Using Artificial Intelligence in Writing an Academic Essay: A Literature Review

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Abstract

Writing an academic essay might be challenging for English as a Foreign Language (EFL) students. As a response, the researcher is interested in investigating EFL university students' perspectives on using Artificial Intelligence technology to help them improve their academic essays. To achieve the research goal, the researcher first did a literature review analysis on seventeen articles published in national and international journals. After the review analysis, the researcher interviewed five participants who are now or have taken academic essay writing classes in batch 2021 or 2022 to discuss the results of the literature review analysis. This interview served as an insight into the experiences and perceptions of EFL students regarding the benefits and limitations of AI in academic writing. The data was qualitatively examined and presented as themes. The study results showed that the participants generally had positive perspectives when using AI technology. The study was expected to provide an overview of the benefits experienced by students and potential limitations of AI in essay writing, thus providing valuable insights for educators who wish to integrate AI in academic writing classes. The study concluded with recommendations for further research on the role of AI in EFL academic writing support.

Keywords: Artificial Intelligence; Difficulty Writing; Academic English Essays

INTRODUCTION

Writing academic essays is an essential part of each student's academic journey, no matter how old, how educated, or what subject they are studying. Being proficient in this area is essential for academic success and improved communication skills, which are highly valued in the workplace (Abbas, 2017; Mali, 2022; Pratama & Hastuti, 2024; Rusmiyanto et al., 2023; Winarto, 2015). According to Hasnawati et al. (2023), increasing this skill delivers immediate advantages and promotes the development of critical thinking and logical reasoning skills. Not only that, Khoshhal (2021) also stated that being good at writing skills may help us connect with great people around us or even all over the world. However, academic essay writing is a complex and frequently time-consuming task that requires a thorough comprehension of syntax, vocabulary, organization, and critical thinking (Abbas, 2017; Hafrison, 2020; Hasnawati et al., 2023). Students also confront the difficult challenge of navigating a vast sea of resources, understanding various writing styles, and managing their linguistic strengths and weaknesses as they work to become more proficient essay writers (Amanda et al., 2023). Writing can be difficult for certain students and lead to failure due to its complexities. According to Yolanda et al. (2020), most students cannot write cohesively and coherently. Inadequate cohesion and coherence in writing leads to misunderstandings and makes reading more difficult. Another reason why writing is hard is that some students lack vocabulary and have low comprehension of grammatical rules (Nova, 2018). At the same time, the use of Artificial Intelligence (henceforth called AI) technology has gradually become a trend in education, played a growing role in shaping modern language learning environments, and has been of great concern to many educators as artificial intelligence. AI technology has shown to be a revolutionary force in the

