ORIGINAL ARTICLE

University Students' Perceptions of AI Application in Writing Skills in Vietnam: A Systematic Review

Linh Thuy Cung+,
Uyen Phuong Thi Hoang,
Anh Ngoc Dinh,
Thu Ha Bui

Hanoi University, Vietnam
+*Corresponding author ● Email: cunglinh2705@gmail.com*

ABSTRACT
Despite the growing integration of Artificial Intelligence in global education, AI tools fail to be broadly applied in Vietnamese contexts. This study aims to systematically review students' perceptions regarding the application of AI tools in writing education in Vietnamese contexts to proffer some suggestions for effective AI use to support writing skills. The content analysis method was employed in a thorough analysis of three selected articles. The study concludes that Vietnamese university students' perceptions have increasingly garnered attention from scholars in recent years, with mixed methods being identified as the predominant research approach in relevant investigations. The findings reveal that AI applications offer significant advantages to students, including enhancements in writing quality, increased writing productivity, and improvements in active learning engagement, as well as positive psychological effects. Nevertheless, the study also underscores challenges that participants face, particularly concerning the accuracy of AI-generated content and the tendency of over-dependence on these technologies, which could affect their overall writing skills development and critical thinking skills. The study recommends that universities in Vietnam invest in digital literacy, improve technological infrastructure, and establish clear ethical guidelines for AI integration in academic writing.

1. INTRODUCTION

The rapid development of technology and digital applications is changing the way we live, work and learn. In this context, Artificial Intelligence (AI) is one of the most revolutionary and transformative technologies. Thanks to its ability to mimic human intelligence and decision-making processes, AI has opened up an era where robots are partaking in problem-solving, invention, and decision-making. AI development has gained traction thanks to advances in machine learning, deep learning, neural networks, and natural language processing (Vinothkumar & Karunamurthy, 2023). As a result, AI has been extensively adopted across multiple fields all over the world, including education (Yang, 2023).

Specifically, AI has become an intriguing approach used in language teaching and learning to improve learning outcomes (Haristiani, 2019; Pedro et al., 2019). With its capacity to handle massive amounts of data, identify complicated patterns, and provide customized insights, AI presents new opportunities to improve educational practices and student results (Roll & Wylie, 2016). For instance, ChatGPT, an AI-powered language learning tool, has the potential to improve learners' language skills and subskills. These AI-powered tools are known for creating captivating and immersive learning environments that facilitate students to complete language learning assignments

and enhance their overall level of proficiency (Divekar et al., 2022). According to Feng Teng (2024), the significance of AI and its technologies is indisputable in this scientifically advanced era, since they are making notable advancements in a variety of language learning areas, including writing proficiency.

However, while international research confirms the transformative impact of AI in language education, there remains a notable gap in the Vietnamese context. Although Vietnam has witnessed rapid technological adoption in education, which was particularly accelerated during Covid-19 pandemic, Vietnam-based literature indicates that both educators and students are still hesitant to fully embrace AI tools, often perceiving them as too new, overly sophisticated, or difficult to control. Despite growing governmental and institutional investments in educational technology and AI-driven tools, research specifically examining how Vietnamese university students perceive and engage with AI applications in writing instruction is still limited (Tran, 2024; Nguyen & Phan, 2024). Therefore, this study aims to pinpoint the gap by systematically reviewing Vietnamese university students' perceptions of AI applications in writing skills. This systematic review intends to investigate the research trends and findings related to students' perspectives towards applying AI tools to improve writing skill, point out the possible benefits and challenges in the Vietnamese context, and make suggestions for practitioners, future research; and eventually provide new insights for policymakers, curriculum designers, teachers as well as researchers who are planning to utilize AI tools soon. The present study was designed to answer the following research questions: (1) What are the trends in applying AI tools in writing skills in ESL/EFL learning in Vietnam?; (2) What are the main findings from the available literature (benefits/ challenges)?

