

Impact of Using AI on the Learning Experience of State University Students in Sri Lanka

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Abstract

The integration of Artificial Intelligence (AI) into higher education has significantly impacted academic practices globally, including in Sri Lanka. However, the impact of AI on the learning experience of students in state universities in Sri Lanka remains underexplored. This study addresses this gap by examining students' perceptions of usefulness, trust, and willingness to use AI in academic settings. The conceptual framework examines three independent variables: perceived usefulness, perceived trust, and willingness to use AI, and their effects on students' overall learning experience with AI in academic contexts. This deductive, explanatory, and quantitative study surveyed 394 undergraduates from state universities in Sri Lanka using a structured questionnaire. A stratified purposive sampling approach was applied to ensure representation across faculties and study years. Correlation and regression analyses were conducted to examine relationships among variables. The findings reveal that all three factors significantly and positively impact students' learning experiences, with perceived usefulness having the strongest correlation ($r = 0.462$), followed by perceived trust ($r = 0.434$) and willingness ($r = 0.298$). Collectively, the three predictors explained 47.1% of the variance in learning experience ($R^2 = 0.471$), confirming AI's multifaceted role in enhancing engagement and academic outcomes. The study suggests that universities should prioritize AI Infrastructure, faculty training, and student awareness programs to strengthen adoption and improve learning outcomes. The research provides context specific insights for higher education in developing countries, highlighting cultural and institutional challenges in AI adoption.

Keywords: artificial intelligence, higher education, learning experience, perceived usefulness, willingness to use AI