always-changing field of education, improving many facets of academic growth and learning. Helping students become better essay writers in English is one exciting way AI is used in education (Fitria, 2023). The ability to write coherent and persuasive essays in the English language has grown in importance as the need for fluent English communication skills across the globe rises (Syahnaz & Fithriani, 2023). This is where AI comes in, acting as a potent instrument to enhance the educational process, offer priceless feedback, and enable students to achieve unprecedented success in their scholarly writing pursuits. Most studies seem to agree that participants considered AI could help them write more cohesive and coherent essays. Amanda et al. (2023) and Miranty et al. (2023) identified that incorporating technology tools in English academic writing can revolutionize the development and evaluation of writing skills. Several more researchers (e.g., Syahnaz & Fithriani, 2023; Tuti et al., 2023; Zhao, 2023) evaluated the effectiveness of AI in enhancing students' academic writing. Although many experts believe that AI is effective in improving the quality of students' academic essays, little study has been conducted to investigate students' perceptions of the impact of AI. Furthermore, little is known regarding students' critical responses and perspectives on literature exploring the use of AI in the writing classroom. In this study, the researcher is interested in exploring EFL university students' perspectives on using AI in writing an English essay. AI describes a computer's or a robot's capacity to perform operations typically performed by intelligent entities. The phrase is commonly used to describe creating artificial intelligence systems that include human-like cognitive functions, like reasoning, meaning-finding, generalization, and experience-based learning (Zhao, 2023). The phrases AI and its subdivisions, computer learning, and deep learning, are frequently used interchangeably. These fields use AI algorithms to build expert systems that categorize or predict things based on data fed into them (Malik et al., 2023). AI has become an essential tool for enhancing students' writing abilities in academic English writing. Using technological tools, students can improve their comprehension of how academic writing develops within particular writing subjects (Zulfa et al., 2023). From a platform where materials were just downloaded, online education has evolved to include intelligence (Marghany, 2023). Artificial intelligence technology is helpful in everyday life and is not just employed for severe purposes (Fitria, 2023). When we think of artificial intelligence, the first things that come to mind are job automation, algorithm bias, and technological advancements. AI writing tools are often designed to examine written texts and offer feedback on various aspects of the writing, including syntax, vocabulary, grammar, content, and structure. Academic writing must speak to an intellectual community where students actively participate in their education (Hasnawati et al., 2023). Some fundamentals or guidelines need to be defined. One of the most critical aspects of learning is making use of information. Students must be able to access, appraise, and synthesize the words, ideas, and opinions of others to build their academic voice (Khoshhal, 2021; Sumakul et al., 2022). An idea-generation tool is a computer program that allows individuals to develop ideas. Tools like *Microsoft Bing*, *Bard*, and *ChatGPT* must be familiar to us. These tools are helpful for text analysis, filtering, and parsing (Dergaa et al., 2023; Javier & Moorhouse, 2023). According to Marghany (2023), virtual assistants that provide suggestions, respond to requests, and perform certain activities instantly, these devices can transform into virtual assistants capable of making suggestions, responding to requests, and carrying out specific activities instantly. Fitria (2023) added that this tool effectively develops ideas before writing, such as creating outlines or writing prompts. This tool also assists in finding references that can be used to strengthen the work and give it more credibility (Jones, 2022). Meanwhile, a paraphrasing tool is a computer program that allows individuals to change the words in a text without affecting its significance (Amanda et al., 2023). We have all heard the phrases "paraphrase" and "rewrite," but here is how they function. The paraphrase tool operates with two sources: copied and original text (if available). The program scans the original text and creates a new text with the same meaning (Fitria, 2023). *Quillbot* is

one of the most famous free paraphrasing tools. *Quillbot* provides a solution that uses artificial intelligence (AI) to propose paraphrases. According to Fitria (2021), the AI method combines deep learning with several approaches to natural language processing. It automatically removes, adds, or changes words to create a new sentence. *Quillbot* provides a solution by assisting with paraphrasing when teachers and pupils do not know how to do it manually (Zulfa et al., 2023). The use of this tool is simple. *Quillbot* rewrites texts after we write or paste the texts and then press the Paraphrase button (Amanda et al., 2023). Grammar websites allow students to teach themselves multiple ways of representing a concept. Many popular grammar software such as *Grammar Check Online, Free Grammar Checker*, *Online Editor*, and *Grammarly* exist. The following tools require an internet connection (data package) to check English grammar. By utilizing some of these online grammar check services, users will find two service alternatives, namely free and paid features. The free online English grammar check program has several restrictions. Also, it needs service features, unlike the paid English grammar check (premium), which has full advantages, many features, and complete (Fitria, 2021).

Automated written corrective feedback tools do not attempt to provide feedback on organizational or structural factors in texts but focus exclusively on lower-level writing issues, mainly grammatical and lexical errors. Whereas a web-based portal supplies access to AWE systems, *Grammarly* and similar tools are available in various ways (Miranty et al., 2023). *Grammarly* works as a standalone tool or is integrated into existing writing tools, such as *Microsoft Word* or *Google Docs*. Most recently, it has been available as a web browser extension or a smartphone's virtual keyboard. Given how widely *Grammarly*, in particular, is used (and how much it is hyped in marketing materials), more studies would be welcome, as it does indeed represent a new and distinct genre of writing-support technology (Nova, 2018).