2. LITERATURE REVIEW

2.1. Overview of AI

The word Artificial Intelligence (AI) was first coined in 1956, when the two computer scientists at Stanford, Marvin Minsky and John McCarthy hosted a Research Project on the subject at Dartmouth College in New Hampshire (Haenlein & Kaplan, 2019). From then on, there have been numerous ways of defining AI. According to Rahman (2009, p.343), the use of AI is to create software that filters information and performs other autonomous tasks such as computing or searching for users. Russell and Norvig (2016) also claim that "AI is the only field to attempt to build machines that will function autonomously in complex, changing environments." Furthermore, researchers reviewed AI based on its abilities to not only create other machines but also imitate humans. In 2009, Whitby stated that artificial intelligence is a complicated term, including logic, self-awareness, learning, emotional knowledge, planning, conscience, creativity, and so on. This definition aligns with many other researchers, proving that the purpose of artificial intelligence is to build systems that display human characteristics (Campesato, 2020; Aldosari, 2020), including the abilities to think humanly, to think rationally, to act humanly, and to act rationally (Russell & Norvig, 2016).

2.2. AI tools in language teaching and learning

AI tools are increasingly integrated into language education, benefiting both students and teachers in various ways. Students use AI tools to improve the four main language skills. Tools like Listenwise and Speechling offer interactive exercises and real-time feedback that help enhance listening comprehension. Tokac et al. (2019) claim that through active practice of listening comprehension, users can converse with virtual chatbots in real-time. Learners are likely to be exposed to a wealth of accents, lexical resources, and speech patterns through the chatbot's responses, allowing them to get more acquainted with the way English language is used naturally. Concerning speaking, platforms such as Rosetta Stone and Google Assistant integrate AI to provide pronunciation practice and simulate conversations. Duong and Suppasetseree (2024) note that students could listen to the AI voice chatbot's speaking voice, which sounds like a native speaker multiple times and practice pronunciation by trying to correct pronunciation mistakes so that they could speak with better pronunciation. As highlighted by Hidayat (2024), AI tools like Scribe and Rewordify provide tailored recommendations for reading materials based on students' interests and levels. Noticeably, the platform also supplies personalised reading comprehension exercises which align with students' levels and adjust the difficulty level as students progress. Moreover, AI tools like ChatGPT give users immediate feedback on grammar, vocabulary use, sentence structure, coherence, and organisation. The AI model with a large amount of language data recognises mistakes, gives recommendations, and offers contextualised suggestions, intending to promote users' writing skills (Song & Song, 2023). Furthermore, teachers leverage AI tools to streamline their instructional tasks. When designing exercises and assessments, AI tools like Kahoot use data to

create personalised quizzes, promoting more targeted practice, as seen in studies by Licorish et al. (2018). In terms of grading, AI-based automated grading systems can significantly reduce grading time while maintaining high accuracy and fairness in assessments (Dimari et al., 2024).

2.3. Students' perspectives on using AI tools to improve writing skills

The integration of AI tools in the writing process has yielded both benefits and challenges.

2.3.1. Benefits

AI tools have been found in numerous studies to offer a wide range of advantages. AI tools, with their user-friendliness, boast their ease of use (Lee et al., 2024) and facilitate the process of paraphrasing and determining grammar correction. By making it easy to paraphrase a sentence and suggest new vocabulary that has never been used, AI tools contribute to the production of high-quality work (Ginting et al., 2023). In addition, with the assistance of AI writing tools, students can improve various aspects of writing as well as enhance their creativity and correct their mistakes (Safitri & Fithriani, 2024). This is because AI tools can enhance vocabulary, provide translations and recommend rich expressions. They also give feedback, detect and correct errors (Lee et al., 2024). Likewise, Selim (2024) discovered that common problems including spelling, grammar, and punctuation can be fixed by AI tools. AI tools' suggestions provide EFL students with crucial instructions to increase the quality of their academic work, save time, boost clarity, and avoid unintentional plagiarism. The student participants in this study mentioned that they used AI-powered tools to meet deadlines and seek advice and comments from valuable AI tools.

