

University students' perception of using ChatGPT toward their writing skills

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ABSTRACT

This study investigated students' perceptions of the use of ChatGPT on their writing skills in the context of learning English as a Foreign Language (EFL). Using a descriptive qualitative design supported by quantitative data, 53 students from the Department of English Language Education at the University of Riau Islands participated in a questionnaire and semi-structured interviews. The study findings indicated that students' overall perception of ChatGPT was moderate ($M = 3.57$). The highest mean was found for Perceived Ease of Use (3.75), and the lowest for Output Quality (3.47). Students with high perceptions described ChatGPT as an effective, user-friendly, and motivating writing assistant that enhanced their productivity, creativity, and confidence in composing academic texts. In contrast, students with low perceptions tended to be cautious, emphasizing the importance of originality, critical thinking, and ethical use. Significantly, the study's findings validate the application of the Technology acceptability Model (TAM), namely that students' who perceived ChatGPT as easy to use were more likely to use and integrate it into their writing process, while concerns about accuracy reduced acceptance among students with low perceptions. This study concludes that while ChatGPT can be a useful tool for improving EFL students' writing skills, its implementation must be governed by a pedagogical framework that fosters ethical awareness and responsible AI literacy. These results offer pedagogical implications for EFL teachers and curriculum designers in creating writing instruction that intentionally and morally incorporates AI tools in higher education contexts, as well as providing theoretical reinforcement for TAM.

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INTRODUCTION

One of the most crucial abilities for learning English as a foreign language (EFL) in Indonesia is writing, which enables students to arrange their ideas, feelings, and thoughts logically. Writing is a process that involves planning, drafting, editing, and finalizing (Pratama, 2021). For EFL students, writing is a skill since it enables them to communicate ideas in a clear and effective manner while capturing readers' attention (Yana & Rozimela, 2023). Writing also involves thinking tasks that help students improve their intellectual abilities by challenging their ideas and ways of thinking. (Mohamad et al., 2024).

According to previous research, many students consider writing to be the most difficult skill in academic settings (Alammar & Amin, 2023; Fitria et al., 2022). Therefore, to fully understand the essential elements of the writing process, students are required not only to master the language but also to have in-depth experience in academic writing and critical thinking skills (Mohamad et al., 2024). Students must understand academic writing styles. This further emphasizes the importance of mastering all aspects of writing. Many students still struggle with various aspects such as topic development, organization, grammar, vocabulary, coherence, and even plagiarism (Dewi et al., 2020; Nishwa & Amsari, 2025). Vietnamese postgraduate students experience difficulties in organizing grammar and spelling, coherence, paraphrasing, and incorrect referencing and citation (Uyen, 2024). The high standards of academic writing and these challenges indicate that writing remains a major obstacle for EFL learners in various contexts, particularly at university. Therefore, there is interest in understanding students' perceptions of the use of AI technology to assist them in academic English writing.

According to recent research, to meet the demands of 21st-century communication, the development of academic writing skills increasingly requires integration with multimodal and digital approaches so that writing in higher education now includes multimodal projects that encourage creativity, teamwork, and digital literacy, not just text-based approaches (Yana et al., 2024). In recent years, EFL writing instruction has shifted toward multimodal and digital approaches. Many EFL writing programs still emphasize traditional text-based writing, even though incorporating multimodal and digital components is crucial today (Yana et al., 2023). This gap highlights the need for the latest and most advanced resources, such as AI-based programs, to help students develop more dynamic and coherent writing skills.

In the 5.0 era, advanced technologies such as Artificial Intelligence (AI) are increasingly integrated into daily life to enhance human well-being and address social challenges. Unlike the Industrial Revolution 4.0, which emphasized technology, the 5.0 era promotes human–technology collaboration to achieve both economic growth and social welfare (Hanjowo et al., 2023). AI and digital technologies have transformed

how people communicate, work, and learn, becoming essential infrastructures that redefine interaction and educational practices in modern society. Traditional pedagogical approaches have been gradually replaced by adaptive and interactive methods supported by AI-based learning environments (Rukmini et al., 2023). To maintain educational continuity, many institutions adopted online and hybrid learning during and after the COVID-19 pandemic, a transition largely accelerated by AI tools (Hasibuan et al., 2022). In higher education, AI offers various benefits such as personalized learning and early support for less engaged students (Bond et al., 2024).

However, while AI provides flexibility and real-time feedback, it also poses challenges including algorithmic opacity, design constraints, and potential impacts on cognitive performance (Zhao, 2025). Essentially, AI imitates human intelligence through self-learning systems capable of reasoning, adapting, and making decisions (Cukurova, 2025; Khamouja, 2025).

Similarly, Putri et al. (2025) found that EFL students who used ChatGPT strategically maintained originality and demonstrated greater motivation and linguistic competence. These results suggest that, when implemented responsibly and thoughtfully, AI can support learning. Widely adopted in classrooms, ChatGPT supports text-based assignments, promotes writing fluency, and enhances instructional interaction (Ajevski et al., 2023; Farrokhnia et al., 2024; Maulana et al., 2023). Its rapid growth, reaching over one million users shortly after its release, reflects the global shift toward AI-assisted English learning and writing practices (Ajevski et al., 2023; Astuty & Anggraini, 2024).