Automatic writing evaluation systems, such as *Criterion*, *MY Access!*, or *Pigai*, are used principally in academic settings. They have been available for some time, so a base of research studies is available. Synchronous text editors are recent. Tools such as *Grammarly* or *ProWritingAid* are widely used in educational, professional, and everyday environments. They offer automated written corrective feedback (AWCF), a descriptor beginning to be used in emerging research on their use (Miranty et al., 2023; Nova, 2018). Translation services such as *Google Translate* have improved dramatically in recent years and are now available in various formats and on many different devices. The newest addition to intelligent writing assistance is automatic text generators, which, independent of the grammatical accuracy of a text string, suggest wording improvements (*Google Compose*) or even generate entire texts when given a topic or prompt (Jones, 2022).

An academic essay is a written composition that attempts to convey an argument or analysis of a topic in a systematic and coherent structure. The most crucial aspect of writing is making our content legible to others. Writing academic essays requires two significant considerations: the writing process, which involves prewriting, drafting, revising, editing, and advertising, and micro and macro skills, such as grammar and proper writing mechanics (Abbas, 2017). It is essential for writing a well-structured essay that avoids misunderstandings. Yolanda et al. (2020) stated that three components are required to write a decent essay: unity, coherence, and cohesiveness. Each paragraph in the essay must have unity relevant to the topic of discussion. (Hafrison, 2020) stated that cohesive essay writing occurs when each phrase and paragraph are connected and have consistent ideas. One of the components of mastery essay writing is coherence, which relies on grammatical characteristics to generate excellent writing (Alqasham et al., 2021). Khoshhal (2021) added that, besides being cohesive and coherent, another purpose of writing academic essays is to generate writing that can demonstrate ideas clearly, rationally, and critically. Based on the explanation above, the aim of this research " to find out the students' perspectives on using AI in their academic essays".

METHOD

The purpose of this study is to explore EFL university students' perspectives on using AI in their academic essays. To answer the research question, the researcher first conducted a literature analysis on seventeen articles (see Table 1) published in peer-reviewed national and international journals relevant to the purposes of this study. To find those articles, the researchers searched for relevant articles from two databases: *Google Scholar* and *SINTA*. The researcher also found the articles from the following journals: *TEFLIN Journal* (https://www.journal.teflin.org/index.php/journal)*, TESOL Journal* (https://onlinelibrary.wiley.com/journal/19493533), and *English Language Teaching (ELT) Journal* (https://academic.oup.com/eltj), using the following keywords: *artificial intelligence*, *"writing essay'*, "*Chat GPT*," "*Grammarly*" "*Quillbot*", "*Automated Writing Evaluation (AWE),*" "*academic English essays,*" "*translation,*" "*writing essay"* "*difficulty writing*" on-empirical studies published in the last ten years to be included in the analysis.

Table 1. The Articles Reviewed in This Study

Journal Name	Empirical Study	Research Goal	Contexts and participants
Asian EFL Journal	Alqasham et al. (2021)	A quantitative and qualitative studies explore the cohesive devices undergraduate EFL students use in their essays	50 EFL students at the university in Saudi Arabia
CDELT Occasional Papers in the Development of English Education	Marghany (2023)	A quantitative and qualitative study exploring the use of AI technology, especially *Grammarly*, to develop Egyptian higher education students' FL essay writing skills	100 randomly selected students in English courses in Egypt's higher education
English Learning Innovation	Hastuti and Pratama (2024)	A quantitative and qualitative studies exploring the effectiveness of AI in teaching writing	30 high school students at the Kalideres RPTRA, Indonesia
English Review: Journal of English Education	Hidayati et al. (2024)	A qualitative study exploring the effectiveness of digital literacy in essay writing	120 EFL students at the university in Indonesia
English Teaching and Research	Armanda et al. (2022)	A qualitative study exploring EFL students' perspectives and opinions on using *Grammarly* to check their grammar when writing articles	120 EFL students in the third year of the English Education Department Study Program at the university in Indonesia
Heliyon	Nazari et al. (2021)	A quantitative study exploring the effectiveness of the application of artificial intelligence-powered digital	180 students in a national university in Indonesia