2.3.2. Challenges

Despite the benefits of AI tools in enhancing students' writing skills, there still exist challenges for consideration. Students express concerns regarding inaccurate translations and unnatural expressions or grammatical structures (Lee et al., 2024), and concerns over security related to hacking and password protection (Ginting et al., 2023). They are also concerned about becoming overly dependent on AI-based tools and need instructions from teachers to cultivate their English writing skills. Safitri and Fithriani (2024) add that depending on AI Writing tools can also hinder creativity in writing.

### 2.4. Previous systematic studies in the world

Feng Teng (2024) conducted a systematic review of 20 studies to examine ChatGPT's effectiveness in EFL writing. These articles, published between 2023 and 2024, were primarily based in Asian nations (China, Japan, etc.). The results indicate that ChatGPT can be used as a collaborative tool to offer writing suggestions, customize search results, give individualized feedback, and improve the overall quality of writing. Furthermore, it can identify complex grammar and syntax errors, suggest writing structure, and promote prompt coherence (Mizumoto et al., 2024). ChatGPT also excels in text generation, first draft creation, idea generation, and literature summarization. These features can help writers generate and organize their ideas more easily in the phases of the writing process (Boudouaia et al., 2024). Consequently, ChatGPT facilitates specific writing phases and aspects, which boosts productivity and allows better time management. Notwithstanding its benefits, ChatGPT presents serious problems with regard to academic integrity and ethical use. An excessive dependence on AI-generated content raises the risk of undermining the growth of writing and critical thinking abilities (Barrot, 2023). To preserve the integrity of academic and professional writing, it is imperative that AI tools be used sensibly and morally. Although ChatGPT can help with a variety of writing assignments, it cannot completely replace a human writer's sophisticated abilities and knowledge. This is because AI lacks the ability to understand context thoroughly, interpret complex emotions, and generate truly original ideas, which are important factors of high-quality writing. In addition, using ChatGPT to generate content could lead to misuse, creating misleading or plagiarized content, and false citations (Day, 2023).

3. MATERIALS AND METHODS

Systematic reviews, as their name suggests, refer to a detailed and comprehensive plan to identify all the evidence topics to reduce bias in the review results (Uman, 2011). Systematic reviews differ from literature reviews in terms of their methodology. While traditional literature reviews are generally a less systematic review with only a small number of databases (Robinson & Lowe, 2015), systematic reviews are conducted in a meticulously organised process that digs deep into "the body of evidence" (Nordenbo, 2009, p. 22).

In August of 2024, the systematic research was carried out on databases including Web of Science, ERIC, Google Scholar and ResearchGate. These databases were selected since they provide numerous accessible education-related

studies. The selected articles are written in English and the Vietnamese language, published between 2016 and 2024. The review period of 2016 to 2024 was chosen because this era marks significant advancements in AI technologies, particularly in education, with rapid development and adoption of AI-powered tools for academic writing in Vietnam (Nguyen & Hoang, 2024; Tran, 2023). This timeframe also captures the effects of the Covid-19 pandemic, which accelerated digital transformation and the integration of AI in Vietnamese higher education (Tran, 2023). Reviewing literature from these years ensures the inclusion of the most relevant trends, challenges, and opportunities in AI applications into academic writing in the Vietnamese context. The searched articles were selected based on the research areas, document types, language used and publication years. Only research studies were taken into consideration in the research results. After reading these articles, a systematic review is conducted, following the five phases suggested by Khan et al. (2003). Figure 1 shows five phases of the Systematic Literature Review proposed by Khan et al. (2003).
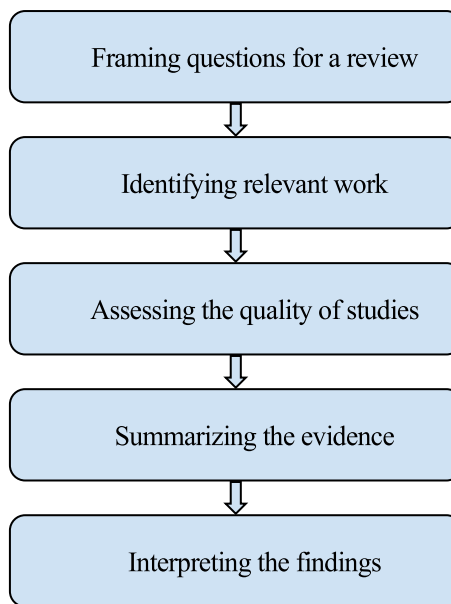
Figure 1. Five phases of Systematic Literature Review proposed by Khan et al. (2003)

