

ABSTRACT

Dzawataa Afnan: *The Correlation Between Students' Use of AI ChatGPT and Their Academic Writing Performance in the 4th Semester.*

This quantitative correlational study aimed to investigate the relationship between students' use of AI ChatGPT and their academic writing performance among fourth-semester English education students at UIN Sunan Gunung Djati Bandung. Despite the growing integration of generative AI tools in higher education, empirical quantitative studies measuring the statistical relationship between ChatGPT usage frequency and objective writing outcomes remain scarce, particularly in the Indonesian EFL context. This study employed a correlational research design with ChatGPT usage as the independent variable and academic writing performance as the dependent variable. Data were collected from 39 participants selected through purposive sampling using two instruments: a Likert-scale questionnaire measuring ChatGPT usage frequency across five indicators and document analysis of students' midterm exam scores in the Academic Writing course. The data were analyzed using descriptive statistics, normality tests, linearity tests, and Pearson product-moment correlation with IBM SPSS version 26. The findings revealed that students' ChatGPT usage varied considerably with a mean score of 72.26 and standard deviation of 11.40, ranging from 50.0 to 96.7, indicating diverse adoption patterns. In contrast, students' academic writing scores were highly homogeneous with a mean of 79.56 and standard deviation of only 0.88, ranging from 77.64 to 81.99, suggesting similar writing abilities across respondents. Most importantly, the Pearson correlation test demonstrated a very strong, positive, and statistically significant relationship between ChatGPT usage and academic writing performance ($r = 0.843$, $p = 0.000$), leading to the rejection of the null hypothesis. This study concludes that there is a significant and positive correlation between the frequency of ChatGPT usage and academic writing performance among fourth-semester English education students. Students who use ChatGPT more frequently tend to achieve higher scores in their academic writing assessments. However, correlation does not imply causation, and the observed relationship may be influenced by other variables such as prior language proficiency, learning motivation, and academic self-discipline. The findings provide empirical evidence supporting ChatGPT's potential as a supplementary tool in academic writing instruction while emphasizing the importance of responsible and ethical use to prevent overreliance that may undermine critical thinking and independent writing skills. Recommendations include integrating ChatGPT strategically in writing instruction, developing institutional guidelines for ethical AI use, and conducting further experimental or longitudinal research to examine causal effects.

Keywords: *Academic writing, ChatGPT, correlation, EFL, higher education*