Journal Name	Empirical Study	Research Goal	Contexts and participants
		writing assistant in higher education	
International Journal of Educational Technology in Higher Education	Escalante et al. (2023)	A qualitative study exploring the insights into ENL students' efficacy and preferences in using AI-generated feedback on writing	91 students at a small liberal arts university in the Asia–Pacific
International Journal of English Linguistics	Selim (2024)	A quantitative and a qualitative study exploring how AI transforms university-level EFL students' academic writing skills	50 female fresh graduate students at the university in Saudi Arabia
International Journal of Evaluation and Research in Education	Miranty et al. (2023)	A quantitative study exploring the use of free automated writing evaluation (AWE) tools affects undergraduate EFL students' writing skills	35 Indonesian undergraduate students of the English education department at the university in Indonesia
	Mohammed and Sanosi (2024)	A quantitative analytical study with a cross-sectional survey explored the effectiveness of *Grammarly* as a writing assistant	98 undergraduate students in ENG351 (Applied Linguistics) and ENGL4760 (CALL) courses at a university in Saudi Arabia
International Journal of Educational Research Open	Malik et al. (2023)	A quantitative study to explore students' perceptions of AI usage in academic essay writing	245 undergraduate students from 25 tertiary institutions in eastern and central Indonesian provinces
International Journal of Social Science and Human Research	Hasnawati et al. (2023)	A qualitative study explores students' difficulties in writing English essays	23 students in an English essays course in Indonesia
Journal of English Educational Study (JEES)	Tuti et al. (2023)	A qualitative study explores translation tools' role in writing in a second language and the impact on students' writing performance and processes	18 students in a language education program at STKIP Persada Khatulistiwa Sintang

Journal Name	Empirical Study	Research Goal	Contexts and participants
Jurnal Pendidikan dan Sastra Inggris	Amanda et al. (2023)	A quantitative study explores the effectiveness of *Quillbot* as an assistant in students' English writing.	33 students from the Islamic University of North Sumatra
Premise: Journal of English Education and Applied Linguistics	Nova (2018)	A qualitative study exploring the strengths and weaknesses of *Grammarly* program as an automated writing evaluation program in evaluating academic writing	3 Indonesian EFL postgraduate students in a university in Indonesia
Scope: Journal of English Language Teaching	Fithriani and Syahnaz (2023)	A qualitative study exploring students' perception of *Quillbot* utilization in an EFL academic writing course	20 sixth-semester students majoring in English Education at a university in Indonesia
TEFLIN Journal	Mali and Salsbury (2021)	A qualitative study exploring the lecturers' reflections on integrating technology to support their students in completing English language learning tasks in an EFL writing classroom	3 students from the EFL writing class at the English Language Education Program at the University in Indonesia

Research Participants

After analyzing the literature, the researcher conducted an interview with five students (i.e., batch 2021 or 2022) in English Language Education at a private university in Central Java, Indonesia. They were selected because they have experienced using AI during the Academic Writing or Writing for The Media classes. The researcher expected that they could give their perspective on how AI technology affects their experiences and learning outcomes. The researcher used pseudonyms to refer to the participants to protect their real identities. All of the participants were Luffy (student 1), Nami (student 2), Robin (student 3), Zoro (student 4), and Charlotte (student 5). In addition, the researcher interviewed the students to discuss the results of the literature review analysis.

Data Collection

Initially, to contact the researcher participants, the researcher contacted the potential participants via WhatsApp about the study and answered any questions they might have about it. The researcher contacted the participants by greeting them first and then asking them if they were willing to join as participants in this study. The researcher asked about the participants' experiences using technology in writing their academic essays. Furthermore, the researcher asked additional questions about whether technology helps and broadens the participants' perspectives in developing ideas for their essay writing. After that, the researcher provided a list of statements (i.e., the results of the literature review analysis) related to the purposes of the study and asked the participants to respond to those statements in the interview session. All the interview sections' results were transcribed for data analysis. The interviews were conducted face-to-face offline or online using Indonesian to ensure the participants could participate in the

discussion session and respond in-depth to all interview questions. Before the interview, the researcher explained the purpose of the study and asked the participants to sign a consent form to be the research participants in this study. Then, the researcher ensured the participants that there would be no risk to the participants' study. The interviews were audio-recorded, transcribed, and analyzed.

