


# Chapter 10

## An Exploratory Study of the ChatGPT Use of Vietnamese Graduate Students in a Research Writing Course

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### ABSTRACT

*This exploratory qualitative study aims to explore the ChatGPT use of Van-Lang-University graduate students in a research writing course and the cognitive levels of their reactions to its responses. The data was collected from observations and interviews with twelve Vietnamese graduate students studying in a research writing class at this university. According to the findings, the participants opted for ChatGPT as a help-seeking strategy during their course due to several reasons including its convenience, instant feedback, and multifunction. Additionally, they had critical reactions to ChatGPT's feedback and advocated that ChatGPT could not replace lecturers' roles in future language classrooms. To develop the growth of critical ChatGPT use for research writing in Master's programs in English Language Studies at Van Lang University, actions from relevant stakeholders is required, including policymakers, lecturers teaching research writing, and MA students.*

### 1. INTRODUCTION

The use of Artificial Intelligence (AI) tools in learning academic writing has brought many profound but controversial impacts due to their pros and cons. Many students advocate this use in their classrooms because it can assist them in content generation, translation, and automated proofreading and editing. According to Golan et al. (2023), it can help to increase output and content by streamlining the writing and creative processes. Besides, it is useful for groups with little expertise to spark creativity

DOI: 10.4018/979-8-3693-7260-9.ch010

in a particular area of interest and point out gaps in the literature. Ozfidan et al. (2024) report that AI tools such as Google Translate, Grammarly, and ChatGPT are commonly used. This approval shows how flexible and helpful these tools are for managing many stages of the writing process, from editing to conception. The students appreciated how the AI tools helped them to save time and improve their writing in general and the areas of grammar and vocabulary in particular, which are crucial for academic writing. They also show that some individuals were concerned about the potential for plagiarism and an excessive dependence on these tools. Instructors must face considerable worry that an over-reliance on AI may cause learners to miss out on important learning opportunities and critical writing skills. This highlights the need of assisting students in developing critical AI literacy so that they can use AI technology responsibly, preserve their writing voice, and develop critical writing abilities.

ChatGPT (Generative Pre-train Transformer) is worth mentioning among recent AI tools. It was developed by OpenAI and released in November 2022. It operates under the principle that “big data + big computing power + algorithm = intelligent model”, enabling its users to extract meaningful information from vast amounts of trained text data and produce increasingly sophisticated and humanized text responses. This also allows for the recognition of multi-round human-computer dialogue using natural language (Cheng et al., 2023). Bai et al. (2023) reveal five functions of ChatGPT including conversation, language translation, educational aid, coding, and creative content generation. Concerning educational support, ChatGPT can be a valuable tool for improving writing in higher education. Specifically, it can generate texts, summarize information, and create outlines, all of which can save writing time and improve the output quality. Additionally, it can identify stylistic and grammatical errors, improving the readability of written material (Atlas, 2023). In addition, it can help students develop their research skills by giving them access to resources and information on a particular subject, pointing out previously undiscovered aspects, and introducing them to new research areas, all of which can help them better understand and assess the subject (Kasneci et al., 2023). Moreover, with features like educational resources, study aids, memory enhancement, research support, skill development, and facilitation of language acquisition, ChatGPT’s various abilities underscore its value as a potent educational resource, especially in the areas of learning and memory (Bai et al., 2023).

ChatGPT 3.5 and ChatGPT 4.0 are two prominent versions of ChatGPT introduced by OpenAI. The GPT-3.5 model can bring many beneficial effects on students’ learning, including quickly retrieving information on a variety of topics, better conceptual understanding of complex topics, and developing students’ problem-solving skills, writing and communication skills, storytelling skills, or critical thinking skills according to OpenAI (2023). Students can also leverage ChatGPT’s potential for tailored learning and non-judgmental emotional support. With an astounding estimated 1 trillion parameters, GPT-4 was made publicly available on March 14, 2023, marking a significant turning point in its development as one of the most sophisticated conversational chatbot models ever. GPT-3.5 and GPT-4.0 saw a number of improvements over the rest of 2023, such as the addition of speech recognition, picture production, PDF reading capabilities, sophisticated data analysis, plugin integration, and the ability for users to create custom ChatGPT-powered chatbots. According to Espejel et al. (2023), while GPT-4 has demonstrated notable advancements over previous ChatGPT models, it still has some of the same drawbacks. These constraints include the inability to draw lessons from experience, the creation of misleading information, the giving of damaging advice, and the limited context window. Moreover, OpenAI (2023) informs that to log into ChatGPT 4.0, its users have to pay \$20 per month at that time. This leads to some inconveniences for underprivileged learners; therefore, the researcher opted for surveying the English-major MA students’ use of ChatGPT 3.5 (free version).

The use of ChatGPT in research writing courses has a controversial influence. On the one hand, language instructors and students in higher education have shown favorable attitudes towards using ChatGPT due to its advantages. Sabzalieva and Valentini (2023) study that it can assist groups in researching and solving problems together. Additionally, Keyue (2023) reports that it can help learners collect reference resources for their research papers or essays, allowing them to work more efficiently and dedicate more attention and time to creative projects. Besides, Song and Song (2023) reveal that the EFL students using ChatGPT show improved writing production in several areas, including structure, coherence, grammar, and vocabulary. In addition, it can produce a less stressful learning environment for students to practice and improve their academic writing abilities and motivation because of its interactive features and quick feedback can make the writing process more interesting and pleasurable. Pham (2024) also studies that it is a great tool for project development and ideation since it can enhance self-confidence, comprehension, and participation in language classes. Furthermore, Pham and Le (2024) believe that it is a useful tool for language learning, demonstrated in four ways. First, it can help students absorb material faster by providing timely answers to their questions. Second, it can facilitate the creation of topics for group discussion among students, which the lecturers may ask their students for deeper explanations. Third, it can improve students' reading ability by assisting in memorizing new information for long-term learning. Last, but not least, using this tool in the learning activities contributes to a less stressful classroom atmosphere, making it a more enjoyable place to study. This can result in promoting active engagement and relaxed the learning environment.

