



What Lies Beneath English Major Students' Attitudes towards ChatGPT for Academic Writing: A TAM Perspective?

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Abstrack. *This study aims to determine the perceived usefulness and ease of use of ChatGPT among English majors. The study used a qualitative case study research design to gain an idea of the experiences and perceptions of major English students at a university in East Java, Indonesia. Participants in this study are six undergraduates from the major in English at an Indonesian university. Data collection is conducted using open-ended questionnaires and interviews with selected undergraduates. The Technology Acceptance Model (TAM) framework is used as an analysis lens to identify trends and interpretations of students' attitudes of ChatGPT for academic writing. The results of this study indicate that students majoring in English have mixed attitudes to ChatGPT, some students find it useful and others prefer alternative tools for their academic writing assignments. Finally, this study emphasizes the importance of understanding individual preferences and needs when considering the integration of AI tools into academic environments.*

Keywords : *ChatGPT; Academic Writing; English Department Students; Technology Acceptance Model*

Abstrak. *Penelitian ini bertujuan untuk mengetahui persepsi kegunaan dan kemudahan penggunaan ChatGPT di kalangan jurusan Bahasa Inggris. Penelitian ini menggunakan desain penelitian studi kasus kualitatif untuk mendapatkan gambaran tentang pengalaman dan persepsi mahasiswa jurusan Bahasa Inggris di sebuah universitas di Jawa Timur, Indonesia. Partisipan dalam penelitian ini adalah enam mahasiswa sarjana dari jurusan Bahasa Inggris di sebuah universitas di Indonesia. Pengumpulan data dilakukan dengan menggunakan kuesioner terbuka dan wawancara dengan mahasiswa terpilih. Kerangka Technology Acceptance Model (TAM) digunakan sebagai lensa analisis untuk mengidentifikasi tren dan interpretasi sikap siswa terhadap ChatGPT untuk penulisan akademik. Hasil penelitian ini menunjukkan bahwa mahasiswa jurusan Bahasa Inggris mempunyai sikap yang beragam terhadap ChatGPT, beberapa mahasiswa menganggapnya berguna dan yang lain lebih memilih alat alternatif untuk tugas penulisan akademik mereka. Pada akhirnya, penelitian ini menekankan pentingnya memahami preferensi dan kebutuhan individu ketika mempertimbangkan integrasi alat AI ke dalam lingkungan akademik.*

Keywords : *ChatGPT; Penulisan Akademik; Mahasiswa Jurusan Bahasa Inggris; Model Penerimaan Teknologi*

PRELIMINARY

The integration of Artificial Intelligence (AI) in academic writing has recently become very popular. Many AI-powered tools like ChatGPT are used among students, including English learners who commonly use ChatGPT in academic writing sessions. Due to this increasing use of AI, there is an urgency to understand students' attitudes towards this technology. This understanding is critical for educators, policymakers, as well as AI developers because of the ongoing debate about whether the use of ChatGPT in academic writing is beneficial or detrimental. This is to increase potential advantages and reduce potential disadvantages, so it is necessary to know how students feel when using ChatGPT in their academic writing. According to Maria et al., (2024), digital transformation can

improve the learning experience by incorporating technology into Learning Design, driving engagement and personalized learning paths while increasing administrative efficiency and data-driven decision making for curriculum design and academic management. In addition, this process encourages a mutualistic relationship between education and real-world application through integrated learning, thereby ensuring graduates are work ready and can adapt to changing job market demands. Therefore, to ascertain the benefits of digital transformation in education, it is important to study the attitudes of English majors towards AI tools such as ChatGPT in academic writing.

Previous research has explained how ChatGPT became so popular. This happens because ChatGPT has the potential to improve writing quality, offer writing features, and help language development (Oguz et al., 2023; Sirichokcharoenkun et al., 2023). Previous research demonstrated the academic utility of ChatGPT in undergraduate studies and its potential for scientific research (Oguz et al., 2023). In English language teaching, ChatGPT considered to help writing skills (Sirichokcharoenkun et al., 2023). Previous research also showed students' high intention to use ChatGPT, indicating its growing popularity and acceptance (Zou & Huang, 2023). These tool has the ability to provide personalized feedback, increase accessibility, and offer innovative ways to teach complex concepts so their popularity among students is increasing (Rahman & Watanobe, 2023).