Recent studies show that AI tools such as Grammarly, QuillBot, and ChatGPT have transformed students' writing and revision processes by offering automated feedback, vocabulary enhancement, and structural assistance (Ravšelj et al., 2025). However, AI feedback systems can significantly improve students' writing accuracy, but they can also lead to dependency, hindering students' ability to develop independently, claim (Fathimatuzahro & Rizkiyah, 2025). Among various AI applications, ChatGPT developed by OpenAI and first released on November 30, 2022 based on Natural Language Processing (NLP) has become the most prominent in higher education due to its ability to support idea development, writing fluency, and academic text generation (Astuty & Anggraini, 2024; Ravšelj et al., 2025).

Although international studies like Launonen et al. (2024) in Finland show that students like ChatGPT's ease of use for academic writing, they also draw attention to contextual and ethical issues pertaining to originality and cultural perceptions of AI (Launonen et al., 2024). In Indonesia, Amani & Bisriyah (2025) investigated AI-based tools. Amani examined students' perceptions of AI applications in supporting their self-regulated writing. However, they did not specifically examine ChatGPT or compare user perceptions. Another study also examined tenth-grade high school students' perceptions of the use of ChatGPT in English writing skills (Napitupulu et al., 2025). This study focused solely on two key aspects of Davis's (1989) TAM: Perceived

Effectiveness (PU) and Perceived Ease of Use (PEOU). And also focused solely on high school students. This further strengthens the novelty of the research I will examine.

However, despite the growing interest in using ChatGPT for writing, research examining diverse student perceptions of ChatGPT remains limited. Most previous studies have examined general perceptions of AI tools like Grammarly or Quillbot, but none have specifically examined perceptions of using ChatGPT. These studies also address the general benefits of AI feedback or its technical effectiveness. Furthermore, few have compared student perceptions (high vs. low) in the context of ChatGPT-assisted EFL writing in Indonesia.

The novelty of this study lies in: 1. Differentiating students based on their level of perception (high vs. low), which has rarely been studied in previous literature, and 2. Combining quantitative data as support for the instrument and qualitative for the interviews to deepen the complexity of students' attitudes and behaviors towards writing supported by ChatGPT. The significance of this research lies in its contribution to understanding how ChatGPT, as an AI-assisted tool, can be effectively integrated into English as a Foreign Language (EFL) writing instruction. By uncovering diverse student perceptions and experiences, these findings are expected to provide insights for educators (teachers/lecturers), curriculum designers, and policymakers in developing ethical and pedagogically sound strategies for integrating AI tools like ChatGPT into academic writing contexts. This study focuses on students' perceptions of using ChatGPT toward their writing skills, which will be discussed further in this article.

Considering the limitations of this study, this study aims to address the gaps in previous research by more specifically this study has research question: 1. What are students' perceptions of using ChatGPT to support their writing skills? and, 2. How do students with high and low perceptions of ChatGPT describe their experiences in using ChatGPT toward their writing skills?

RESEARCH METHODOLOGY

Research design

This study used a descriptive qualitative research design and was supported by quantitative data from a Likert-scale questionnaire. The goal was to explore students' perceptions of the use of ChatGPT in their writing skills. This descriptive qualitative approach was chosen because it is suitable for providing a straightforward description of a person's educational experiences and practices. Qualitative research itself provides contextual findings about a person's behavior, attitudes, and life experiences (Creswell, 2018). Quantitative data were used to categorize perception levels (high and low), while qualitative data provided deeper insights into students' experiences and opinions. This approach aligns with Creswell's (2018) embedded design, where

qualitative findings play the dominant role and quantitative results serve as supporting evidence to strengthen interpretation. Therefore, this study does not aim to test the hypothesis, but to describe students' perceptions and experiences regarding the use of ChatGPT in writing.

Research subject

The subjects of this study were 53 students from the English Language Education Department at the University of Riau Islands, the Province of Kepulauan Riau. They were in their third and fifth semesters, with the third semester having only one class (3A), and the fifth semester having two classes, (5A and 5B). They were selected through purposive sampling, with an emphasis on students who had at least once used ChatGPT for writing or academic purposes. Third and fifth semester students were specifically selected because they are more likely to use AI tools to support their writing. They have completed core writing courses and are more familiar with academic projects. Furthermore, students at these levels typically have more exposure to AI applications and have higher levels of digital literacy, enabling them to provide more in-depth opinions on the use of ChatGPT in academic writing.

Instrument

From these 53 respondents, questionnaires were distributed online via Google form. From the processed questionnaire results, 10 students (5 with high perceptions and 5 with low perceptions) were selected based on the questionnaire results (median score = 63) to represent a diverse range of experiences. This selection aimed to conduct interviews to gain a deeper understanding of the positive and negative perceptions of using ChatGPT in developing writing skills.

Data collection procedure

Data collection was conducted in October 2025. Data were collected through two types of instruments, the questionnaire and semi-structured interviews. This questionnaire consists of several closed-ended questions primarily aimed at assessing student perceptions. The questionnaire is adapted from the Technology Acceptance Model (TAM 3) by Venkatesh and Bala (2008), Students' demographic information was collected first, followed by a 5-point Likert scale assessment (1 = strongly disagree to 5 = strongly agree) (Wicaksono, 2022). Before the questionnaire was administered, its content validity was evaluated by two experts: one EFL lecturer and one experienced English teacher. Minor revisions were made based on their feedback to improve clarity and contextual appropriateness. After expert validation, the questionnaire was distributed, and its reliability was analyzed using Cronbach's Alpha. The overall reliability score was $\alpha = 0.919$, indicating very high internal consistency.