On the other hand, there have been several concerns about using ChatGPT in language teaching and learning expressed by language teachers and learners in higher education. Specifically, the potential for plagiarism is one issue with utilizing the GPT-3 for assessments in higher education. Essay-writing AI systems are made to produce essays in response to prompts or given specifications. Thus, it is possible that students will utilize these systems to submit writings that are not their own, thereby cheating on their assignments (Dehouche, 2021). Supportively, Cotton et al. (2024) report that ChatGPT can enable cheating because it is challenging to differentiate between writing produced by a computer and that produced by a person. In order to guarantee that these technologies are employed in an ethical and responsible manner, universities need to carefully weigh the benefits and dangers of this use. To prevent and identify academic dishonesty, this may entail providing proper guidance and offering teachers and students assistance and training. In addition, Nguyen (2023) studies that EFL teachers at Van Lang University also determine several possible issues with this chatbot, including the concern about students' excessive dependency on ChatGPT because of inappropriate use. Moreover, Pham and Le (2024) report that users of ChatGPT could become disinterested in live lectures. Students using ChatGPT excessively may find it difficult to think critically and creatively, leading to work distractions.

Although many researchers have investigated the attitudes of lecturers and students at universities towards the benefits and challenges of ChatGPT use, few have explored how English-major postgraduate students use this tool. As a result, this motivated the researchers to conduct the current study, entitled *"An Exploratory Study of the ChatGPT Use of Vietnamese graduate Students in a Research Writing Course at Van Lang University"*.

## 2. LITERATURE REVIEW

### 2.1 Critical Thinking and Bloom's Cognitive Taxonomy

Critical thinking (CT) was differently defined throughout the period. Paul and Elder (1992) defined it as the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication as a rubric to belief and action. Bloom et al. (1956) first introduced a cognitive taxonomy, providing well-developed definitions of six primary categories of cognitive domains. They were six nouns including knowledge, comprehension, application, analysis, synthesis, and evaluation (Krathwohl, 2002). The goal of this hierarchical model of is to categorize the anticipated behavior of students, including how people are expected to behave, think, or feel after engaging in a particular instructional unit (Bloom et al., 1956). Recently, it is known as the six levels of verbal learning goals. The top three categories including analysis, synthesis, and evaluation were seen to reflect CT skills, whereas the three bottom categories were thought to indicate fundamental abilities that a thinker possesses. According to Assaly and Smadi (2015), it is classified into two levels of thinking skills which are lower-order thinking skills (remember, understand, and apply) and higher-order thinking skills (analyze, evaluate, and create).

To be more specific, Omar et al. (2012) summarize and report each level's definition. Additionally, Newton et al. (2020) investigated to ascertain whether Bloom's Taxonomy presentation guidelines are widely accepted in UK higher education. A collection of 47 publicly accessible verb lists was gathered from 35 universities and textbooks.

*Table 1. Summary of categories in Bloom's Taxonomy*

Cognitive levels	Definitions	Sample action verbs
Remember	extract factual responses, assessing the ability to remember and identify certain information	recall, tell, list, state, name, define, label, and repeat
Understand	comprehend what the information means	arrange, explain, classify, translate, distinguish, demonstrate, paraphrase, discuss, report, locate, generalize, and summarize
Apply	apply information to real-world circumstances (fresh and tangible)	modify, apply, operate, prepare, illustrate, operate, use, solve, produce, and choose
Analyze	(1) disintegrate into components or shapes. (2) establish a connection with the presumptions, categorize, and differentiate	distinguish, examine, identify, categorize, analyze, question, differentiate, experiment, test, categorize, calculate, contrast, outline, infer, discriminate, and compare
Evaluate	(1) rearrange the individual concepts to form a new whole. (2) create a structural pattern using a variety of components.	create, combine, develop, rewrite, compile, compose, argue, design, plan, support, revise, and formulate
Create	make comparisons and use certain criteria to differentiate the value	appraise, critique, decide, evaluate, judge, rate, assess, and justify

*Note.* Adapted from Omar et al. (2012) and Newton et al. (2020)

## 2.2 Task-Based Language Teaching (TBLT)

Willis (1996) advocated that tasks should be activities where learners use the target language to communicate a goal. He developed the original TBLT model into a model having six steps. His model included pre-task (input, meaning-focused), task, assessment task, planning, task presentation, and post-task language emphasis. Additionally, Oxford (2006) listed several types of tasks, including reasoning-gap, question-and-answer, structured and semi-structured dialogues, puzzles and games, interviews, debates, sharing personal experiences, attitudes, and feelings, problem-solving, decision-making, opinion-gap or opinion exchange, information-gap, comprehension-based, and basic cognitive processes (like comparing listing and ordering/sorting).

According to Tuyen et al. (2024), ChatGPT can help both teachers and learners in the task-based approach. Teachers can utilize ChatGPT to fulfill their objectives for each phase. Additionally, it offers particular exercises and demonstrations that assist them in improving their teaching strategies. It is also an excellent platform for students who want immersive and practical learning. This allows students to ask ChatGPT questions like they do with their instructors. The ChatGPT model can also aid in the development of analytical and creative problem-solving abilities by producing thorough explanations and responses to a given issue. More interestingly, students can argue with ChatGPT about the arguments, answers, and other concepts that are offered. Consequently, ChatGPT provides interactive assistance to students at any time and from any location. In addition, it is a useful resource and guidance for students conducting a project to investigate their subject or topic (Liang and Luo, 2024). It aids each student by attending to their specific learning demands in the classroom. Additionally, it offers personalized comments on the written work of the students who participated in their study. They also admitted that its ability to respond instantly and hold follow-up conversations was helpful.

## 2.3 Self-Regulated Learning (SRL)

According to Schunk and Zimmerman (2007), SRL involves the ability to monitor and control one's own cognitive processes, behavior, and emotions while pursuing a goal. Panadero (2017) introduced SRL as a key conceptual framework for understanding the cognitive, motivational, and emotional elements of learning. Research on SRL also tended to conceptualize it as an individual activity, focusing on the cognitive processes within individuals that contribute to supposedly independent and autonomous learning (Bransen and Govaerts, 2020).

Self-regulated learning plays a certain role in language learning, which students may take an active role in the learning process with SRL strategies including self-motivation, planning, organizing, repeating, self-monitoring, and self-evaluation (Artino and Stephens, 2009). In addition, Roohani and Asiabani (2015) report EFL learning is significantly impacted by the use of SRL techniques as goal-setting, self-efficacy, asking for help, organizing, practicing, time management, feedback, and self-evaluation.

In terms of characteristics of self-regulated learners, Richards and Rodgers (2001) studied that possible task roles for learners were group member, monitor, risk-taker, strategy-user, goal-setter, self-evaluator, and more. Zimmerman (2002) claimed that self-regulated learners actively participated in their education and made informed choices about what, where, and how they studied, which planning, monitoring, time management, and asking for assistance are some of the tasks involved. Perry et al. (2017) showed that SRL was associated with students developing into flexible, lifelong learners who can work and study both independently and cooperatively. They were also critical and creative thinkers, problem solvers,

and thinkers. Moreover, Jansen et al. (2022) reviewed that self-regulated learners took an active role in their education and chose carefully what, where, and how to study. It entailed tasks like organizing, keeping an eye on things, managing their time, and asking for assistance.