Despite its obvious popularity among students, the use of ChatGPT is still a matter of debate. Several studies highlight the benefits of ChatGPT, such as improving scientific writing (Sallam, 2023). However, there are also concerns about potential risks such as cheating and plagiarism (Iqbal et al., 2022). Research showed that ChatGPT in a healthcare context can offer benefits such as efficient analysis of data sets (Casella et al., 2023). However, ethical issues, copyright issues, transparency, and legal challenges also arised regarding its use (Casella et al., 2023). A study by Deng and Lin, (2023) provided an overview of ChatGPT, a natural language processing (NLP) system developed by Open AI, and discusses its features, benefits, and challenges. That paper also highlights the potential applications of ChatGPT and its limitations.

Furthermore, previous research has explored students' general perceptions and experiences of using AI-powered tools for academic writing. In the Indonesian context, teachers responded positively to the use of ChatGPT to support English writing, because it provides useful writing features and helps language development (Rahma, 2024). ChatGPT is also considered to have the potential to contribute to the development of Indonesian students' writing skills, especially in the Education 4.0 era (Setiawan & Luthfiyani, 2023). Previous research has also investigated lecturers' attitudes towards the use of ChatGPT, and some reported negative perceptions (Iqbal et al., 2022). However, research also shows that students generally have positive perceptions of ChatGPT, with factors such as gender, major, and previous experience influencing their perceptions (Yilmaz et al., 2023). A study conducted by (Zou & Huang, 2023) found that doctoral students in China had a high intention to use ChatGPT in writing, and attitude was a significant predictor of their behavioral intention to use the tool. Another study by Bernabei et al., (2023) investigated the use of large language models in engineering education and found that students had positive perceptions of technology. This study also explored the feasibility of using ChatGPT in clinical and research scenarios, highlighting the importance of recognizing and promoting education about the appropriate use and potential pitfalls of AI-based language models in medicine (Casella et al., 2023).

While there were research on the use of ChatGPT in academic writing, this study dug deeper into the perspectives of English majors, who tend to have unique experiences and considerations when using ChatGPT in their work. The current research focused on the specific context of English major students and their attitudes toward ChatGPT for academic writing. This study examined the perceived usefulness and ease of use of ChatGPT from a Technology Acceptance Model (TAM) perspective (Davis, 1989) to provide a comprehensive understanding of how English majors viewed and adopted this technology. Additionally, the research explored the reasons why English majors preferred or disliked using ChatGPT, which shed light on aspects that influenced their acceptance of

AI in academic writing. This new approach contributes to existing knowledge about AI in education and provided valuable insights for educators, policymakers, and AI developers.

Using the Technology Acceptance Model (TAM) framework, information about how learners feel about ChatGPT for academic writing can be captured and reviewed. Davis, (1989) introduced TAM in order to explain how people's attitudes toward technology use are influenced by their view of its usefulness and ease of use. Perceived usefulness and perceived ease of use are two essential indicators of user adoption of technology, according to the TAM framework (Davis, 1989). Perceived ease of use refers to a sense of user confidence in a technology's ease of operation, whereas perceived usefulness indicates how much a user believes a technology will increase its efficiency. Educators and researchers may be able to develop effective methods for the application and integration of technology into learning environments and teaching curriculum by investigating students' impressions of the usefulness and simplicity of use of this technology (Kasneji et al., 2023).

In conclusion, although AI-powered tools like ChatGPT are growing in popularity among students, there is a lack of research that specifically focuses on English majors' attitudes toward ChatGPT for academic writing. Previous research has explored the general perceptions and experiences of students and teachers in using AI-powered tools for academic writing, but there is a need for further research to understand English major students' attitudes toward ChatGPT for academic writing. Therefore, this research aims to figure out the perceived usefulness and perceived ease of use of ChatGPT among students majoring in English. The research questions that will be discussed are:

1. What is the attitude of students majoring in English towards ChatGPT based on perceived usefulness and perceived ease of use?
2. Why do English majors prefer or dislike using ChatGPT for academic writing assignments?

