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Navigating the Digital Writing Landscape: EFL Students' Perspectives on ChatGPT Utilization

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Abstract. This study investigated the role of artificial intelligence (AI) technology from the perspectives of English as a foreign language (EFL) students in an Indonesian university. AI has opened up new pathways for language skills development, student engagement, and learner autonomy through innovative technologies amidst the digital transformation in education. The study adopted a mixed-methods approach consisting of a quantitative survey with 106 students and qualitative interviews with 10 of these students to explore the findings more deeply. The questionnaire captured perceptions regarding the usefulness, ease of use, and social influence of AI, while the interviews revealed students' experiences and motivations in detail. The analysis showed that specific AI tools, particularly grammar checkers, text-tospeech programs, and language learning apps, were valuable and easy to use, enhancing students' confidence and performance. However, social influence from peers and instructors was minimal. While the quantitative and qualitative data were analyzed independently, their integration in the discussion revealed points of alignment and disagreement between the two strands. The findings suggest the need for institutional policies aimed at responsible AI adoption and the enhancement of teacher preparedness as well as student education on the shortcomings of AI. This study provides practical benefits to educators and policymakers, while being grounded in the widely accepted technology acceptance model, offering theoretical contributions. Reliance on self-reported data and a limited field of study are some shortcomings. Future research should adopt a cross-disciplinary approach using a longitudinal or comparative framework.

Keywords: academic integrity; AI-assisted writing; ChatGPT; EFL students; technology acceptance model

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1. Introduction

The rapid advancement of information and communication technology (ICT) has profoundly influenced educational practices, particularly in language learning. Among these innovations, artificial intelligence (AI)-powered solutions such as ChatGPT have gained significant attention due to their potential to support academic writing tasks (Hutson & Plate, 2023; Naz & Robertson, 2024). The ChatGPT conversational AI model can respond contextually with the correct content levels, increasing writing productivity and coherence (Roumeliotis & Tselikas, 2023).

AI tools are a tremendous help to students in learning English as a foreign language (EFL). This group of learners usually struggles with idea generation, textual coherence, and even following the rules of academic writing (Jarrah et al., 2023). These issues tend to be worse in cases where English is not the first language, highlighting the importance of technology for language learning. While numerous studies have examined learners' experiences with digital tools in language learning, few focus on how ChatGPT affects EFL learners' academic writing skills (Song & Song, 2023). This study contributes to the EFL field by exploring how AI tools impact the English language learning experience, providing insights into pedagogy, learning autonomy, and technology-based instruction in language teaching.

To bridge the gap, this study focuses on EFL students' perceptions and experiences regarding ChatGPT and AI writing tools, specifically looking at ethical issues and institutional framing. This work clarifies the claims made by the current literature by investigating how AI application connects with language learning, academic integrity, and educational frameworks to understand the interaction between these domains. Literature shows conflicting views regarding AI adoption in education (AlAfnan et al., 2023; Prashar et al., 2024; Yu, 2024; Zhai et al., 2024). For example, students appreciate the ability of AI tools to provide instantaneous feedback and score higher on creative tasks. Others are more skeptical due to the problems of dependency, image appropriation, and underdevelopment. These differences in opinion suggest that some compromise solutions are needed to remove excessive bias while still honoring ethical boundaries.

Literature has shown that AI-assisted learning has attracted growing interest in various educational contexts, including language learning and personalized instruction (Alshumaimeri & Alshememry, 2024; Kasneci et al., 2023). However, very few studies have looked at how EFL students perceive ChatGPT in the context of academic writing. Some studies have concentrated on the general adoption of educational technologies without considering a non-native English speaker's diverse linguistic, cultural, and ethical nuances (Laato et al., 2023; Seprum & Wongwatkit, 2022). This study aimed to address this particular case by broadening the focus to the context of EFL students who face a unique set of converging factors that shape the use and adoption of technology.

This study is grounded in the technology acceptance model (TAM) framework, examining how perceived usefulness, ease of use, and social influence contribute to EFL students' adoption of ChatGPT in academic writing. Furthermore, *ethical considerations* are introduced as an emerging variable within AI-in-education contexts, extending the traditional TAM framework. Therefore, this study contributes practically by offering institutional recommendations for ethical AI integration, empirically documenting students' lived experiences with AI tools, and expanding TAM to include ethical hesitation as a moderating factor within EFL educational contexts.

2. Literature Review

2.1 Technology Integration into EFL

ChatGPT and other AI applications have introduced innovative approaches to language learning, particularly within the EFL environment. These AI-powered tools have proven beneficial in improving writing skills, increasing learner engagement, and enhancing feedback integration, key challenges for non-native English speakers (Njonge, 2023; Tarihoran, Alhourani et al., 2022). Research further supports the idea that educational technology advancements significantly contribute to students' academic development, particularly in writing (Alshumaimeri & Alshememry, 2024).