Data Analysis

There were two data analysis stages. First, the researcher read the collected articles several times and underlined any words, phrases, or sentences that were closely related to the research question of this study. Then, the researcher developed themes in the form of phrases or sentences as the answer to the research question. This theme was presented in the findings section. Second, to analyze the interview data, the researcher read the transcribed interview and did the same things described above. The interview excerpts were used to support the data analysis results. The researcher asked the participants to read all the transcripts to check that the excerpts were what they wanted to say. This member-checking procedure could help enhance the research's trustworthiness (Mali & Salsbury, 2021; Nova, 2018; Tuti et al., 2023; Wardani & Mali 2023).

RESULTS AND DISCUSSION

Results

The main focus of this study is to examine and answer the researcher's research question: *What are EFL university students' perspectives on using AI in writing academic essays?* In this section, the researcher summarizes and presents the overall findings from the results of the literature review analysis and includes excerpts from the data obtained from student interviews. The findings that have been summarized and presented are expected to provide insight and recommendations on how AI impacts writing academic essays. In this study, the researcher focused on three significant AI tools often used in writing academic writing essays: *ChatGPT*, *Grammarly*, and *Quillbot*. The following section will show the themes generated from the data analysis to answer the research questions.

AI Can Generate Constructive Feedback to Help Students Evaluate Their Writing

Most previous studies confirmed that writing is challenging for students (Alqasham et al., 2021; Armanda et al., 2022; Hasnawati et al., 2023). According to research from Hidayati et al. (2024), the factors that made students have difficulty writing were a lack of motivation and difficulty getting constructive feedback. According to Amanda et al. (2023), AI might have the potential to help students overcome problems in writing, especially in analyzing and evaluating. Some researchers (e.g., Amanda et al., 2023; Miranty et al., 2023; Selim, 2024) claimed that AI, such as *ChatGPT*, *Grammarly*, and *Quillbot*, provided constructive feedback, allowing students to evaluate and improve their writing immediately. AI has the potential to serve as a writing assistant and support students effectively (Escalante et al., 2023a). Certain AI tools provided students with written feedback highlighting the areas of their work that still required correction or modification (Nova, 2018; Pratama & Hastuti, 2024; Syahnaz & Fithriani, 2023). Many students felt that AI feedback helped them improve their quality of writing and boosted their confidence (Marghany, 2023). This was in line with what Nami, Luffy, and Charlotte discussed during the interview.

> Most of the time, the feedback from AI like *ChatGPT*, *Quillbot*, and *Grammarly* helped me see the big picture of what I was writing about or refine some of my thoughts to make

them more understandable. Furthermore, AI feedback assisted me in identifying and evaluating errors or weaknesses in my work [...] [Nami/interview/22/08/2024]

After receiving constructive feedback from AI, I felt more motivated and confident in my work. [...] [Luffy/23/08/2024]

[...] The quick and instant feedback provided by AI was able to take on the role of a practical writing assistant. I did not need to check one by one because these AI could summarise and highlight the parts of my writing that needed development. [Charlotte/interview/25/08/2024]

These insights reflected students' generally positive perspectives regarding using AI in academic writing. Miranty et al. (2023) found that students appreciated AI feedback positively because it provided new information that made writing more manageable and flexible. Other reports indicated that students were satisfied with AI feedback because their writing had improved significantly (Selim, 2024).

AI Helps Students Develop Their Ideas in Writing Academic Essays

Several studies provided evidence that AI effectively assisted students in developing ideas when writing. AI encouraged students to generate ideas in writing by giving constructive suggestions (Fitria, 2023). Students increased the quality of their ideas by developing suggestions from multiple sources (Malik et al., 2023; Marghany, 2023). Mali and Salsbury (2021) found that students used AI to outline their writing ideas and expand on them. Students also thought their writing was better structured and engaging (Miranty et al., 2023). In addition, according to some researchers (e.g., Amanda et al., 2023; Nazari et al., 2021; Selim, 2024; Tuti et al., 2023), using *ChatGPT*, *Grammarly*, and *Quillbot* as an assistant tool allowed students to broaden their thinking styles and improve their writing quality. This was in line with what Robin, Zoro, and Luffy discussed during the interview.