RESEARCH METHODS

This study used qualitative case study research design, concentrating on students in the English department. The use of qualitative case study in this research is to gain insight into English Major undergraduates' experience and perceptions at a university in East Java, Indonesia. This method allows for an in-depth understanding of their attitude towards ChatGPT use during academic writing exercises. According to Creswell, (2012), this approach believes that studying people within their natural setting will provide a useful insight into social dynamics as well as behaviors.

The participants for this study are six undergraduate students drawn from the English Major at a university situated in East Java, Indonesia. These students were selected based on those who had used ChatGPT while doing academic writing assignments. By choosing undergraduate students from the English Major, the study would majorly focus on individuals who do these types of tasks related to their courses. Specifically, with regards to how they interact with ChatGPT when dealing with different academic areas, located at an east Java university.

In this study, data collection is done by employing open-ended questionnaires as well as interviews with chosen undergraduates. Open questionnaire questions are adapted from the Technology Acceptance Model (TAM) Framework (Davis, 1989). To gather detailed responses on what they think and feel about ChatGPT, there are several different questions such as "Is ChatGPT good for academic work?" or "Why do you think ChatGPT is useful or not useful for academic writing?". The main type of data collected was interview transcripts and questionnaire responses obtained from the learners themselves.

Moreover, the data collected from the informants are subjected to thematic analysis where it is organized and coded. Thematic analysis is used to identify patterns and themes in the data (Ary et al., 2014), providing a comprehensive understanding of the participants' attitudes towards ChatGPT for academic writing. This study intends to go through students' attitude by using TAM Framework as

a lens of analysis in order to identify trends and interpretations among student's perceptions of ChatGPT for academic writing. The results of the data analysis are then interpreted and reported to answer research questions about English department students' technology acceptance and utilization.

RESULTS AND DISCUSSION

1. Attitudes of English Department Students towards ChatGPT

From the statements of six informants, this study investigates the view of English department students regarding ChatGPT for academic writing. The study explores their perceived usefulness, perceived ease of use and attitude towards using chat GPT as a writing tool. This research therefore provides invaluable information on AI-powered writing assistance tools like ChatGPT through analysis of their feedback and ideas. The sections below present the participants' views about how ChatGPT has been useful, usable and reliable in their academic life.

Perceived Usefulness

All six participants find ChatGPT to be useful in their academic work. The reasons for its perceived usefulness include its ease of use, time-saving capabilities, and ability to provide ideas and recommendations for academic writing.

Two participants specifically mentioned that ChatGPT is easy to use and easy to understand. One participant stated, *"I think ChatGPT is useful for academic writing because it is easy to use"* (Student 2). Another participant agreed, *"So easy to understand"* (Students 5).

Two participants also agreed that ChatGPT provides ideas and recommendations for academic writing. One participant mentioned that it provides a lot of information, stating, *"it such a useful tool because it can show so many information that we need to help our academic writing to be better"* (Students 6).

Another reason for its perceived usefulness is that it helps students save time and organize their paragraphs. One participant stated, *"It saves our time and helps us to organize our paragraph"* (Students 1).

Overall, the participants find ChatGPT to be a helpful tool for their academic work, citing its ease of use, time-saving capabilities, and ability to provide ideas and recommendations.

Perceived Ease of Use

Five out of the six participants find ChatGPT to be easy to use for their academic writing tasks, while one participant finds it to be somewhat difficult. When asked about the ease of learning how to use ChatGPT, five participants described it as "very easy," highlighting its user-friendly nature.

Participants who found ChatGPT easy to use mentioned specific features that they found particularly user-friendly. One participant stated, *"The features that I felt were the easiest to use were the recommendation feature and formatting options"* (Student 4), while another participant mentioned, *"The recommendation feature was the easiest to use"* (Student 6).