The second procedure was semi-structured interviews with 10 students with high and low perceptions. A small number of people who supply detailed information are usually involved in qualitative research. The goal is to have a thorough grasp of the main phenomenon rather than to make generalizations (Creswell, 2018). Five students

from each category interviewed for questionnaire results indicating a high perception and five students for questionnaire results indicating a low perception. These interviews served to further explore the reasons why these students had high and low perceptions regarding the use of ChatGPT toward their writing skills.

Table 1. Data collecting procedure

No	Questionnaire	Interview
1.	Prepare the questionnaire	Create open-ended questions about students' perceptions of the use of ChatGPT in their writing skills.
2.	Conduct a questionnaire validity test conducted by an expert.	Check the validation of the questions with an expert.
3.	Distribute the valid questionnaire to students.	Conduct structured interviews with several students with (high and low) perceptions.

Data analysis technique

This study employed descriptive and thematic analysis to explore students' perceptions of using ChatGPT on their writing skills. The researcher used descriptive analysis techniques to interpret the data collected through questionnaires and interviews regarding students' perceptions of the use of ChatGPT on their writing skills. Quantitative data from the Likert scale questionnaire were analyzed descriptively using SPSS 26 to obtain the mean, median, and standard deviation of each indicator. Qualitative data from semi-structured interviews were then analyzed thematically following the Cresswell (2018). The process involved transcription, coding, categorization, theme generation, and interpretation. This sequence enabled the researcher to systematically identify recurring ideas and deeper insights regarding students' experiences with ChatGPT. To enhance the trustworthiness of the qualitative findings, triangulation between questionnaire and interview data and member checking with selected participants were conducted to ensure accuracy and credibility.

RESULTS

Reliability analysis

Prior to the descriptive analysis, a reliability test was conducted using Cronbach's Alpha to ensure the internal consistency of the questionnaire items. The overall reliability coefficient was $\alpha = 0.919$, which exceeds the acceptable threshold of 0.70

(Sugiyono, 2022). This means the reliability coefficient is in the very high category and indicates that the instrument is reliable and consistent.

Table 2. Reliability statistic

Cronbach 's Alpha	Items
.919	17

Descriptive Analysis of Students' Perceptions

Quantitative data obtained from questionnaires were analyzed using SPSS 26 to identify students' perceptions. The analysis included five key indicators adapted from the Technology Acceptance Model (TAM 3): Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Output Quality (OUT), Perceived Enjoyment (ENJ), and Behavioral Intention (BI).

Table 3. Descriptive analysis of student's perceptions

Indicator	N	Minimum	Maximum	Mean	Std. Deviation
Perceived Usefulness (PU)	53	1.00	4.75	3.5472	.70550
Perceived Ease of Use (PEOU)	53	1.00	4.75	3.7453	.75238
Output Quality (OUT)	53	1.00	4.67	3.4717	.75230
Perceived Enjoyment (ENJ)	53	1.00	5.00	3.5723	.74069
Behavioral Intention (BI)	53	1.00	5.00	3.5157	.70579
Mean Overall	53	1.40	4.72	3.5704	.59698

Note: Scale Used: 1) Strongly Disagree, 2) Disagree, 3) Neutral, 4) Agree, 5) Strongly Agree

The research findings indicate that students' overall perception of the use of ChatGPT on their writing skills was moderate (M = 3.57). In research using a 1–5-point Likert scale, average results are typically categorized into levels (low, medium, high) based on equal intervals. This approach is often used by researchers to interpret average values categorically (Sugiyono, 2022).

Table 4. Table of category perception

Indicator	Score interval	Interpretation
Low	1.00 – 2.33	Low perception
Medium	2.34 – 3.66	Moderate perception
High	3.67 – 5.00	High perception

Among the five indicators, the highest mean score was found for Perceived Ease of Use (PEOU) ($M = 3.75$). This result indicates that students' perception generally found ChatGPT easy to use in their writing activities and a positive acceptance of ChatGPT's user-friendly accessibility. Meanwhile, the lowest mean score was found for Output Quality (OUT) ($M = 3.47$), suggest that students still need to be selective about the quality of ChatGPT writing, especially regarding grammar, vocabulary, structure, which is integrated. Perceived Usefulness ($M = 3.55$) and Perceived Enjoyment ($M = 3.57$) also fell into the moderate category. This indicates that although students found ChatGPT quite useful, enjoyable, and easy to use, they still relied on their own writing skills to produce good and accurate academic writing.

Based on the total average score for all items, the median value (63) was used as the cutoff point to classify students into high and low perception groups. A total score of 17–85 was possible due to the questionnaire's 17 items, each of which was assessed on a 5-point Likert scale. The sample's actual median score was 63, which is a suitable statistical midpoint for dividing students into two perceptual categories. Of the 53 respondents. 26 students (49%) were classified as having low perception, 27 students (51%) were classified as having high perception. These findings indicate that students generally perceived ChatGPT positively, although some students still expressed doubts about its accuracy and reliability.