Phase 1. Framing Questions for a review: With the robust development of technology, a variety of AI tools are being introduced in the Education Industry. Many of them are beneficial for users' language learning, especially writing skills; thus, AI tools are widely used by students in support of their writing skills. Therefore, this review aims to explore the trend in applying AI tools in writing skills in ESL/EFL studies in Vietnam, as well as analyse students' perceptions of AI tools application in writing skills.

Phase 2. Identifying Relevant Work: The next phase in performing a systematic literature review is to identify relevant articles. There are two steps in this phase. First, collect all the related articles on previous studies. Next, select appropriate studies based on the aforementioned categories. The search is carried out with databases including Web of Science, ERIC, Google Scholar and ResearchGate, published from 2016 to 2024. The research terms used included "AI applications in Vietnamese education", "AI's impacts on Vietnamese education", "AI tools and writing skills", and "AI and Vietnamese education".

Phase 3. Assessing the Quality of Studies: The next phase in the systematic literature review is assessing the quality of studies. The inclusion criteria was clarified to determine whether the articles would be included or excluded from this review. Only articles that satisfy the inclusion criteria of the study would be chosen for further phases. Hence, irrelevant studies can be avoided. After assessing, only three out of 101 articles have met the inclusion criteria.

Inclusion criteria in the study: (1) Published between 2016-2024; (2) Written in the English language; (3) Implementation of AI tools in writing skills; (4) Learning that involves the English language (ESL and EFL); (5) Participants or respondents from higher education; (6) Students' perceptions of AI application.

Phase 4. Summarising the Evidence: The search was carried out using databases such as Web of Science, ERIC, Google Scholar, and ResearchGate. The search using keywords "Implementation of AI tools in EFL/ESL in

Vietnam" and "Application of AI tools in EFL/ESL in Vietnam" resulted in a total of 40 articles published from 2016 to 2024 in Google Scholar and ResearchGate databases. After reviewing article titles, abstracts, keywords, results and conclusion, 40 articles were chosen. After assessing the articles, excluding those that did not meet the inclusion criteria, only three articles are appropriate for this review.

Phase 5. Interpreting the Findings: In the final phase, three selected articles are examined by analysing the content. This phase reveals the trend in applying AI tools in writing skills in ESL/EFL research studies in Vietnam, as well as highlights students' perceptions of AI tools application in writing skills.

4. RESULTS AND DISCUSSION

4.1. Results

Table 1. Trends in AI utilisation in the academic writing process in Vietnamese higher education

Categories	Phi and Nguyen (2024)	Le et al. (2023)	Phan (2023)
Year	2024	2023	2023
Methods	mixed methods	qualitative method	mixed methods
Participants	46 third-year students majoring in English Language Teaching in Da Nang University	20 Vietnamese EFL students from two higher education institutions: Can Tho University + Nam Can Tho University	100 students from four General English classes at Vietnam National University (VNU)

For the purpose of answering Q1, the studies' distribution by subcategories including publication years, research methodology used, and the participants' education level was examined by the researchers.

The distribution of reviewed research related to the utilisation of AI tools in the academic writing process in Vietnam by publication years is clearly explained as follows. The studies in this field were mostly published in 2023 (n=2). The following year witnessed only one research study. The most commonly used research methods were mixed methods (n=2), while only one research study used qualitative methods. In terms of sampling, Phi and Nguyen (2024) examined 46 third-year students majoring in English Language Teaching Da Nang university; Le, Hua, Pham (2023) investigated 20 Vietnamese EFL students from Can Tho University and South Can Tho University and Phan, (2023) studied 100 students from four General English classes at Vietnam National University (VNU).