AI could come up with ideas I never thought of or even imagined. It then presented these ideas logically and in an easy-to-understand language. Some AI, like *ChatGPT*, provided ideas from various sources, which made it easy for me to adapt them according to my version. [...] [Robin/interview/23/08/2024]

[...] I also employed AI, such as *ChatGPT*, to find the main idea behind my random ideas. After that, I used *Quillbot* and *Grammarly* to help me sort through my thoughts and integrate them to create structured and neat concepts. […] [Zoro/interview/24/08/2024]

[...] So far, *ChatGPT* has helped me widen my views on what I want to develop to better grasp my future ideas from various perspectives and possibilities. [Luffy/interview/23/08/2024]

AI allowed students to access various tools to help them develop themselves, especially by making it easier and more focused (Malik et al., 2023). AI also enabled students to broaden and enhance their thoughts by offering several references from different sources (Marghany, 2023). According to specific experts, students generated intriguing ideas based on various insights provided by AI (Nazari et al., 2021; Selim, 2024).

AI Supports the Development of Cohesive and Coherent Writing

AI helped direct and clarify each student's writing so that each paragraph and sentence could be interconnected sequentially. Some previous studies reported that students could write cohesive and coherent paragraphs with support from AI (Miranty et al., 2023; Sanosi & Mohammed, 2024; Tuti et al., 2023). According to Mali and Salsbury (2021), AI facilitated students' ability to obtain an overview of the work they would create by offering an outline. It could develop students' writing skills, especially regarding clarity (Nova, 2018). AI could build a solid foundation for more structured student writing (Armanda et al., 2022). According to research by Pratama and Hastuti (2024), AI could clarify the content of student writing, encouraging students to better direct the purpose of their writing. Furthermore, studies indicated that by employing AI, students may assess the coherence and cohesiveness of their writing by considering the reader's point of view (Malik et al., 2023). Students felt more confident producing cohesive and coherent writing (Alqasham et al., 2021). This was in line with what Zoro, Luffy, and Charlotte discussed during the interview.

> AI facilitated me to create cohesive and coherent writing. Clarifying the flow of my essay made it easier to be selective with each sentence and paragraph. The results of my writing could become a unified and related whole. [...] [Zoro/interview/24/08/2024]

> AI support helped me clarify the content of my writing, making it more cohesive and coherent. It allowed the readers to have thoughts that aligned with mine. […] [Luffy/interview/23/08/2024]

> AI offered a solid foundation for more structured writing. My writing become more cohesive in aligning sentences and paragraphs and more coheren with the clear contents. [...] [Charlotte/interview/25/08/2024]

Marghany (2023) found that students responded positively to AI, encouraging their writing progress. AI facilities motivate students to write better and invite them to develop their skills (Miranty et al., 2023). Carefully considering AI assistance could encourage students to create quality and competitive papers such as conference presentations, academic writing contests, or publication submission (Pratama & Hastuti, 2024).

Challenges in Using AI That Hinder Students' Academic Writing

Aside from being a possible assistant, AI sometimes hindered students' writing. According to Malik et al. (2023), their research revealed that the obstacles experienced by students often force them into dullness, where they cannot examine their writing output and only rely on AI. Many researchers discovered (e.g. Escalante et al., 2023; Miranty et al., 2023; Syahnaz & Fithriani, 2023) that students believed some of the AI's replies or evaluations needed more accuracy and required clarification before using the revised. Pratama and Hastuti (2024) found that students' dependence on using AI increased and caused a decline in thinking. Another study by Selim (2024) discovered that the outcomes produced by AI were not always what students desired, which disrupted their focus. In addition, some students felt AI was less effective because it required a premium subscription to access more advanced facilities (Sanosi & Mohammed, 2024). This was in line with the discussions conducted by the five interviewers.