Experiences of students with high and low perceptions of using ChatGPT toward their writing skills

After identifying students with high and low perceptions of ChatGPT's use on their writing skills, an experience-focused inquiry approach emphasized rich descriptions to uncover individual experiences (Creswell, 2018). Semi-structured interviews were then conducted to gain deeper insight into students' perceptions of ChatGPT, its ease of use, and its effectiveness in improving writing skills. The researcher used a methodical qualitative analytical approach that included transcription, open coding, axial coding, and theme development to examine the interview material and identify recurrent themes. Without the assistance of qualitative analysis software like NVivo, the coding procedure was carried out by manually. The first EFL supervisor examined some of the coded transcripts to make sure the developing themes were accurate and consistent, which increased the analysis's trustworthiness.

Face-to-face interviews were conducted with 10 selected participants (five from each category). This phase aimed to explore more deeply how they viewed using ChatGPT in developing their writing skills. The findings revealed several emerging themes that illustrate students' perceptions, attitudes, and behaviors toward ChatGPT. Based on the results of the questionnaire conducted on the sample, this study identified several key themes related to the use of ChatGPT on their writing skills. Including frequency and purpose of use, perceived usefulness, ease of use and effectiveness, output

quality, enjoyment and motivation, intention to continue use, and overall perception. The following is a detailed analysis of the interview results.

Frequency and purpose of using ChatGPT in writing

After the interviews were conducted, the results revealed differences between students with high and low perceptions of ChatGPT's impact on their writing skills. This included how often and for what purposes they used ChatGPT in their writing activities. Students with high perceptions reported using ChatGPT frequently, for a variety of more academic purposes, such as developing ideas, checking grammar, completing writing assignments, and improving their writing skills. They considered ChatGPT a reliable writing assistant that helped them overcome challenges and save time, as reflected in the following responses:

"Incidentally, quite often, I usually use GPT chat to look for ideas or additional knowledge that can complement my writing, my writing assignments." (ANS-HIGH)

"Actually, I do it quite often because in CGPT I can look for ideas, I brainstorm those ideas into writing for the writing assignment." (ARF-HIGH)

"It happens quite often, especially since I also work while studying, so when I'm stuck on a job or something, I can ask for help from checking GPT because it really helps with writing assignments, especially that." (ARM-HIGH)

Another student reported a 60% frequency of ChatGPT use, and suggested that ChatGPT might be used not only for developing ideas, writing assignments, and grammar checkers, but also as a reference tool for writing cheat sheets:

"I use ChatGPT frequently, but only about 60% of the time for assignments. The rest I use for reference purposes, such as teaching or seeking inspiration for things I'm curious about when writing questions. I don't actually use GPT chat to generate ideas, except for things like correcting grammar or finding fewer academic words." (RHD-HIGH)

"Quite often Sis, makes references to cheat sheets as well as what the writing is like in GPT chat." (RHM-HIGH)

In contrast, students with low perceptions reported using ChatGPT less frequently and for narrower purposes, such as simply checking the grammar of previously written texts or further developing existing ideas. In this regard, they preferred to rely on their own creativity rather than relying too heavily on AI assistance, particularly ChatGPT:

"I don't actually write that often, because I prefer to write from my own creativity. But sometimes I look for ideas in GPT." (FRH-LOW).

"Not often sis, I use it when I need or want to generate an idea in grammar before I submit an assignment, Sis." (WLD-LOW).

"Rarely used, only as a reference, a reference for writing assignments." (JFR-LOW).

But there are also students who say they often use ChatGPT for their writing assignments by asking for references on how to write a paragraph, and other students say they often use ChatGPT and ask ChatGPT to correct their writing structure only, not to look for ideas, because the ideas have been found at the beginning and from themselves. As the two students said below:

"If I use GPT so often, why do I use it? Because it helps me with my assignments. For example, I had an assignment to write a paragraph. I didn't know what a paragraph looked." (JOY-LOW).

"In writing assignments, it's mentioned almost every assignment, so it's very frequent. And for the purpose, it's more about asking for a writing structure. If you're looking for ideas, you've already found it yourself. But because you can't write the writing structure, you don't understand it, so you ask ChatGPT for the writing structure." (ZNB-LOW).

To put it briefly, students who had high perceptions of ChatGPT preferred to use it more often and for academic writing, whereas students who had low perceptions tended to use it more sparingly and cautiously, preferring to rely on their own thoughts and originality when writing.

Perceived usefulness of ChatGPT toward writing performances

Based on the interviews, both students with high and low perceptions recognized that ChatGPT contributed to improving their writing performance in various ways. However, the level and nature of their perceived usefulness differed between the two perspectives. Students with high perceptions consistently reported satisfaction with all the answers provided by ChatGPT. They emphasized that ChatGPT significantly improved their writing through their requests for help in improving the structure of their writing to make it more formal and coherent. They considered ChatGPT a useful writing aid that could improve their language, generate more creative ideas, and save time during the writing process. For example, some students expressed their views on ChatGPT:

"Personally, I'm always satisfied with the answers provided by ChatGPT. It truly improves all the tasks and answers I type and write." (ARM-HIGH)

"GPT Chat, if you say, doesn't help my performance improve, but it does improve my writing to be better and more formal." (RHD-HIGH)

"It's quite easy for me because that's where I can find ideas for the assignment." (ARF-HIGH)

Something similar was also said by another student (RHM) and (ANS) who stated that ChatGPT helped by providing useful writing references:

"Helping, providing references. Like a piece of writing, later we can see, read the writing. It can be given as input. We can give our own title or story for writing." (RHM-HIGH)

"Sometimes ChatGPT can help me with possible ways to do it or facts that can be added to my writing." (ANS-HIGH).