The key findings regarding AI application in the academic writing process in Vietnamese higher education

In response to RQ2, the subcategories were examined by the researchers as follows: benefits, challenges and recommendations related to applying AI in the academic writing process in Vietnamese higher education.

All three reviewed studies show students' positive perceptions towards the use of AI in their academic writing projects. The most common perceived benefits include improved students' vocabulary (n=3), grammar (n=3) through immediate feedback and suggestions (n=3), making learners more engaged (n=2), increasing their motivation (n=2) and eventually enhancing their writing productivity (n=2).

Table 2. Benefits of applying AI tools in writing skills in ESL/EFL studies in Vietnam

Categories	Sub-categories	n	Articles
Quality of writing	Improving vocab	3	Le, Hua and Pham (2023); Phan (2023); Phi and Nguyen (2024)
	Improving grammar	3	Le, Hua and Pham (2023); Phan (2023); Phi and Nguyen (2024)
	Improving structure	2	Le, Hua and Pham (2023); Phan (2023)
Productivity of writing	Summarising and translating the topic	1	Phi and Nguyen (2024)
	Generating ideas	1	Phi and Nguyen (2024)
	Paraphrasing their work	1	Phi and Nguyen (2024)

Categories	Sub-categories	n	Articles
	Giving immediate feedback and suggestions	3	Le, Hua and Pham (2023); Phan (2023); Phi and Nguyen (2024)
Active learning	Making learners more engaged in learning	2	Le, Hua and Pham (2023); Phan (2023)
Psychology	Increasing students' motivation	2	Le, Hua and Pham (2023); Phan (2023)
	Increasing students' interest	2	Le, Hua and Pham (2023); Phan (2023)
Others	Exposure to the diversity of different styles, dialects, and cultural nuances of the English language	1	Le, Hua and Pham (2023)

Though acknowledging the benefits of using AI in academic writing, the reviewed articles also present some disadvantages in the application. The most visible shortcoming is the increased overdependence of students on these tools (n=2), leading to the degradation of creativity (n=2). Besides, inaccuracy (in paraphrasing, translating, and suggestion processes), ethical consideration and related digital problems (n=1) are also pointed out.

Table 3. Disadvantages of applying AI tools to writing skills in ESL/EFL studies in Vietnam

Categories	Sub-categories	n	Articles
Accuracy	Inaccurate paraphrases	1	Phan (2023)
	Inaccurate translations	1	Phan (2023)
	Inaccurate suggestions	2	Phan (2023); Le, Hua and Pham (2023)
Ethical Consideration	Unauthorized access	1	Le, Hua and Pham (2023)
Others	Overdependence	2	Le, Hua and Pham (2023); Phan (2023)
	Repetitive and uninteresting inputs	1	Phan (2023)
	Creativity limitation	2	Le, Hua and Pham (2023); Phan (2023)
	Language knowledge hindrance	1	Phan (2023)

4.2. Discussions

The trends in applying AI tools in writing skills in ESL/EFL studies in Vietnam

The current systematic review explores EFL/ESL university students' perceptions on the utilisation of AI tools in the academic writing process in Vietnam by reviewing and analysing three studies in 2023 and 2024.

Firstly, the studies on the utilisation of AI in language learning, particularly in Vietnam, have gained growing interest since 2023. This is driven by advancements in AI technology that offer individualised interactive learning experiences and transform the approach to language learning (Rane et al., 2023). In Vietnam, educational institutions are increasingly adopting AI tools to facilitate remote learning, provide tailored educational resources, and support teachers in their instructional methods (Tran & Nguyen, 2024).

