence of two exogenous variables (perceived enjoyment and attitude towards ICTs) on two endogenous variables (behavioural intention and teachers' Information Communication Technology (ICT) usage behavior), based on the proposition of Technology Acceptance Model (Davis, 1989a). The sample was 212 teachers from Business Education faculties of 13 tertiary colleges in the northwestern region of Nigeria. As one of the major developing countries in Africa, Nigeria has invested a lot of resources in ICTs for the past several years to ensure the appropriate uptake and integration of technology across the important sectors of the country's economy, especially the education sector. Unfortunately, the country's standard of ICT adoption has remained low for many years. Congruently, its educational sector has remained incapacitated by lack of adequate ICT facilities and lack of skilled ICT-manpower, with school teachers using obsolete tools in the classroom, and some of them buying and using ICTs out of their own volition. Teachers' use of ICTs in tertiary schools' has remained poor in Nigeria, and research initiatives on ICT usage behaviour are rare and predominantly descriptive in nature. Past studies have dwelt on investigating the influence of physical infrastructural facilities on teachers' use of technology in the classroom. The current study has investigated the influence of teachers' perceptive beliefs, attitudes and intentions on their technology usage behaviour, using Structural Equation Modeling (SEM). Findings have shown that teachers' perceived enjoyment of ICTs influences their ICT usage behaviour in the classroom (= .281, p < .05); teachers' perceived enjoyment of ICTs influences their intention to use ICTs (= .740, p < .001); teachers' ICT attitude influences their intention to use ICTs (= .122, p < .05); teachers' ICT attitude influences their ICT usage behaviour (= .512, p < .001) and teachers' behavioural intention influences their ICT usage behaviour ICTs (= .-368, p < .05). Teachers' behavioural intention to use ICTs has, however, predicted a decrease in their self-reported ICT usage behaviour. This study will benefit school leaders, curriculum planners and researchers in technology acceptance behaviour in Africa, by giving them guidance in taking decisions concerning teachers' perceptions and intentions of using ICTs in the classroom. The study will play a vital role in filling up the research gap that exist in technology acceptance behaviour among business education faculties across tertiary institutions in Nigeria and the rest of Africa. Future research on the subject matter may attempt to investigate the moderating roles of voluntariness and compulsory standards in influencing teachers' ICT usage behaviour.

Keyword: Attitude towards technology; Behavioural intention; Business education; Developing country; ICT usage behaviour; Nigeria; Perceived enjoyment; South Africa; Teachers