In contrast, students with low perceptions reported using ChatGPT more cautiously or limitedly. While they acknowledged the benefits of ChatGPT in referencing ideas and structuring sentences, some expressed concerns about over-reliance on it. As some students put it:

"In what ways did it help me? I gained new ideas from the GPT chat, and it helped me to be more creative with my writing." (JOY-LOW)

"I feel like the writing is more structured, Sis, since I started using it." (WLD-LOW)

"I find it helpful because it's easy to use. We just type the command or even use voice or VN. Then of course, the structure is immediately corrected by ChatGPT, which is very helpful so you're no longer confused about how to create a writing structure. But on the other hand, I feel that if you use ChatGPT continuously to help with the writing structure, eventually you won't be able to write on your own because you don't know how to write the structure, you will always be helped." (ZNB-LOW)

"If it's from ChatGPT itself, it's more about words, its vocabulary is more organized, like after I write what I think, then I use ChatGPT to help me tidy up my previous vocabulary, so it helps tidy up the sentence structure." (FRH-LOW)

"I realize that ChatGPT is an AI, a tool, not a solver. It can be used at any time or not, so it's flexible." (JFR-LOW)

Of these two perceptions, both high and low perception groups agreed that ChatGPT was beneficial for improving writing performance, with students with high perceptions tending to view it as an empowering tool that increases productivity and writing quality, while students with low perceptions considered it beneficial but potentially limiting individual creativity and independence.

ChatGPT ease of use and effectiveness

This theme investigates how students perceive ChatGPT's use and effectiveness in helping them with their writing assignments. Most students, especially those with a high perception of ChatGPT, reported that the application was easy to use, effective, and user-friendly. They also emphasized that ChatGPT helped them complete writing assignments quickly and efficiently. For example, (ARM) stated that using ChatGPT was:

"Easy, very easy because I just type or usually, I also copy and paste it in ChatGPT and all my writing tasks will be answered according to my expectations. Everything I asked, everything I didn't know when I asked for help on GPT chat, everything was answered very satisfactorily." (ARM-HIGH)

Another student highlighted ChatGPT's ease of use, saying that:

"In terms of effectiveness, it is very easy to use and also generates results very quickly because for ordinary academic assignments, the database is already large, so it's quite good. ChatGPT is easy and simple to operate." (RHD-HIGH)

"I think it's quite easy to chat with GPT because we just give him a task, like giving him a text, and the command will appear." (RHM-HIGH)

"I think it's quite effective because we just need to provide a prompt that suits my needs and the GPT chat will do it according to my prompt. (ANS-HIGH)

*"It's quite easy for me because that's where I can find ideas for the assignment."
(ARF-HIGH)*

Even students with low perceptions, such as (JFR) and (FRH), acknowledged the ease of use, and said:

"Actually, it's not difficult, because we give ChatGPT commands and it can immediately provide the answers we want. However, sometimes we have to be specific so that we can get the right results." (FRH-LOW)

"Easy, easy enough for a writing assignment. Easy enough." (JFR-LOW)

On the other hand, one student stated that despite ChatGPT's ease of use, the answers it provides aren't entirely accurate, and he chose not to trust ChatGPT 100%.

"In my opinion, it's very easy for me to do it because I just copy from the GPT, but in terms of difficulty, I feel that ChatGPT isn't always right, so I have difficulty saying things like this to GPT, for example, like this, it seems like what you said is wrong, then the GPT comes and says, oh yes, that's right, I was wrong in this part, sorry, so I can't 100% trust JPT, that's the difficulty I'm experiencing." (JOY-LOW)

Even students like (WLD) stated that ChatGPT would be of limited use if it were free. ChatGPT was also said to be confusing for (ZNB):

"Because I don't use the paid ones, Sis, I use the free ones, well, sometimes the free ones aren't suitable or the references should be more complete, but because I use the free ones, that's why I get less or the ones that have been summarized, Sis. So, because it's not paid, it's limited." (WLD-LOW)

"The difficulty with ChatGpt on my device is probably because it hasn't been set up or something, because I've seen that it can be set up on TikTok. It's too obedient, like if we correct it once, it immediately thinks, "Oh, yes, that's right." Correct it again, and then "Oh, yes, follow it again." so we're confused about what it actually means. Oh, so it's confusing, huh? If it doesn't follow our instructions. (ZNB-LOW)

This theme indicates that students, both those with high and low perceptions, found ChatGPT easy and effective to use in their writing assignments. ChatGPT facilitated their academic writing process and provided prompt responses to their requests. However, students with low perceptions expressed concerns about limited access due to the free mode, accuracy issues, and inconsistencies in responses. These challenges led to reduced trust and confusion regarding the use of ChatGPT.