Secondly, the methodology of the three reviewed studies is analysed to find out the most widely-used research design. The analysis reveals that the most favoured research method is mixed-methods design, followed by the qualitative method. With mixed methods, researchers can generalize findings from the qualitative interviews with a broader sample and investigate students' different perspectives about the utilisation of AI in the academic writing process (Vigoda-Gadot & Vashdi, 2020).

Thirdly, in terms of sampling, the number of participants of Phan (2023) study is the largest, followed by Phi and Nguyen (2024). Le et al. (2023) has the smallest number of participants. Therefore, future research could expand to a broader sample range to seek better insights into EFL/ESL university students' perceptions on the utilisation of AI tools in the academic writing process in Vietnam.

The main findings from the available literature

There are indeed limited Vietnamese research studies on AI utilization in academic writing, though all reviewed studies focus on students' perceptions of this trend.

Firstly, all three studies report that AI enhances students' writing quality. In the study by Phi and Nguyen (2024), the students claimed that they can learn formal language, advanced vocabulary, and correct grammar to apply to their essays writing thanks to appropriate suggestions and thorough explanations of ChatGPT. Similarly, Phan (2023) also concluded that students can improve their vocabulary and grammar through error detection, hence fostering their writing quality. These recognitions are in line with Ginting et al. (2023), asserting that AI tools appropriately determine vocabulary and grammatical correctness, resulting in high-quality work. AI tools also greatly enrich students' vocabulary by providing synonyms and recommending more advanced word choices (Marzuki et al., 2023). Moreover, Le et al. (2023) pointed out that students' sentence structures have improved because AI tools assist students in correcting their own errors and suggest better ways to structure their ideas. Phan (2023) also reported that students used the Paraphrasing Tool application to diversify their structures. Besides, Selim (2024) pointed out that AI tools resolve students' common issues like spelling and punctuation errors. These improvements improve the overall quality of students' work.

Secondly, AI enhances students' productivity during the writing process. According to Phi and Nguyen (2024), AI simplifies writing challenges and makes writing tasks easier to complete by summarising and translating the topic. As a result, AI could create the initial engagement between students and the writing process, assisting students in generating ideas for writing tasks. AI tools, particularly ChatGPT, contributed to idea generation for writing assignments by proposing topics, themes, and perspectives that students might not have come up with otherwise (Taecharungroj, 2023). Once students have done their writing, they use ChatGPT for revision. This finding has strengthened Ginting et al. (2023), revealing that students utilised Quillbot and Grammarly to paraphrase sentences to complete the final project. All three studies agree that students got this significant support through instant feedback from AI tools. This agreement aligns with Selim (2024), in which students found valuable suggestions and feedback given by AI tools. This study, moreover, pointed to new points in AI boosting students' writing productivity, expressing that students can save time in proofreading and editing phrases. Also, AI tools act as students' deadline reminders.

Thirdly, AI tools engage students in the writing-learning process. Le et al. (2023) prove that students not only receive one-way responses from AI tools, but they can also be actively involved in the learning process by using ChatGPT more extensively in their writing exercises, leading to the enhancement of their understanding of the English language. The examined students in the study of Phan (2023) also expressed joy when gaining new experiences provided by AI tools, resulting in boosted learning engagement. This claim is presented in the findings of Amyatun and Kholis (2023), showcasing students' attentiveness in the learning process and eagerness when seeking clarification on their writing-related problems. Similarly, the participants in the study by Song and Song (2023) also reported that incorporating AI technology into writing learning significantly enhanced their motivation and engagement. They noted that the interactive features of ChatGPT and the instant feedback it provided encouraged them to participate more actively in writing activities and boosted their motivation to practice and develop their writing skills.

Fourthly, AI tools increase students' motivation and interest in the writing-learning process. This is because Le et al. (2023) reported that the AI tools' interface is easy to use and adaptable to their learning styles, motivating students to take more responsibility for their learning outcomes. Phan (2023) also found that AI users felt more imaginative and self-assured after receiving immediate and enthusiastic support from AI tools. Due to this significant benefit, Amyatun and Kholis (2023) made a comparison between traditional teacher-centred techniques and AI tools utilisation in the classroom, commenting that students in traditional classrooms may lack motivation and interest in writing activities compared to those in the latter ones.

