Personality Traits and the Intention to Use Artificial Intelligence Tools in English Language Learning: A Mixed-Methods Extension of the UTAUT Framework

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Abstract

This study extends the Universal Theory of Acceptance and Use of Technology (UTAUT) model to study three under-explored areas: the non-formal and informal usage of AI by Thai undergraduates, factors influencing AI adoption, and the role of personality traits in adoption patterns. First, we tested our structural model via survey data from 238 undergraduates enrolled in English as a foreign language classes at a Thai university. We added Personal Innovativeness and Algorithmic Aversion to the UTAUT model alongside the Big Five personality traits as antecedents and moderators. We used partial least squares structural equation modeling (PLS-SEM) to explore this data. We then conducted focus group interviews with 29 of the students. Survey results showed that Performance Expectancy was the strongest predictor of intention to use AI, with Social Influence a close second. Personality traits had no significant direct or moderating effects. Focus group findings highlighted the universality of AI use, perceived efficiency gains, and risk management strategies such as cross-checking outputs. Based on our findings, we discuss implications for EFL pedagogy, including the need to bridge students' out-of-class AI practices with coursework, and point to model extensions that capture social media influence and habit formation.