ChatGPT can support self-regulated learners in many ways. According to Wu et al. (2023), it can help them feel more motivated, which supports the SRL process throughout the planning stage. They may utilize ChatGPT to get fresh perspectives and ideas for their learning activities whenever they need them throughout the performance phase (i.e., when they experience learning obstacles). Throughout the self-reflection stage, they can ask ChatGPT for feedback on their learning and suggestions for improvement. In general, ChatGPT can offer detailed explanations, step-by-step guidance, and personalized, interactive educational learning. Additionally, Chiu (2024) shows that the three stages of SRL including forethought, performance, and self-reflection can be supported by ChatGPT-based learning exercises. During the planning stage, learning exercises might offer more detailed explanations and illustrations to help clarify the issue as well as other ideas for teaching methods. During the performance phase, students can practice and get more original problem-solving ideas, as well as prepare to apply what they have learned and practiced by using ChatGPT. In addition, they can make quick, personalized, and infinite requests. Teachers believe that by offering feedback, allowing students to practice self-reflection approaches, and offering further suggestions for development, this AI tool can assist them in their self-reflection process in the final phase. These suggest that ChatGPT may provide a creative, interesting, and interactive student-centered setting that is oriented on their requirements. Moreover, this setting, which promotes “think pair and share” thinking, helps high-ability children realize their full potential while developing the SRL skills of low-ability pupils (Xia et al., 2023).

## 2.4 Ethical Concerns

There have been several concerns about using ChatGPT in language teaching and learning expressed by language teachers and learners in higher education. Specifically, Nguyen (2023) investigated the opinions of EFL teachers on the use of ChatGPT in writing classes at Van Lang University using a mixed-methods case study employing a purposive sampling technique. Her study used interviews and an online Google Forms-based questionnaire to gather data from twenty experienced EFL instructors. The purpose of this study was to find out how Van Lang University instructors evaluate using ChatGPT during writing sessions. It also aimed to provide important insights into their recommendations for using ChatGPT effectively in writing classes. According to her findings, despite these positive perceptions, they also determined several possible issues with this chatbot, including the concern about students’ excessive dependency on ChatGPT as a result of incorrect use.

Using ChatGPT in EFL classrooms requires careful consideration of ethical concerns including respect for privacy, cheating, fairness, and teachers’ roles (Mhlana, 2023 and Zeb et al., 2024). Regarding personal privacy, when learners use ChatGPT, the information that they provide may be leaked since ChatGPT is trained using vast amounts of data gathered from the internet. Hence, Mhlana (2023) reveals that it is crucial to ensure that students’ personal information is protected and not misused by others. Before implementing ChatGPT in the classroom, teachers should obtain their permission and explain how their data is collected, processed, and stored. For cheating, Zeb et al. (2024) report that ChatGPT users can commit plagiarism and academic dishonesty because it may facilitate cheating, and it can be difficult to tell the difference between human and machine-generated work. Additionally, it is required of academic writing to properly recognize the original authors and confirm the study by acknowledging their effort

using citations and references. However, ChatGPT and other AI language models cannot provide adequate citations as they do not have access to pertinent sources or the appropriate citation style. About fairness, undesirable assumptions, biases, and prejudices can be reinforced and propagated by language models such as ChatGPT. Therefore, a thorough investigation of these systems is necessary, taking into account the potential for prejudice and discrimination before deploying AI systems like ChatGPT in educational settings (Mhlana, 2023). With regards to human role, Kim (2020) supports that one of the most important aspects of education is the bond that forms between a teacher and their students. By building relationships with their students, teachers may learn about their unique needs as well as their talents and limitations. ChatGPT lacks the emotional intelligence, empathy, and interpersonal abilities of human teachers due to the AI language model's characteristics. As a result, ChatGPT finds it challenging to understand each learners' particular needs, provide tailored support, and a supportive and stimulating learning environment. Concerning teachers' roles in the classrooms, ChatGPT cannot provide experience learning or hands-on training which are the best ways to learn for many students. Hence, it is the responsibility of educators to offer these opportunities, and they can accomplish this through practical projects, laboratory experiments, or field excursions (Jacobs, 2020). Supportively, Mhlana (2023) studies that the teachers should critically understand ChatGPT's limitation to ensure that the platform is used in ways of enhancing rather than replacing the function of human educators.

## 2.5 Related Studies

ChatGPT can help English-majored students in different ways. Stokel-Walker (2022) disclosed that it was proficient at producing a wide range of written texts, including research articles and assignments. According to Curtis (2023), it could speed up the writing and editing process. Additionally, Su and Yang (2023) conducted an exploratory study to identify ChatGPT's advantages for education including developing virtual tutors, responding to student inquiries, and offering individualized learning experiences. Besides, Nguyen (2023) showed that Van-Lang-university EFL instructors saw ChatGPT as a helpful tutor in writing classes since it could respond to constant queries, suggest books that would help students generate ideas, and provide feedback on students' work to improve language skills and inspire them to write more. In addition, Kohnke et al. (2023) revealed that it could provide linguistic input, stimulate learners' interest, and real-time assistance, allowing them to practice their language skills anytime and anywhere. It could also adjust the level of difficulty, offer personalized learning materials, and facilitate an authentic language-learning environment. The authors also discussed its capabilities in supporting language learning tasks including correcting language mistakes. According to Xiao and Zhi (2023), ChatGPT might be a useful tool for learning and could help students with language-related tasks. They outlined three main advantages of using this tool. Firstly, it was similar to a personal instructor or students' learning partner by providing them with a customized, immediately available, and adaptable feedback system. Secondly, applying critical thinking skills to tasks like changing prompts, training the model, and confirming and accepting its outputs helped them improve language proficiency. It could help them become critical learners by double-checking and evaluating the data produced by this chatbot and accepting information after careful consideration. It implied that the students assessed the accuracy, relevance, and specificity of the information provided by ChatGPT rather than accepting

it at face value. They could also modify prompts to train this tool, which could lead to their learning outcomes' improvement.