Perceived ChatGPT output quality and accuracy

This topic investigates how students see ChatGPT's accuracy and quality when it comes to writing tasks. Students with a high perception of accuracy stated that ChatGPT's results were accurate and helpful in their writing when they were unsure how to begin. The results were also high-quality and accurate, provided the user provided the right prompts:

"Oh, that's very accurate, friends, especially for those of you who are often confused about how to make something, especially with writing assignments. With ChatGPT, you just have to improvise in your own way." (ARM-HIGH)

"In my opinion, ChatGPT's accuracy is around 70%. It's good at generating results, but it often draws its own conclusions instead of presenting the data as is. So, for example, if we want to search for something, we have to research it again and ask the source to verify the authenticity of the information. ChatGPT isn't always accurate." (RHD-HIGH)

"I think it's quite accurate, as long as we provide accurate prompts too." (ANS-HIGH)

"In my opinion, GPT chat is very good if used for writing because if I search for it, I think it is quite accurate with what I want." (ARF-HIGH)

While (RHM) states 50% - 50% for accuracy and quality:

"Maybe it's not very accurate, I don't really know what ChatGPT is like, sometimes ChatGPT only gives answers but doesn't directly provide the source from where it comes from, so we don't really know the source given by ChatGPT, the writing is either from which book or from which analysis, which search like that, so it's not accurate, not 100% accurate and the quality described. maybe 50-50 can be of quality or not." (RHM-HIGH)

On the other hand, students who have low perception, one voice stated that ChatGPT is not completely accurate:

"It can't be said to be 100% accurate because it's a machine, so we can't just accept it wholeheartedly. Sometimes we modify what GPT gives us to suit our needs."
(FRH-LOW)

"Well, it just so happens that mine isn't paid. So, the accuracy... It's not 100%, so it's not 100% accurate." (JFR-LOW)

"The quality may be good, but sometimes I need to edit the sentences to make them look more interesting to write, Sis." (WLD-LOW)

There are even students who compare the answers generated by ChatGPT with other applications because according to them ChatGPT is not completely accurate and of good quality:

"For Zainab's writing, it's usually compared with other answers, whether from other AIs or Google. You can even look at the writing structure. I often use it for writing structure, so you can check the guidelines again and compare it. The quality is lacking if we only use ChatGPT." (ZNB-LOW)

"Its accuracy isn't 100% reliable, as when I compared the answers from ChatGPT and Perplexiti, they yielded different results, and their accuracy wasn't immediately reliable. Therefore, it's necessary to sort through the answers to produce the correct answer for the writing section." (JOY-LOW)

This theme reflects students' perception that ChatGPT produces content that is only marginally relevant and not entirely accurate. As users, we must be wise in our use and avoid completely plagiarizing what ChatGPT produces, as ChatGPT is generally just a writing aid.

ChatGPT as a source of enjoyment and motivation

Students with high perceptions stated that using ChatGPT was enjoyable and motivating. They felt inspired to write more after using it because ChatGPT helped them overcome confusion and generate creative ideas for writing assignments:

"Motivated, of course, and fun, of course. How motivated? So, next, I just have to do it. Just remember what I've searched before, so for the next step, I don't need ChatGPT anymore, so I can analyze it myself." (ARM-HIGH)

"It's fun and motivating, Sis. Because we can read a lot of the answers given by ChatGPT, it can be a gain for us to motivate us to write more." (RHM-HIGH)

"It's quite fun and motivating because ChatGPT can give me what I want." (ANS-HIGH)

"I'm fun" (ARF-LOW)

On the other hand (RHD) thinks that he is 50% motivated and enjoys it, because according to him ChatGPT does not make someone smart:

"In my opinion, using ChatGpt for writing is just so-so. It's just so-so, nothing particularly interesting or anything. Because ChatGPT doesn't make us smarter. It's like telling someone else to tidy up something, not us doing it. So, there's no improvement in ourselves." (RHD-HIGH)

Furthermore, students with low perceptions admitted that ChatGPT was not fully motivating, because ChatGPT could provide everything requested, thus reducing motivation to write:

"Quite motivating, fun too, makes it easier for me to write." (FRH-LOW)

"Sometimes being motivated depends on accuracy, but if it's accurate, I'm motivated. If it's not accurate, what can I do? so it depends, it depends on the result." (JFR-LOW)

"For me, GPT is really helpful, but if you say it's motivating, it's not enough because I use GPT chat not to motivate me to write but only to find the answer." (JOY-LOW)

"It's fun and motivating, that's 50% of it. Also, with GPT chat, we can save time that we would have spent reading books. Using ChatGPT makes things easier, and I'm more confident with my assignments." (WLD-LOW)

"It's quite fun but not very motivating because it makes us feel like this task is finished so we're not motivated to do well." (ZNB-LOW)

In conclusion, this theme illustrates that students' feelings toward using ChatGPT for writing were generally positive, but some expressed concerns. While many found it enjoyable and motivating, others viewed it as merely a learning aid, not a true motivator. The level of motivation and comfort likely depends on the user's perception.

Intention to continue using ChatGPT for benefits

Students with a high perception plan to continue using ChatGPT in the future because they find it convenient, efficient, and helpful in generating writing ideas. They consider ChatGPT a reliable writing assistant, saving time and providing guidance while writing:

"Oh, maybe yes, of course. I still need ChatGPT. And then, because, of course, it really helps with my assignments. Especially since I'm the type of person who works while studying. So with ChatGPT, everything will be easier." (ARM-HIGH)

"Yes, I plan to because ChatGPT always helps me to do writing assignments more easily." (RHM-HIGH)

"Of course, because ChatGPT really helped me in both the preparation and the writing process." (ANS-HIGH)

"Because as I said, I find it very easy to use because it understands what I want." (ARF-HIGH)

