

Impact of Generative AI on Perceived Creativity of State University Students in Higher Education

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Abstract

This study investigates the impact of generative artificial intelligence (Generative AI) on the perceived creativity of undergraduate students in Sri Lankan state universities. With the rapid integration of generative AI tools such as ChatGPT, Grammarly, and DALL·E into academic environments, understanding their influence on students' creative potential has become increasingly important. The study is grounded in the Technology Acceptance Model (TAM) and the Creativity in Language Learning Framework (CLLF) and aims to examine how four key factors: perceived ease of use, perceived usefulness, educational environment, and instructional practices affect students' perceived creativity in higher education. The research adopts a quantitative design, employing a structured questionnaire distributed to 384 undergraduates from 17 state universities in Sri Lanka, selected through stratified random sampling. Sri Lankan state universities were chosen as the context due to their diverse academic structures and increasing exposure to AI-driven learning tools. Data were analysed using descriptive statistics, correlation, and multiple regression analyses in SPSS. Results indicate that all four independent variables have a significant positive influence on students' perceived creativity (β values ranging from 0.29 to 0.42, $p < 0.05$). These findings highlight the transformative potential of Generative AI in enhancing creative confidence, divergent thinking, and academic performance, while emphasising the need for ethical use and balanced integration. The study contributes to the growing body of knowledge on AI in education and provides insights for educators and policymakers to design AI-integrated pedagogical strategies that foster creativity in higher education.

Keywords: creativity, Gen AI, higher education, perceived ease of use, perceived usefulness