English-majored students in tertiary education use ChatGPT differently. Bok and Cho (2023) revealed that students anticipated that lecturers would provide easily available, understandable explanations of ChatGPT-generated feedback. Apart from further explanations of its comments, several students said that they wanted to have their professors confirm the correctness and dependability of the system. Overall, the participants in their study made the case that instructors should have a crucial role in offering personalized, culturally aware, and nuanced feedback, which challenged ChatGPT. In addition, Šedlbauer et al. (2024) revealed that college students had two primary strategies for entering queries into ChatGPT. The first technique was verifying the validity of its answers and the other involved carefully making the query and eventually refining it. After receiving ChatGPT's responses, they rated the quality of the output. Furthermore, Dong (2024) showed that students often consulted individuals whom they were trustworthy for the right advice and help (their professors) when their need arose, especially throughout the focus group discussion.

ChatGPT's roles in academic writing courses are differently perceived by English-majored students at universities and colleges. Chen (2023) highlighted the significance of human agency or the dominant and controlling role of humans, which ChatGPT was perceived as a machine proofreader and quick search engine. Thorp (2023) and Chen (2023) argued that ChatGPT was not an author and that human authors must use this AI tool carefully. Both authors emphasized the significance of human agency in using ChatGPT and the necessity for more research into how authors would perceive this use. As a result, the expert highlighted the significance of human agency in writing training. This included having clear guidelines, analyzing ChatGPT feedback critically, and ongoing observations to uphold human roles in students' learning to write with ChatGPT. In addition, Phan and Nguyen (2023) studied that ChatGPT could be a valuable tool for lecturers, students, and managers, but it should not replace human expertise and critical thinking. Moreover, Šedlbauer et al. (2024) revealed that college students had two primary strategies for entering queries into ChatGPT. The first technique was verifying the validity of its answers and the other involved carefully making the query and eventually refining it. After receiving ChatGPT's responses, they rated the quality of the output.

In previous study, the ChatGPT use of EFL students were investigated based on four theories including self-determination theory, constructivist language learning theory, technology acceptance model (TAM), and social learning theory. From the self-determination theory perspective, Du and Alm (2024) reported that ChatGPT, which offered rapid feedback and adaptable, customized learning experiences, could help students feel more competent and autonomous in their language learning. Besdies, Solak (2024) used three theories for his study which were constructivist language learning theory, technology acceptance model and social learning theory. Constructivist approach might be aided by AI, particularly ChatGPT, which offer dynamic and interactive language learning environments. Students would have meaningful conversations, got quick feedback, and modified their comprehension of the material in response to their interactions with the AI in real time. For the technology acceptance model, teachers and students had positive attitudes and agreed that ChatGPT was a useful tool for removing language barriers, personalizing instruction, fostering language acquisition, offering real resources, and enhancing the educational process. About social learning theory, when learners used ChatGPT, they witnessed the good experiences of others. They also supported that positivity about ChatGPT's future role, particularly when combined with other technologies, sets an example for prospective users and influences their expectations and choices.



## 2.6 Research Gaps

Many previous authors have studied undergraduates' ChatGPT use relied on learning theories including SRL, but few have introduced the conceptual framework of this use as a support tool for English-majored graduate students in research writing courses with the task-based teaching approach. Particularly, how graduate students employ ChatGPT for different learning tasks such as group discussions, case studies, reading comprehension, peer feedback, and projects receive little attention. Moreover, few studies have evaluated their reactions to its feedback according to Bloom's Cognitive Taxonomy.

## 2.7 Research Objectives

Upon examining pertinent literature, the interaction between humans and AI is unavoidable. This requires more research to find strategies for using ChatGPT critically and properly involving ethical concerns. Therefore, the current study aims to fill these research gaps. Specifically, it explores the ChatGPT use of English-majored graduate students at VLU during their research writing course and the cognitive levels of their reactions to its responses.

## 2.8 Research Questions

To achieve these research objectives, this research addresses two research questions:

1. To what extent do graduate students use ChatGPT to assist their study in a research writing course?
2. What cognitive levels do graduate students' reactions to ChatGPT's feedback relate to?

## 3. METHODS

### 3.1 Pedagogical Setting and Participants

Research writing was a compulsory subject and accounted for three credits in the curriculum of Master of Art in English Language Studies at Van Lang University. In this course, the students had twelve meetings with their lecturer and learned with a task-based approach. More specifically, the teaching techniques used in this course were lectures, discussions, presentations, Q&A, modeling, task-solving, reading comprehension, peer feedback, teacher feedback, group work, and individual work.

This research was conducted between September 2023 and October 2023 in a research writing course at Van Lang University. Among a population of fifty-three English-majored MA students, the authors carried out this survey with twelve of them who belonged to the academic year 2023-2025 and studied in an intake class of main author.

*Table 2. Demographic information of participants*

Participants	Information		N = 12	
			No. of respondents	Percent
English-majored MA students	Biological Gender	Male	3	25%
		Female	9	75%
	Age Range	From 23 to 32 years old	10	83.3%
		From 33 to 42 years old	2	16.7%
		From 43 to 52 years old	0	0%
		53 years old and above	0	0%
	Educational Institution	Van Lang University	12	100%
		Other universities	0	0%

Table 2 reveals demographic information of recruited English-majored MA students. There were twelve participants in this study, nine of them were female students (75%) while the other five were male students (25%). A majority of them were aged between 23 and 32 years old (83%) and there were two participants aged from 33 to 42 years old (16.7%).

*Table 3. Controlled variables in the current study*

Participants	Information		N = 12	
			No. of respondents	Percent
English-majored MA students	ChatGPT's version use	ChatGPT version 3.5	12	100%
		ChatGPT version 4.0	0	0%
		Other versions	0	0%
	Time of practice using ChatGPT	Less than a month	3	25%
		From a month to less than two months	5	41.7%
		From two months to less than three months	0	0%
		Three months and more	4	33.3%
	Time of using ChatGPT for learning research writing	Less than four hours a week	6	50%
		From four hours to less than seven hours a week	6	50%
		From seven hours to less than fourteen hours a week	0	0%
		Fourteen hours a week and more	0	0%
	Formal training in using ChatGPT that they attended before studying in the research writing	Yes	0	0%
		Not yet	12	100%

Table 3 illustrates variables that were controlled in the current study including ChatGPT's version use, time of practice using ChatGPT, time of using ChatGPT for learning, and specific training in using ChatGPT that they attended. As can be seen from Table 3, all participants used ChatGPT 3.5 (free version) because of its cost-efficiency and convenience. Additionally, 47.1% of participants had a two-month experience practicing using ChatGPT, followed by those having three-month experiences (33.3%), and less-than-a-month experiences (25%). While six participants spent less than four hours a week using this chatbot for learning research writing (50%), the others were inclined to spend more time on this educational purpose (50%). In addition, 100% did not take part in any specific formal training for employing ChatGPT. These data can be interpreted that although participants have practiced using ChatGPT for a long time, they have not had the opportunity to participate in professional training sessions to be guided in using it properly. Moreover, they have been hesitant to use ChatGPT version 4.0 due to its monthly maintenance costs. These findings indicate that the ChatGPT use of English-majored MA students for studying research writing is spontaneous and have not undergone formal training before attending this course. Hence, this group of graduate students is worth investigating to use ChatGPT as a support tool for learning research writing.