> The most crucial factor that made me concerned about adopting AI was that I needed to properly manage the assistance from AI if I did not want the quality of my writing to suffer. Sometimes, AI messed up my writing if I did not do accuracy checks and clarifications properly. [...] [Charlotte/ interview/ 25/08/2024]

I felt that the instant form of AI could cause dependence on AI. So, I sometimes wanted to depend without bothering or being too lazy to process my thoughts. It caused me to experience a decline in thinking, which affected my comprehension of my writing. [Nami/interview/22/08/2024]

The challenge could be paid subscriptions. The features supplied by AI may require a premium subscription, which was not always affordable for us as students. [...] [Zoro/interview/24/08/2024]

Some students were concerned about system failures when utilizing AI (Tuti et al., 2023). Sometimes, the AI results made it difficult for students to understand due to differences in language levels (Miranty et al., 2023). Some students also found it challenging to understand the language generated by the AI, which was a robotic language that seemed rigid and confusing (Sanosi & Mohammed, 2024). According to Nazari et al. (2021), AI is an addictive technology, and its use with students should be carefully examined. Malik et al. (2023) added that if the use of AI was excessive, it would negatively impact students' development and their quality of thinking.

[...] The name was also an artificial tool. Sometimes, it could be erroneous, so it could take a long time, delaying my work progress when writing [...] [Luffy/interview/23/08/2024]

I assumed the problem of applying AI was more about the language created. Because AI was a robot, the language utilized was naturally robot-specific. Which could sometimes be complicated to understand. [...] [Robin/interview/23/08/2024]

Discussion

This systematic review explores EFL university students' perspectives on using AI in writing academic essays. The researcher categorized the critical findings into four themes. The findings discuss EFL students' perspectives on their experiences with AI, both positive and negative. The first theme suggests that AI technologies provide valuable, constructive input, which many students consider essential for improving their writing skills. Previous studies indicated that students frequently struggle with self-evaluation and would benefit from immediate feedback to overcome these gaps (Alqasham et al., 2021; Amanda et al., 2023; Hasnawati et al., 2023). AI applications such as *ChatGPT*, *Grammarly*, and *Quillbot* assist students in finding errors, improving ideas, and raising motivation (Fitria, 2023; Marghany, 2023). Interview excerpts demonstrate this effect, as students reported feeling more inspired and confident after receiving comments, which allowed them to see the big picture of their writing (e.g., Luffy, 2024; Nami, 2024). This was consistent with Escalante et al. (2023) and Selim (2024), who imply that AI feedback could increase students' sense of agency and improve their job quality. Furthermore, the rapid availability of feedback motivates students to continue polishing their writing independently, which promotes a growth attitude and continual improvement.

The second theme emphasizes how AI aids in idea generation and development. AI tools assist students by offering prompts and suggestions that promote idea development and expansion (Fitria, 2023). Malik et al. (2023) and Marghany (2023) agree that AI input broadens students' perspectives and enriches their writing expression by providing various insights. In interviews, students like Robin, Zoro, and Luffy stated that AI-enabled brainstorming gave them ideas they had not previously considered, making it easier to construct cohesive arguments and structure their writings logically. Students could further develop and arrange their ideas more efficiently

thanks to the availability of several AI tools for different purposes, such as *Quillbot* for restructuring, *Grammarly* for sentence-level improvement, and *ChatGPT* for general brainstorming (Nazari et al., 2021; Tuti et al., 2023). Students are encouraged to approach writing as an organized process that incorporates ideation, organization, and revision via this comprehensive help. Because AI could enable students to think about various viewpoints and rhetorical strategies, their academic writing becomes more complex and nuanced. In addition, AI served as a writing assistant that could personalize the unique needs of students by offering feedback that matched each student's needs or character. Most studies revealed that this AI's flexible character allowed students to revise more effectively by encouraging them to broaden their thinking styles (Amanda et al., 2023; Nazari et al., 2021; Tuti et al., 2023). The benefits offered clarify the role of AI in helping students improve their academic writing, which confirms the perspectives shared by previous researchers regarding the potential of AI in supporting students' writing process.

