

Abstrak

Perkembangan *Artificial Intelligence* (AI) dalam pendidikan tinggi telah mengubah cara mahasiswa menyelesaikan tugas akademik, termasuk dalam memahami materi dan mengelola proses belajar. Dalam konteks ini, efikasi diri akademik menjadi faktor psikologis penting yang memengaruhi bagaimana mahasiswa menggunakan AI secara adaptif. Penelitian ini bertujuan untuk menggambarkan efikasi diri akademik mahasiswa Fakultas Teknik dalam menggunakan AI pada tugas akademik serta menguji perbedaannya berdasarkan karakteristik demografis. Penelitian menggunakan pendekatan kuantitatif deskriptif dengan metode survei terhadap 216 mahasiswa Fakultas Teknik yang aktif menggunakan AI. Pengumpulan data dilakukan menggunakan *The Indonesian Academic Self-Efficacy Scale* (TIASS) yang mencakup empat dimensi, yaitu *Interaction at University* (IU), *Performance in Class* (PiC), *Performance out of Class* (PoC), dan *Managing Work–Family–University* (MWFU). Analisis data meliputi statistik deskriptif, uji *independent sample t-test*, dan uji ANOVA. Hasil penelitian menunjukkan bahwa efikasi diri akademik mahasiswa berada pada kategori sedang. Tidak terdapat perbedaan signifikan berdasarkan umur, namun terdapat perbedaan pada dimensi *Performance out of Class* (PoC) berdasarkan jenis kelamin serta perbedaan signifikan berdasarkan program studi pada dimensi PoC dan efikasi diri akademik secara keseluruhan. Penelitian ini menunjukkan bahwa penggunaan AI berkaitan dengan efikasi diri akademik mahasiswa, namun pengaruhnya bersifat kontekstual. AI berperan sebagai alat bantu pembelajaran yang dapat meningkatkan efisiensi, tetapi tetap memerlukan regulasi diri agar tidak menimbulkan ketergantungan.

Kata kunci: *Artificial Intelligence* (AI), efikasi diri akademik, mahasiswa teknik, pembelajaran, *The Indonesian Academic Self-Efficacy Scale* (TIASS)

Abstract

The development of Artificial Intelligence (AI) in higher education has transformed the way students complete academic tasks, including understanding course material and managing the learning process. In this context, academic self-efficacy is a key psychological factor influencing how students adaptively use AI. This study aims to describe the academic self-efficacy of students in the Faculty of Engineering regarding the use of AI in academic tasks and to examine differences based on demographic characteristics. The study employed a descriptive quantitative approach using a survey method involving 216 active engineering students who use AI. Data collection was conducted using the Indonesian Academic Self-Efficacy Scale (TIASS), which covers four dimensions: Interaction at University (IU), Performance in Class (PiC), Performance out of Class (PoC), and Managing Work–Family–University (MWFU). Data analysis included descriptive statistics, independent samples t-tests, and ANOVA tests. The results of the study indicate that students' academic self-efficacy falls into the moderate category. No significant differences were found based on age; however, differences were observed in the Performance out of Class (PoC) dimension based on gender, as well as significant differences based on program of study in the PoC dimension and overall academic self-efficacy. This study shows that the use of AI is associated with students' academic self-efficacy, but its impact is contextual. AI serves as a learning tool that can enhance efficiency, but it still requires self-regulation to prevent dependency.

Keywords: *academic self-efficacy, artificial intelligence, engineering students, learning, The Indonesian Academic Self-Efficacy Scale (TIASS)*