### 3.2 Design of the Study

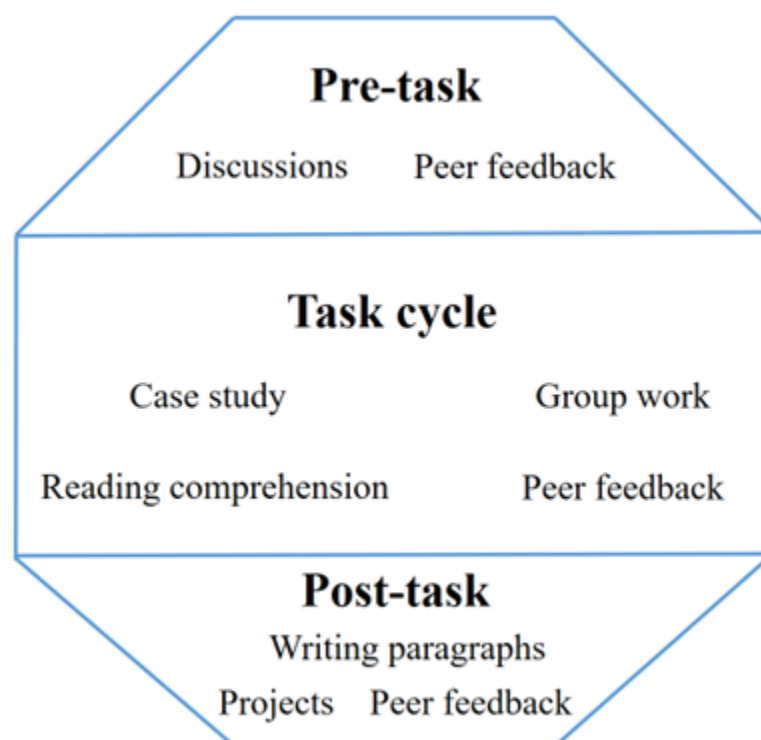
This qualitative research is a case study, in which the data for analysis was gathered through observations and interviews. In this study, the researchers used a convenient sampling technique by selecting all research writing learners who were conveniently accessible and readily available in a postgraduate course at VLU. Besides, all references to ChatGPT in the following are to ChatGPT 3.5.

### 3.3 Data Collection and Analysis

First of all, the authors asked for the class lecturer's and students' permission for the current survey. Naturalistic observations were conducted during the course. Firstly, the researchers planned the observations by reviewing ethical considerations, choosing unobstructed observations as an observation method, and selecting an observation sheet as the main tool for data collection. Recordings were not allowed in this class. To conduct observations, they gained familiarity with the environment, did note-taking, and remained unobstructed. For data analysis, they categorized the observed behaviors of the English-majored MA students, analyzed the data to identify themes, and determined relationships and connections between them. Finally, they developed interview questions, sought advice from an expert in the field of CALL in teaching research writing to modify them, and carried out the interviews. The semi-structured interviews were conducted after the course had finished and its items were designed in Vietnamese so that the interviewees could clearly express their experiences on ChatGPT use throughout this course. Then, the qualitative collected information was divided into themes, transcribed, and analyzed.

To ensure validity, the current survey was built upon SRL theory, in which participants' personal experiences were discovered to support their self-study. The survey was also piloted by ten English-majored MA students in another research writing class at VLU. Before the launch of the interviews, the researchers carried out observations. They also consulted with the expert three times and considered his valuable comments for improving the interview questions. Furthermore, one of the authors was the lecturer who could alleviate them immediately during the research process.

Figure 1. Training procedure in a meeting in the research writing course and its learning tasks



Note. The training procedure shows the progress and learning tasks that students have to carry out during a meeting

Figure 1 indicates how English-majored MA students were trained within a particular meeting in the research writing course surveyed. In this course, every meeting has three phases including pre-task, task cycle, and post-task. In the pre-task stage, these MA students often had group discussions to answer their instructor's queries. The task cycle involved evaluating case studies, working in groups, and reading for comprehension with follow-up questions, followed by writing paragraphs and projects in the post-task phase. Peer feedback took place in every phrase.

### 3.4 Ethical Issues

The researchers carried out the current survey with the class lecturer's and students' permission. In addition, they ensured that all participants were fully informed about the purpose, procedures, risks, and benefits of the research. Besides, the participants were provided voluntary consent to participate, which meant that they were willing to participate in this investigation. Their identities were strictly confidential, even from their instructor to ensure that they were not influenced by subjective psychological factors such as anxiety, embarrassment, and so forth when being observed and answering questions in interviews.

## 4. FINDINGS

### Research Question 1: To What Extent do Graduate Students Use ChatGPT to Assist Their Study in a Research Writing Course?

#### Reasons for Choosing ChatGPT as a Support Tool

All twelve participants preferred using ChatGPT for learning research writing because it was convenient and speedy. When compared to using other AI chatbots such as Google Bard, Poe, and so forth, one disclosed that it was easier to get access to ChatGPT by Gmail (8.3%). In addition, they showed that it could provide quick results and immediate help to alleviate their learning problems (100%).

**S5:** When compared to other AI chatbots such as Microsoft Bing AI, Google Bard, and Poe, I saw that ChatGPT was more popular. Additionally, it is easier to get access to ChatGPT than to Bard which requires Microsoft emails.

**S10:** ChatGPT can provide immediate answers for many fields I do not have much knowledge about.

English-majored MA students at VLU were keen on using ChatGPT due to its multifunctional characteristics. For instance, they explained that it could help them search for information, plan questions, write content, synthesize, deliver feedback on their classmates' writing assignments, narrow the scope of the research, outline, translate, generalize information, and solidify knowledge.

**S6:** I use ChatGPT to suggest errors in grammar, spelling, language use, cohesion, coherence, and ideas of my classmates' paragraphs when giving peer feedback.

**S7:** I use ChatGPT to search for definitions of specialized phrases and synthesize information. Moreover, I use ChatGPT to help condense knowledge and focus on exercises.