Besides, Le et al. (2023) spotted a new benefit when students use AI in the writing learning process. They reported that students were interested in insights that AI tools provide, such as different styles, dialects, and cultural nuances of the English language. Thus, AI tools could create an engaging learning environment that offers students various linguistic expressions, developing a deep understanding of the language.

From the obtained findings, students are found to have positive perceptions of the role of AI tools in their writing learning process, which brings them undeniable benefits in terms of quality, productivity in writing, active learning and so on. However, students complain about challenges that they encountered while using these tools during their writing learning periods.

Firstly, Phan (2023) reported students' doubts about the inaccuracy in the paraphrasing and translating process of AI tools. Regarding paraphrases, examined students are concerned that the Grammarly website might not provide

flexible language used due to its single input, leading to monotonous assistance. Moreover, students worried that this tool could even fail to paraphrase lengthy passages accurately. When it comes to translation, students expressed that Google Translate could provide inappropriate language translation, specifically long sentences or specialised terminologies, because it is culturally insensitive. Le et al. (2023) also included this problem in their findings, questioning the appropriateness of AI-provided content, which might lead to misconceptions or misunderstandings and potentially prevent the development of language knowledge in students. These findings resonate with Lee et al. (2024), in which students are concerned about inaccurate translations and unnatural expressions or grammatical structures. As a result, students questioned the efficacy of AI tools in fostering their English writing skills.

In terms of ethical considerations, the students in Le et al. (2023) raised another concern about users' privacy, whether their data and interactions with AI tools were being handled and stored without any authorisation. They worried that other people could get access to their writing samples and feedback that they have received from AI tools. Similarly, Ginting et al. (2023) claim that students might be exposed to potential cybersecurity vulnerabilities, posing a significant threat to each individual. Consequently, students are reluctant to use AI tools due to concerns over privacy issues (Malik et al., 2023).

Overdependence is another major concern when students use AI in their learning (Phan, 2023). This study points out the fact that students nowadays invest less time and effort in writing to search for ideas or to look up relevant references to deal with their current problems, such as a difficult word or an idiom. Instead, they rely on AI tools for immediate answers, which could eventually diminish their critical thinking and problem-solving, as they only use information fed by AI tools. This recognition is further presented in Lee et al. (2024), finding that students, especially those who are beginners and lack the English skills to judge their work themselves, are likely to accept feedback from AI without any further judgment. Even though many AI tools, according to Phan (2023), could only be fed with repetitive and uninteresting inputs, leading to monotonous suggestions. As time goes by, this overdependent behaviour could lead to diminishing creativity and overall writing capabilities (Le et al., 2023; Phan, 2023). Therefore, relying solely on AI tools could curb students' creativity and hinder their application of language knowledge in writing.

5. CONCLUSION

This study is undertaken to investigate the trends of AI application in the academic writing process as well as the benefits and challenges in the process in Vietnamese higher education. The key results of this systematic review indicate: (1) there has been a growing interest in AI application in the academic writing process in higher education in Vietnam recently; (2) the most preferred method is mixed-method; (3) findings in reviewed studies are both in favour of and concerned about the utilisation of AI tools.

While the reviewed studies highlight both positive outcomes, such as improved writing performance and personalised feedback, and concerns related to over-reliance and ethical issues, the limited number of available studies (only three) restricts the generalizability of these conclusions. To address this gap, future research should broaden its scope by including diverse student populations and employing longitudinal designs to better understand the evolving impact of AI on writing skills over time. Additionally, universities in Vietnam should invest in digital literacy training, improve technological infrastructure, and develop clear guidelines to promote the ethical and effective use of AI in academic writing. Such efforts will help maximise the benefits of AI while mitigating potential challenges, ultimately enhancing the quality and equity of higher education in Vietnam.

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