"It's possible for writing assignments, but only for essays or other common tasks. However, for more academic matters like final assignments, midterm

exams, theses, or scientific articles, it's certainly unethical. ChatGPT could use references that could later turn out to be plagiarized.” (RHD-HIGH)

Several students in the low perception group stated that they did not plan to rely heavily on and use ChatGPT in the future. They preferred to use their own ideas or limit their use of ChatGPT tools to maintain originality and improve their thinking skills:

“It doesn't seem to happen very often, because I prefer original ideas from my own thoughts or from those around me.” (FRH-LOW)

“In my opinion, if there is an application that is better than GPT chat, I will use another application.” (JOY-LOW)

Some students expressed their intention to continue using ChatGPT, depending on its accuracy or even using another application that might be better:

“Maybe so, because I looked for references and it seemed like a good fit. So, maybe so.” (JFR-LOW)

“In my opinion, if there is an application that is better than GPT chat, I will use another application.” (JOY-LOW)

“Maybe yes, Sis, for the title I need a title for me to write.” (WLD-LOW)

“The plan is not to try to reduce it as much as possible so that the critical thinking or thinking can develop more, it doesn't depend on it.” (ZNB-LOW)

In this theme, although most students intend to continue using ChatGPT in the future due to its ease of use, their level of dependence varies. Their decisions are influenced by usage considerations and perceived quality of ChatGPT support.

Overall perception of using ChatGPT when writing

Students with a high perception tended to describe an overall positive perception of using ChatGPT for writing. They found ChatGPT motivating and helpful in preparing for writing and writing assignments:

“More positive of course, as Imbi said before, because it can be a motivation for us. So, when we get a writing assignment, we won't be stuck.” (ARM-HIGH)

“I think if we use it correctly, it will have a positive impact. ChatGPT can help, especially with writing preparation, and it can also correct our writing. That's how it works.” (ANS-HIGH)

"I think it's positive. Because it really helps with writing assignments." (ARF-HIGH)

However, what (RHM) and (RHD) said was that ChatGPT is indeed very good for improving writing skills, but it requires careful planning and careful use. It shouldn't be used blindly. It requires careful thought and effort, such as reading books for references:

"In my opinion, it's positive if we already know what we want to do. If you're someone who already knows what you want to create, has an idea, and knows how to find it, ChatGPT is a helpful tool and a potential partner. But if you don't know anything, ChatGPT can become a sword, a sword that can stab, because there's no improvement or increase in your own value due to over-reliance on ChatGPT." (RHD-HIGH)

"ChatGPT might offer both positive and negative vibes. The convenience it offers is that it's easy to use, like we can use ChatGPT and get the answers straight away. The downside is that it makes us lazy to search, as Tirto mentioned earlier. It's more difficult to search in books than in other sources, like not reading books first or other links, so it goes straight to ChatGPT, so the perception is 50-50 positive and negative." (RHM-HIGH)

This theme concludes that perceptions of ChatGPT's use are conditional. Most students view ChatGPT as a very useful tool, especially for developing ideas during the writing process and correcting language structure. However, they also recognize that reliance on ChatGPT can diminish critical thinking skills and personal creativity. Thus, students' overall perceptions of ChatGPT in writing are positive, but it requires critical thinking, and its use is considered effective if used judiciously.

DISCUSSION

This study explores university students' perceptions of using ChatGPT toward their writing skills, focusing on high and low perception groups. Overall, students held a moderate view of ChatGPT. These results indicate that although students generally found ChatGPT very useful and easy to use, they still questioned the accuracy and reliability of the ChatGPT results themselves. Students with high perceptions considered ChatGPT an effective, motivating, and easy-to-use writing assistant that enhanced creativity and productivity. In contrast, students with low perceptions expressed caution, valuing their own ideas and critical thinking while acknowledging ChatGPT's usefulness but questioning its accuracy and reliability (Chan & Hu, 2023).

The results, when interpreted using the Technology Acceptance Model (TAM 3), indicate that students' Behavioral Intention (BI) to use ChatGPT is influenced by PEOU and Perceived Usefulness (PU). While PU strengthens students' perceptions that ChatGPT can help with generating and organizing ideas, high PEOU actually increases students' willingness to use the application. However, lower OUT ratings actually weaken this acceptance: uncertainty about factual accuracy, coherence, and reliability erodes confidence and reduces full reliance on the instrument. Thus, OUT reflects the TAM-3 process by directly influencing PU and indirectly constraining BI. The model's theoretical applicability to AI-assisted writing is confirmed by this pattern, which shows how PEOU improves BI, PU strengthens it, and OUT limits it. Because students doubt whether ChatGPT recommendations are reliable enough to consistently support their writing, lower OUT also reduces PU. It also clearly maps the findings to the TAM-3 constructs.

The presence of several differences in student perceptions that require further interpretation is a significant trend emerging from these findings. Students expressed lower levels of trust in the Quality of Output (OUT) generated by ChatGPT, despite reporting high levels of Perceived Ease of Use (PEOU). This difference suggests that students are able to distinguish between trust and usability. The high PEOU resulted from their perception of ChatGPT's efficiency and convenience, but they were wary of relying too heavily on its output due to uncertainty about its accuracy, coherence, and potential inaccuracy. Low AI literacy among students, particularly in assessing, confirming, and comparing AI-generated text, may contribute to this difference. Low AI literacy among students, particularly in assessing, checking, and analyzing AI-generated text, may be a contributing factor to this disparity. Many students have used ChatGPT frequently, but not always critically. As a result, they appreciate its ease of use but remain skeptical about the reliability of the information it offers.