Despite one participant finding it somewhat difficult to use, the majority of participants found ChatGPT to be easy to navigate and utilize for their academic writing needs. The positive feedback on its ease of use suggests that ChatGPT is perceived as a convenient and accessible tool for generating content and ideas.

Overall Attitude

When asked about their level of trust in the suggestions and recommendations provided by ChatGPT for academic writing, the responses varied among the participants. Four students expressed a level of trust as "somewhat," one student expressed complete trust with a "completely yes," and one student indicated a lack of trust with "not at all."

Participants expressed a neutral overall attitude towards ChatGPT for academic writing, acknowledging both its positive and negative aspects. Positives mentioned included time-saving benefits and assistance in maintaining coherence in writing. One student stated, *"I choose neutral"*

because sometimes it could be either negative or positive. It gives positive impacts because it can save our time and help us to connect the sentences in our paragraph" (Student 1).

Concerns were raised about the negative impact of potential plagiarism when relying too heavily on ChatGPT-generated content without proper research. Another student mentioned, *"I feel neutral because sometimes the effect is positive, sometimes negative, if directly copied and pasted into an essay"* (Student 3).

Overall, three students maintained a truly neutral stance, two students held a positive attitude towards using ChatGPT for its time-saving and idea-generating features, while one student expressed a negative attitude due to concerns about plagiarism risks associated with using the tool.

The results of this study are consistent with previous studies that have investigated the usefulness and ease of use of ChatGPT for academic writing. For example, Oguz et al., (2023) found that ChatGPT has the potential to be used effectively in undergraduate study, while Yilmaz et al., (2023) found that university students generally have a positive perception of ChatGPT. Similarly, Rahma, (2024) found that teachers in Indonesia have a positive view of using ChatGPT to support English writing.

However, the results of this study also contrast with some previous studies that have raised concerns about the potential negative impacts of using ChatGPT in academic writing. For example, Iqbal et al., (2022) found that university faculty in Pakistan are generally cautious in their approach to using ChatGPT, citing potential risks such as cheating and plagiarism. Waltzer et al., (2023) also found that students expressed disapproval of submitting ChatGPT-generated essays as one's own.

To sum up, the results of this study suggest that while ChatGPT has the potential to be a useful tool for academic writing, it is important to consider the potential risks and negative impacts of its use. Further research is needed to explore ways to mitigate these risks and ensure that ChatGPT is used in a responsible and ethical manner in educational settings.

2. Prevalence of ChatGPT usage among English department students

In exploring the prevalence of ChatGPT usage among English department students, it was found that out of the 6 students surveyed, a majority of 4 expressed a preference for utilizing ChatGPT over other writing tools for their academic assignments. The reasons cited for this preference were centered around the perceived benefits of ChatGPT.

One student highlighted the benefits of ChatGPT by stating, *"It provides better suggestions and recommendations."* This statement indicates a recognition of the tool's ability to enhance the writing process by offering valuable insights and suggestions that can improve the quality of the writing. ChatGPT's advanced language processing capabilities allow it to analyze and provide feedback on writing, helping students to refine their ideas and develop more effective arguments. This feature is particularly useful for students who may struggle with writing or need additional support in crafting their ideas.

Another student mentioned, *"It is easier to use,"* emphasizing the user-friendly nature of ChatGPT. This statement underscores the appeal of the tool, as ease of use is a crucial factor in determining its adoption and effectiveness. ChatGPT's intuitive interface and simple navigation make it accessible to a wide range of users, including those with little or no experience using AI tools for academic writing. This ease of use contributes to the tool's popularity and can help students to become more comfortable and confident in using AI tools for their writing assignments.

Additionally, a student noted, *"It saves more time,"* underscoring the efficiency that ChatGPT brings to academic writing tasks. This statement highlights the time-saving benefits of using ChatGPT, which can be particularly valuable for students who may be juggling multiple assignments or have limited time to complete their writing tasks. ChatGPT's ability to quickly generate ideas, provide feedback, and suggest improvements can help students to complete their writing assignments more efficiently and effectively, allowing them to focus on other aspects of their academic work.