The third theme discussed was that AI helped students write in a coherent and unified way. Some students found it difficult to keep a coherent flow of ideas throughout phrases and paragraphs and sometimes struggled with coherence. This was addressed by AI technologies that provide content organization guidance and structural outlines, making the flow of ideas in an essay more transparent (Sanosi & Mohammed, 2024). According to research by Fitria (2023), students cited AI's help in keeping concentration and ensuring that every paragraph advances the main point. According to student statements, the AI tools enabled students to ensure their work was coherent and integrated, giving readers a better understanding. Another advantage of this feedback loop was that it helped students evaluate their work more critically, which helped them acquire the reasoning and paragraph structure skills necessary for coherent writing. Another prominent potential of AI expressed by students was its support for creating cohesive and coherent writing. AI-enabled students develop transparent and connected essays by providing an outline to help guide ideas (Mali & Salsbury, 2021; Malik et al., 2023). Research by Nova (2018) supported this claim, demonstrating that AI assistance has significantly enhanced students' cohesive and coherent writing.

Although AI has great potential, the fourth theme highlights specific issues that might limit its usefulness in scholarly writing. A significant worry was that students may become less capable of critically analyzing their writing if they rely too much on AI tools. Numerous studies indicated that students rely on AI for quick fixes, which may restrict their capacity for critical thought and self-editing (e.g. Malik et al., 2023; Nazari et al., 2021). Students like Nami voiced worries that this reliance may inhibit their critical thinking and creativity if poorly controlled. The expense of AI tools was another problem since many capabilities necessitate paid subscriptions that students could not afford (Zoro, 2024). Technical restrictions were also mentioned as obstacles, such as sporadic mistakes in AI-generated language and prose that could be overly robotic (Robin, 2024). These difficulties highlight the necessity of employing AI in a balanced manner, ensuring it acts as a supplemental tool rather than a crutch.

CONCLUSION

In conclusion, EFL students generally have a positive perspective on using AI in academic essay writing, as indicated by the themes discussed in this study. The findings show that AI might empower students by providing constructive feedback, generating ideas in writing, and ensuring the essay structure is cohesive and coherent. The capacity of AI to be a flexible writing assistant makes students feel valuable support, enhancing their confidence and capability in the writing process (Syahnaz & Fithriani, 2023). Furthermore, students appreciate the customized and immediate feedback offered by AI, which allows them to be more confident in their writing

progress (Escalante et al., 2023). This insight reinforces AI's growing significance in the academic writing process for EFL students.

The researcher would like to offer the following suggestions to educators and educational institutions regarding using AI to assist students in writing academic essays based on the study results and discussion. First, educators should help students understand that AI is a helpful tool for self-directed learning and encourage using AI in academic writing to supplement conventional feedback. Undoubtedly, it will support pupils' increasing independence, inspiring them to flourish. Second, to assist students in organizing the essay format, developing ideas, and analyzing the helpful criticism they have received, teachers should lead practice sessions on the effective use of AI. Third, educational institutions should consider and offer resources for incorporating AI into academic writing classes so that the technology can be customized to meet the needs of students rather than being applied arbitrarily. Schools should also ensure students have access to all of the cutting-edge writing resources offered, including AI's feedback platform, to raise the caliber and proficiency of their academic writing. Fourth, educators should promote a balanced use of AI by doing peer reviews, contrasting human feedback, and creating a setting where students can gain from AI through one-on-one mentoring. Finally, future studies might explore how AI's role in academic writing changes as AI technology improves. In addition, it may be essential to investigate how AI can affect students' autonomy and long-term writing proficiency. Given the promising results of this study, future research could also use a broader data set, including students with diverse educational backgrounds and from different regions. This research will provide greater insight into the potential of AI in academic essay writing, offering hope and optimism for the future of EFL writing. Also, understanding how different AI tools work on various writing tasks can help tailor AI integration more effectively in EFL writing.

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