**S11:** ChatGPT can help to write the content that you need very quickly, brainstorm ideas, and make outlines.

These findings could be interpreted that when English-majored MA students at Van Lang University dealt with difficulties, they were inclined to use ChatGPT due to its practical characteristics. This indicated that it was believed to be a helpful tool for learning research writing by the participants.

#### Characteristics of Queries/Prompts Given to ChatGPT

Once the researchers had observed the participants' use of ChatGPT to assist them in handling given learning tasks, they identified several themes of questions' characteristics that they gave to ChatGPT based on the categories of those tasks. In other words, the recruited participants asked ChatGPT different kinds of questions when they handled different learning tasks such as discussions, case studies, reading comprehension, peer feedback, and projects. The characteristics of questions that they gave to ChatGPT involved concept-checking questions, reasoning questions, detailed questions, imperatives, definition-determining questions, information-seeking questions, example-discovering questions, application questions, and connective questions. Notably, imperatives, concept-checking, reasoning, and applications questions contributed to four main kinds of questions that they asked ChatGPT more

frequently, when compared to the others. For discussions, case studies, and reading comprehension, they often sought help from ChatGPT's responses for checking concepts, determining definitions, and seeking information and applications while they often asked ChatGPT to relate concepts or situations and suggest applications for particular topics.

**S1:** Give feedback on ...

**S2:** How many...?

**S3:** Why...? / Give me reasons for ... / Several studies have explored [fact]?

**S4:** Infinitives at the beginning of sentences

**S6:** What is/are...?

**S7:** How to ...?

**S8:** [statement]?

**S9:** How do/does A affect B?

**S10:** How can...?

**S12:** How do/does A relate to B?

These findings could be interpreted that the participants could ask different types of detailed questions to ChatGPT to help them solve different learning tasks, even though they had never joined formal training workshops on using it. This indicated that they would use ChatGPT more effectively to support their study in the research writing course with the lecturer's guidances on its appropriate use.

## Reactions to ChatGPT's Feedback

From the findings of interviews, English-majored MA students at Van Lang University reacted to the content supplied by ChatGPT in different ways. To be more precise, all participants requested ChatGPT to offer more references and details and then verified the information supplied by cross-referencing it with other academic sources, including Google Scholar, and their own opinions. This meant that they had background knowledge of this subject and desired to explore it more. They also paraphrased, edited, and used ChatGPT to make outlines, but did not copy their content.

**S1:** I usually ask ChatGPT to examine the information given more carefully to see if this information is accurate and reasonable or not.

**S3:** I compare with my personal views or views of a certain article author.

**S4:** I usually reread and filter which ideas I think are appropriate and then find more documents from different research channels to verify.

**S6:** I usually verify the information and select appropriately

**S9:** I usually review and check the accuracy of the information and then write in my own words.

**S10:** I often analyze phrases and structures of ChatGPT's responses to pick up synonyms and paraphrases.

Overview, owing to the recognition of ChatGPT's responses' limitations, English-majored MA students at VLU did not totally copy its feedback. These findings could be interpreted that they had critical reactions to the content of ChatGPT such as understanding, applying, analyzing, synthesizing, and evaluating, in the early stages that they used this AI tool to support learning to write research. For

the indications of these findings, appropriate guidance on ChatGPT use for learning to write research of their instructor through different kinds of tasks could help them use this tool more critically.

## **Research Question 2: What Cognitive Levels do Graduate Students' Reactions to ChatGPT's Feedback Relate to?**

### **Emotional Reactions**

Overall, from the findings of observations and interviews, English-majored Master's students who participated in the survey disclosed favorable attitudes although they had several concerns about using ChatGPT to assist them in learning research writing. To be more precise, while they preferred its convenience, instant help, and usefulness, they doubted its accuracy and artificial learning environment. Most participants claimed that it took time to double-check the information that ChatGPT offered (66.7%). In addition, their assignments would be readily interpreted as written by artificial intelligence if they did not completely comprehend what ChatGPT offers to paraphrase, which reduced their comfort (8.3%). Furthermore, they discussed if ChatGPT played a predominant role in research writing courses, the self-learning environment would be insufficient and negative when compared to that having human teachers' guidance and supervision (16.7%).

**S1:** I don't feel much comfortable. ChatGPT sometimes provides wrong information and double-checking is time-consuming. Additionally, if I do not fully understand what ChatGPT suggests to paraphrase, the article will easily be thought of as using AI to write. In general, it will cause a loss of comfort during my study. Therefore, I will need human teachers' guidance and supervision.

**S5:** Sometimes the environment of self-learning with ChatGPT is not as sufficient as learning in traditional classrooms.

**S9:** ChatGPT is a convenient and fast tool but requires users to have certain qualifications to verify the information.

**S10:** Using ChatGPT is convenient but not completely reliable and accurate.

By comparison, all participants preferred its convenient and speedy features and usefulness (100%).

**S3:** Using ChatGPT can help to find the information I need very quickly.

**S6:** Using ChatGPT is quite convenient and can help me come up with many good ideas

In other words, these findings could be interpreted that although English-majored MA students at VLU enjoyed using ChatGPT to support their learning to write research, they were concerned about the accuracy and reliability of ChatGPT's feedback, insufficient learning environment, and the cost of time for double-checking. This could indicate that they did not completely believe and rely on the content of ChatGPT, which could result in their need to receive their instructor's support and feedback.

### **Perceptions of Future ChatGPT Uses**

According to the findings of interviews, although English-majored MA students believed that the role of human lecturers is irreplaceable in foreign language classes, they could not guarantee this scenario would not happen in the future because of human usage. A participant argued that while ChatGPT might give users adequate knowledge, it was unable to identify ideological and personality variations

and those in acquisition speed even amongst students in the same class and training period, especially when teaching a large group of students (8.3%). As a consequence, AI-powered instruction was like instructing a fish to climb a tree if it was unable to recognize the distinctions between students, which might lead to a decline in their engagement. Additionally, eight participants argued that teachers' roles were irreplaceable which resulted from ChatGPT's lack of practical experience, emotional intelligence, and cultural aspects (66.7%).

**S7:** Instructors convey practical experience and knowledge based on theory. Hence, it is easier to absorb knowledge and apply it in life.

**S8:** Impossible because AI is just AI, maybe it will provide enough information for users but it cannot recognize differences in ideology and personality, which there is often a difference in acquisition speed even though they are in the same class and training time, especially teaching with a large group of students. If AI cannot acknowledge differences among learners, teaching is like teaching a fish to climb a tree, which can result in the reduction of learner engagement.