Furthermore, while many students, particularly those in the high perception group, reported feeling more motivated and productive when using ChatGPT, this boost was accompanied by concerns about plagiarism and the potential for over-reliance on AI. These concerns reflect international discussions about academic integrity and explain why some students intentionally limit their use of ChatGPT, despite recognizing its benefits. This dynamic explains why students appreciate ChatGPT's ease of use even though they cautiously rely on it without critical thinking.

There was a significant difference in attitudes between low and high perceptions, indicating that the use of and attitudes towards AI vary within the student population (Chan & Hu, 2023). Moderate perception scores indicate that students remain judicious, integrating AI support while maintaining originality. This finding aligns with previous studies showing that AI tools like Grammarly or ChatGPT can improve writing efficiency and motivation, but should not replace independent thinking. However, overreliance can hinder independent learning and the development of original ideas. Students with low perceptions also expressed similar sentiments, reflecting the TAM

notion that ambiguity about output quality can reduce intention to use (Fathimatuzahro & Rizkiyah, 2025; Mahapatra, 2024).

These quantitative themes are further clarified by qualitative themes. ChatGPT was frequently used by high perception students for brainstorming, grammar checking, editing drafts, and improving writing fluency, indicating that its user-friendliness encouraged habitual incorporation into the writing process. Low-perception students, on the other hand, showed a more circumspect and selective participation by using ChatGPT just for particular tasks, including proofreading grammar or improving already formed concepts. These different experiences contribute to the explanation of why output quality issues persisted despite PEOU being the highest-rated quality. Similar to the findings discussed by Thao & Putri, who examined the potential benefits and challenges of teaching using ChatGPT, they explored EFL students' and learners' perceptions of strategically using ChatGPT at each stage of drafting and revising to improve performance and motivation while maintaining originality (Putri et al., 2025; Thao & Thuy, 2024).

The findings of this study complement and extend existing research on the integration of AI, specifically ChatGPT, in education. Prior international research, such as Launonen et al. (2024), emphasized that students' perceptions of ChatGPT vary across cultural and linguistic contexts, suggesting that attitudes toward AI tools are not universal but rather context dependent. The present study extends these insights to Indonesian higher education, demonstrating that differing local norms, cultures, and teaching styles also influence how students interpret the ethical and practical dimensions of using AI, specifically ChatGPT in writing. Furthermore, by distinguishing high and low perception groups something not done in Amani and Bisriyah (2025) this study provides a more complex view of how attitudes regarding AI-supported learning, self-regulation, and writing practices are influenced by perception. These results lend credence to the idea that ChatGPT and other AI technologies can increase accessibility and engagement in higher education, which is in line with Astuty and Anggraini (2024) and Ravšelj et al. (2025). They do, nevertheless, additionally stress the necessity of ethical and instructional frameworks that guarantee AI is used as a learning tool rather than as a replacement for human reasoning, comprehension, and learning.

Theoretically, it supports TAM 3 and expands it by including affective and ethical factors influencing AI acceptance. Practically, it informs EFL teachers and curriculum developers on integrating ChatGPT into writing instruction, emphasizing ethical use and promoting critical thinking alongside AI-assisted drafting and editing. While high-perception students' enthusiastic involvement shows that AI can improve writing output. Low perception students' worries highlight the necessity of responsible AI literacy,

However, this study has limitations. The sample size ($n = 53$) was limited to English faculty at a single institution, which may not be fully representative of the broader

university population. The nature of the reported perception data may also involve subjectivity or bias, stemming from individuals' tendency to provide positive responses to impress others. Future research should include larger, diverse samples, longitudinal designs, and experimental approaches to measure ChatGPT's direct impact on writing performance. Comparative studies across institutions or cultural contexts are also recommended to explore variations in AI acceptance and ethical awareness.

In conclusion, although there are still issues with accuracy and creativity, students generally see ChatGPT positively for assisting EFL writing. ChatGPT is an exciting approach for improving writing teaching in higher education since it provides significant support for generating ideas, drafting, and revision when used ethically and critically. This study emphasizes the significance of encouraging responsible AI use in academic environments and advances knowledge of students' diverse opinions towards AI-assisted writing.

CONCLUSION

Based on the research findings, university perceive ChatGPT positively as a useful and easy to use tool for improving their writing skills. Students with high perceptions viewed ChatGPT as supporting writing quality, productivity, organizing their writing clearly and logically, developing ideas, and improving their grammar and writing style. Conversely, students with low perceptions remained cautious about maintaining quality, creativity, and independence and critical thinking.

These findings highlight the need for critical and thoughtful use of ChatGPT in English as a foreign language in writing contexts. Overall, ChatGPT can be effectively integrated into writing instruction if it remains governed by an appropriate pedagogical and ethical framework to enhance students' writing learning and competence. This research emphasizes that institutional policies should encourage the critical and thoughtful use of AI to balance the usefulness of technology with academic integrity.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this paper.

AUTHOR (S) CONTRIBUTION

Chairiah, A.M., and Edi, W.: Conceptualization (lead), supervision (lead), methodology (lead), writing – review & editing (supporting). Yana, D.: Conceptualization (supporting), writing – original draft (lead), review (lead), editing (lead), methodology (supporting), validation (supporting).

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