Furthermore, when examining specific aspects of ChatGPT that students found beneficial, 4 students agreed that it indeed provides better suggestions and recommendations. This aligns with

their preference for the tool, indicating a correlation between perceived usefulness and preference. Additionally, 3 students acknowledged that ChatGPT is easy to use and saves time on academic writing assignments, further reinforcing the positive impact of the tool on their writing process.

Conversely, the 2 students who did not prefer using ChatGPT for academic writing expressed a contrasting viewpoint. They believed that there are better tools available to assist with academic writing tasks, indicating a divergence in opinion among English department students regarding the efficacy of ChatGPT in comparison to other writing tools.

Overall, these findings shed light on the prevailing attitudes towards ChatGPT among English department students. While a majority favor its usage due to perceived benefits such as better suggestions, ease of use, and time-saving features, there remains a segment of students who hold reservations and believe in the superiority of alternative tools for academic writing assistance. This diversity in perspectives underscores the importance of understanding individual preferences and needs when considering the integration of AI tools like ChatGPT in academic settings.

The results of this study align with previous research on the use of ChatGPT in academic writing. A study found that English department teachers in Indonesia responded positively to using ChatGPT to improve students' writing quality and provide useful writing features (Rahma, 2024). Similarly, Setiawan and Luthfiyani, (2023) noted the potential of ChatGPT to produce academic writing with appropriate prompts and contribute to language development. The current study supports these findings by showing that English department students also find ChatGPT useful for academic writing assignments, citing its ability to provide better suggestions and recommendations, ease of use, and time-saving features.

However, the current study also highlights the contrasting views of students who do not prefer using ChatGPT for academic writing, which is consistent with the previous study that students' optimism about the future role of ChatGPT in education and their differing opinions on academic integrity violations involving AI tools (Waltzer et al., 2023).

The previous study also touches on the potential limitations of ChatGPT, such as ethical, copyright, transparency, and legal issues, which are concerns shared by the students in the current study (Sallam, 2023). The need for responsible and ethical use of AI tools in education is emphasized (Kasneci et al., 2023) and the previous study also highlights the importance of considering ethical implications and potential limitations in the integration of AI into educational curricula (Xu et al., 2024).

Thus, the results of this study indicate that English department students have varying preferences for using ChatGPT in academic writing assignments, with some finding it helpful and others preferring alternative tools. This aligns with previous research on the potential impact of ChatGPT on academic writing and the need for responsible and ethical use of AI tools in education. Further research is needed to explore the implications of these findings for the integration of AI in English language teaching and learning.

CONCLUSION

In conclusion, the results of this study show that students majoring in English have mixed attitudes towards ChatGPT, with some finding it useful and others preferring alternative tools for academic writing assignments. ChatGPT has the potential to be used effectively in undergraduate studies and students generally have positive perceptions of ChatGPT (Oguz et al., 2023; Yilmaz et al., 2023). However, there are also concerns regarding the potential risks associated with their use, such as cheating and plagiarism (Iqbal et al., 2022; Waltzer et al., 2023).

This study highlights the importance of understanding individual preferences and needs when considering the integration of AI tools such as ChatGPT in academic settings. It is important to consider the potential risks and negative impacts of using ChatGPT, such as plagiarism and ethical issues (Kasneci et al., 2023; Xu et al., 2024). Future researchers are encouraged to look for ways to mitigate these risks and ensure responsible and ethical use of AI tools in education. This could

include investigating the effectiveness of various strategies for using ChatGPT in a responsible and ethical manner, as well as exploring the potential benefits of using alternative AI tools or traditional authoring methods. Additionally, it would be interesting to study the impact of ChatGPT on students' writing skills and their overall academic performance. It is important to continue researching and exploring the ethical implications of using AI tools in education to ensure that they are used in a responsible and beneficial manner.

In order to reduce the risks and negative effects associated with using ChatGPT in academic writing e.g., plagiarism or ethical issues, suggestions for further studies are important. It could involve looking at different methods that would help mitigate these challenges e.g., finding out whether they may be used responsibly and ethically or determining if it is better to alternative AI tools or traditional modes of writing. Also, it could be worthwhile examining how chat Gpt affects students' overall academic competence and performance.

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