**S9:** Humans create ChatGPT and AI, so AI can never replace humans. If humans do not program it, it cannot have certain knowledge, including human emotions. This proves that humans do not program machines, so no matter how much science develops, without humans, it is nothing more or less than a machine.

**S10:** ChatGPT cannot replace the lecturer's position because there are in-depth questions and cultural aspects that cannot be queried by ChatGPT and the information provided to students is for reference only and cannot impart valuable experience and information from lecturers.

**S12:** Its data is still inaccurate, not up-to-date, and in-depth.

By comparisons, a participant was uncertain about the future of ChatGPT in foreign language classrooms because it depended on how people would use this chatbot (8.3%).

**S6:** It is impossible to say in advance because it depends on how people use ChatGPT.

In other words, these findings could be interpreted that ChatGPT could not replace human lecturers' positions soon, but its replacement is unpredictable in the more distant future. This could indicate that more current research needs to investigate the use of ChatGPT for learning, particularly for learning writing research to make reasonable recommendations for this use. As a result, the abuse of ChatGPT by lacking-awareness individual English-majored MA students and the replacement of ChatGPT would be prevented from the early stage.

## 5. DISCUSSIONS

According to the findings in this study, the graduate students preferred using ChatGPT because it could assist them in writing content and delivering feedback, which mirrors the results of Stokel-Walker (2022), Su and Yang (2023), Nguyen (2023), and Xiao and Zhi (2023). For their reactions to ChatGPT's feedback, the results of this survey demonstrated that they evaluated and verified the information supplied by cross-referencing it with their own thoughts, their instructors' lectures, and other scholarly sources, such as Google Scholar. This was similar to the findings of Bok and Cho (2023), Šedlbauer et al. (2024),



and Dong (2024). These findings were also consistent with the properties of four theories introduced by Solak (2024), and Du and Alm (2024), including self-determination theory, constructivist language learning theory, technology acceptance model (TAM), and social learning theory.

The present study reported several research findings that were not found in the literature review that English-majored MA students asked ChatGPT different categories of questions when they used it as a tool to help with group discussions, case study resolution, reading comprehension, peer feedback, and final project management. Their questions involved concept-checking questions, reasoning questions, detailed questions, imperatives, definition-determining questions, information-seeking questions, example-discovering questions, application questions, and connective questions. Additionally, their reactions to ChatGPT's responses belonged to five levels of understand, apply, analyze, evaluate, and create in Bloom's cognitive taxonomy such as finding more in-depth information, verifying, outlining, and comparing with different information sources and personal views. From the findings, recruited English-majored MA students were believed to use ChatGPT as a support tool for learning research writing with critical thinking. These reactions' characteristics matched with those revealed by Bloom et al. (1956) and Paul and Elder (1992). In addition, the findings that the participants used ChatGPT critically were similar to those of Xiao and Zhi (2023). Furthermore, the findings that they used the technique of verifying the validity of ChatGPT's responses also advocated those in the study of Šedlbauer et al. (2024). However, the participants in this investigation did not rate the quality of ChatGPT's feedback.

The graduate students at Van Lang University were considered to be self-regulated learners because they had characteristics of self-regulated learners studied by Richards and Rodgers (2001), Zimmerman (2002), Perry et al. (2017), and Jansen et al. (2022). Additionally, ChatGPT supported their learning in different ways during the stages of SRL, which complimented Chiu's (2024) results. Moreover, the findings reported that they opted for using ChatGPT as an assistant tool for studying research writing due to its practical functions such as convenient and speedy information search, content synthesis, outline development, and feedback delivery, which were similar to those of Kohnke et al. (2023) and Su and Yang (2023).

The participants believed that ChatGPT's replacement for the role of human instructors in foreign language classes, especially research writing, would not take place, which advocates the findings of Phan and Nguyen (2023) and Dong (2024). To be more precise, the participants emphasized humans' roles in proofreading and feedbacking within the human-ChatGPT interactions, which correlated with Chen (2023), Thorp (2023), and Dong (2024). Additionally, they promoted the idea that teachers should play a major role in providing students with individualized, nuanced, and culturally sensitive feedback in the classrooms where learners could use ChatGPT to support their studies, which was similar to the findings of Bok and Cho (2023).

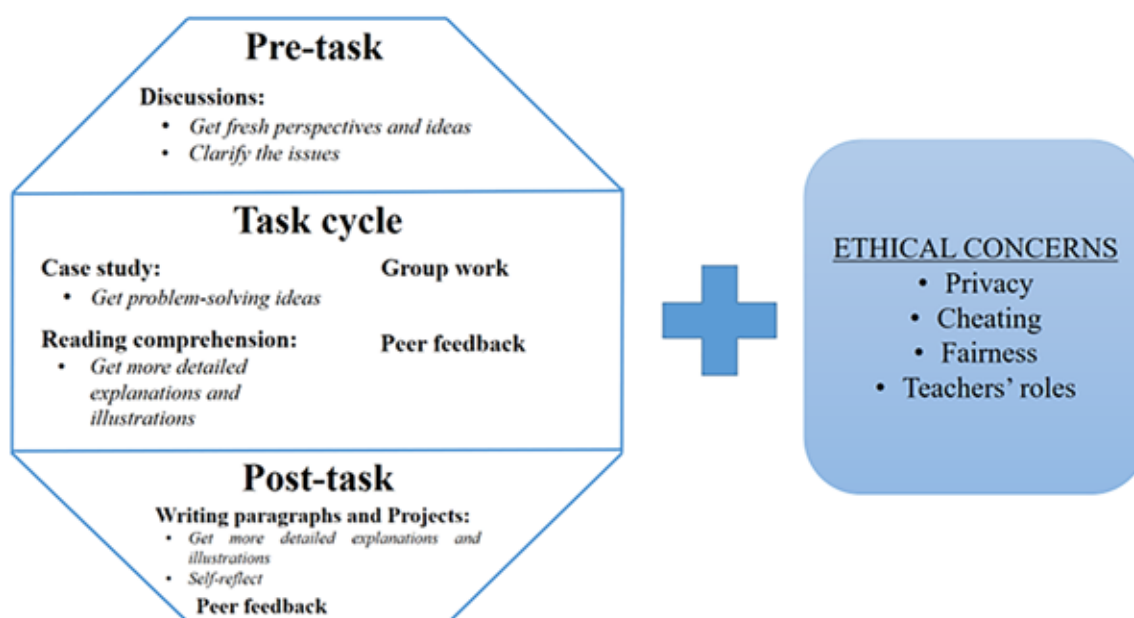
The ChatGPT Use of Vietnamese English-Majored Master's Students at Van Lang University addresses ethical concerns involving privacy, cheating, fairness, and teachers' roles. The investigation's findings highlight the role of the instructor in the classroom and ChatGPT is a support tool for the participants. This alleviates the ethical concerns raised by Mhlanga (2023). Besides, these students used ChatGPT critically and avoided violating scientific ethics such as cheating and plagiarism that were reported by (Zeb et al., 2024). Furthermore, other ethical issues reported by Mhlanga (2023) were also carefully considered by examining ChatGPT's responses.

