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Investigating Factors Affecting Artificial Intelligence Learning Outcomes in Business Education

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Abstract

Artificial intelligence (AI) is rapidly permeating various aspects of daily life, revolutionizing industries and altering the modalities of work, learning, and communication. As AI assumes an increasingly pivotal role across multiple sectors, there is a marked increase in the demand for professionals possessing advanced AI knowledge and competencies. Nevertheless, the majority of prior research has concentrated on supportive environments, such as social norms and facilitating conditions, despite the significant influence that environmental factors exert on university business students' achievement-related decisions and academic performance. To date, limited studies have systematically evaluated these students' success expectations, academic choices, and performance, notwithstanding the growing prominence of AI education programs. This study seeks to address this gap by examining the effects of individual differences, specifically AI self-efficacy, and motivational beliefs, including outcome expectations and the perceived utility value of AI, on students' achievement behaviors. The study hypothesized that AI self-efficacy is positively associated with both outcome expectations and the perceived utility value of AI. Furthermore, outcome expectations and the perceived utility value of AI are positively related to achievement behaviors. This study presents a comprehensive framework for examining the factors that influence the learning performance of university business students. The findings are anticipated to contribute to AI education initiatives by improving motivational beliefs and achievement behaviors. The findings are expected to contribute to the advancement of future research on AI education within the domain of business education studies at universities.

Keywords: AI Education, AI Self-Efficacy, Learning Performance, Outcome Expectations Perceived Utility Value