## 6. CONCLUSION

### 6.1 Main Findings of the Current Research

The main findings indicated that using ChatGPT as an assistant tool could be considered to be a help-seeking strategy for several reasons such as being convenient, speedy, and multifunctional. Additionally, the prompts that they asked ChatGPT were diverse such as concept-checking questions, reasoning questions, detailed questions, imperatives, definition-determining questions, information-seeking questions, example-discovering questions, application questions, and connective questions. Among them, imperatives, concept-checking, reasoning, and application questions were four dominant categories. In addition, they had different reactions to ChatGPT's responses to take advantage of its content for supporting their learning tasks throughout the twelve-meeting period mentioned. For instance, they used its content to find more in-depth information for their lessons, edit, analyze its sentence components, verify, compare with different research sources, and so forth. Additionally, the majority of them verified the appropriateness of ChatGPT's responses with reliable academic sources. Hence, their reactions to these responses belonged to five levels of understand, apply, analyze, evaluate, and create in Bloom's cognitive taxonomy. They did not entirely believe in ChatGPT and revealed that human instructors' support and feedback were essential. Subsequently, they advocated that ChatGPT could not replace lecturers' roles in future language classrooms for several reasons such as its lack of hands-on experience, pedagogical skills, emotional intelligence, and cultural aspects. Moreover, they avoid being involved in ethical concerns when using ChatGPT to support their study in the research writing course at Van Lang University.

Figure 2. Conceptual framework of the ChatGPT use of Vietnamese postgraduate students in a research writing course at Van Lang University



Note. Adapted from Willis (1996), Artino and Stephens (2009), Roohani and Asiabani (2015), Mhlana (2023), and Zeb et al. (2024)

Figure 2 was adapted from Willis (1996), Artino and Stephens (2009), Roohani and Asiabani (2015), Mhlanga (2023), and Zeb et al. (2024) and introduced as a conceptual framework for the ChatGPT Use of Vietnamese postgraduate students in a research writing course at Van Lang University based on the findings in this research. When the students discussed before doing the tasks, they used ChatGPT to brainstorm different viewpoints and ideas and clarify problems. While they performed tasks such as case study, group work, and reading comprehension, this tool provided them with detailed explanations and illustrations. This helped them to come up with ideas to alleviate their issues. For composing paragraphs and conducting projects post-task, they received thorough explanations from ChatGPT and then self-reflected. ChatGPT also assisted them in giving feedback to their classmates. While handling those learning tasks, they used ChatGPT to support their research and took ethical considerations into account.

## 6.2 Pedagogical Implications

The study has shown useful information about English-majored MA students' use of ChatGPT as a support tool for learning research writing. The results imply that ChatGPT can be critically used to help Van-Lang-University English-majored MA students study research writing. To promote the development of critical use of ChatGPT for research writing in Master's programs in English Language Studies, relevant stakeholders need to take action.

In terms of English-majored MA students at VLU, they should be critical when using ChatGPT to support their learning in the research writing courses. To achieve this aim, they should strictly follow their instructors' guidance on the critical use of ChatGPT through learning tasks such as discussions, case studies, reading comprehension, peer feedback, and final projects. When receiving ChatGPT's responses, they should understand, apply, analyze, synthesize, and evaluate their accuracy and appropriateness. During this process, they should employ other AI tools, learn from their peers, and seek help and support from human experts, including their instructors. Furthermore, to help the following generations of English-majored MA students at VLU use ChatGPT more critically, they should work with their teachers to make recommendations and develop guidelines about using ChatGPT in research writing courses.

With regards to lecturers teaching research writing for English-majored students in postgraduate programs at VLU, they should be careful when enabling their students to use ChatGPT to assist in learning writing research. To accomplish this objective, they should design their lessons carefully with the implementation of scaffolded experimental activities that allow their English-majored graduate students to practice using ChatGPT and verify its content. Additionally, while their English-majored MA students are using ChatGPT in lectures, they should closely monitor how they use it and give them feedback. Moreover, they should regularly conduct investigation research on how to use ChatGPT to support the research writing learning of their English-majored MA students to control the employment of this AI tool as a learning assistance so that it will develop positively and reasonably, avoiding the bad scenario that they will depend on this chatbot.

Concerning policymakers at VLU, they should develop more plagiarism-detecting softwares which have text recognition features created by ChatGPT to help lecturers control the honesty and effort of their English-majored MA students when they carry out their projects, which helps them offer objective and fair assessments. This will indirectly prevent lazy students from being overreliant on this chatbot.

### 6.3 Limitations

The current research is not free from limitations, which four main limitations were found. Firstly, a small number of participants prevented the researcher from making generalizations of the findings. Secondly, these research results may change if the participants use other versions of ChatGPT, including ChatGPT 4.0, which is believed to provide more specific information with references. Thirdly, it is an exploratory study, which only explores the ways of using ChatGPT as an assistant tool for English-majored MA students to learn writing research. Finally, if this research investigates English-majored postgraduate courses with different lecturers using different teaching methods or at other educational institutions, the results may be different.

### 6.4 Recommendations for Further Research

From the above limitations, the current study focuses on the Master's students at VLU. It may be great if future studies are expanded to investigate undergraduate students at the same university to make the final results more convincing. Additionally, research in the future should gather data from larger groups of English-majored MA students so that the researchers can generalize their findings. In addition, they can encourage their participants to use other versions of ChatGPT to examine whether their findings are different or similar to those in the current research. Future research should also determine English-majored MA students' use of ChatGPT for learning in other kinds of postgraduate courses such as Second Language Acquisition, IT in Foreign Language Teaching, Pragmatics, and so forth to evaluate the differences among research findings. Besides, to further advance this research area, future studies can measure ChatGPT's impacts on English-majored graduate students' learning outcomes in this research writing course and others. Moreover, the use of ChatGPT for research assistance is controversial in other academic settings, and the use of ChatGPT by English-majored MA students needs to be monitored across multiple courses, so longitudinal studies should be undertaken to determine the social changes.

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