However, the ethical implications of using AI tools still stand and need more attention. The capability of AI to produce human-like text has accentuated the potential for various contexts of academic dishonesty or plagiarism (Naz & Robertson, 2024). The convenience offered by tools such as ChatGPT often brings up issues surrounding the student's work being original, raising the possibility of undisclosed plagiarism. While AI tools such as ChatGPT have been associated with higher writing productivity and interaction levels (Amin, 2023), finding a balance that safeguards students' thinking and imagination remains a problem. This study seeks to fill a specific void in the available literature by considering how students understand the moral aspects of using AI-powered tools to compose texts in EFL contexts, considering both advantages and disadvantages.

Previous studies have looked into the positive ways of integrating AI into education (Barrera Castro et al., 2024). However, few studies have examined the ethical issues of such tools, such as students' concerns about plagiarism or becoming too dependent on AI for EFL text production. This research intends to bridge this gap by documenting how AI-enabled tools for academic writing influence students' writing performance and the emerging perceptions of ethics in academic writing.

2.2 The Role of ChatGPT in Academic Writing

AI-powered writing tools, notably ChatGPT, offer students substantial assistance in generating academic texts tailored to the user's needs and that are cohesive in regard to grammar, style, and organization (Laato et al., 2023; Papadakis et al., 2024). For EFL learners, the feedback provided by ChatGPT not only enhances the learners' ability to formulate and frame ideas but also improves their linguistic accuracy, aligning with research findings on heightened writing engagement

(Nazir & Wang, 2023; Teng, 2024). Nonetheless, while Papadakis et al. (2024) and Laato et al. (2023) noted the general efficacy of ChatGPT, they did not address its influence on non-native writers' distinct challenges of syntactic complexity and academic framing in scholarly work within an EFL context. This study seeks to fill this gap by exploring how ChatGPT aids students in EFL academic writing processes, considering its generative power against the learners' critical language skills development.

Even with these advantages, concerns remain regarding the over-dependence on AI and the potential erosion of students' writing abilities (Carobene et al., 2024; Kasneci et al., 2023). Our research analyzes EFL academic writing through the lens of ChatGPT's affordances and limitations. It offers a more balanced perspective that addresses instructional approaches to AI writing assistants while maintaining authentic learning results.

2.3 Technology Acceptance Model and AI-Assisted Writing

Using the TAM developed by Davis in 1989, numerous scholars have sought to explain users' adoption of technology through the perspective of two main components: perceived usefulness and perceived ease of use. Research regarding AI in education has built upon this model, with several studies (Kim et al., 2025; Ma et al., 2025) showing that students prefer using AI-powered writing tools such as ChatGPT because of the speed with which they generate content. The usefulness and ease of use of these tools are unquestionable, as students are more inclined to adopt technologies that reduce workload.

However, as discussed in previous studies (Seprum & Wongwatkit, 2022), AI technologies are maintained due to the perceived ease of use. Here, the ethical aspects and social impact of EFL education are captured as central mediating variables of the model, which guides TAM research. Researchers have neglected the influence of these extra variables on the acceptance of AI tools in a non-native English context. This study incorporates ethical concerns into the TAM, such as concern over plagiarism and peer support from fellow students and lecturers. It provides a balanced explanation of the use of ChatGPT in academic writing. The TAM receives further enhancement in this research with the suggestion that EFL students' acceptance of and intention to use AI tools are contingent on ethical issues bordering on academic honesty and social influence from fellow students and teachers. The study aligns assisted writing in the EFL context with the TAM, addressing the limited scope of AI adoption research by adapting the model to this specific educational setting.

2.4 Social Influence on AI Adaptation

Social influence – the degree to which an individual is important to another individual and expects them to use a system – is linked to technology adoption. Recent educational research indicates that students are often willing to adopt AI-enabled tools when supported by their peers and instructors (Hutson & Plate, 2023; Ofosu-Ampong, 2024). For example, Hutson and Plate (2023) reported that peer networks often normalize AI tools such as ChatGPT for use during group

projects. Ofosu-Ampong (2024), again, noted that some faculty members support or discourage students' efforts to try new technologies.

A review of instructional technology literature, including the studies above, has revealed a focus on general education or STEM disciplines. In terms of EFL students using ChatGPT for academic writing, little is known about social influence. Our study fills this gap by measuring peer support (M = 3.40, SD = 1.01) and lecturer encouragement (M = 3.05, SD = 1.15) and analyzing the data through EFL lenses, incorporating ethics and usefulness.

Findings indicate that peer influence has a greater impact than instructor support, which means that EFL learners will be more inclined to accept ChatGPT in their workflow when they see their classmates successfully using it in their writing. On the other hand, mixed signals from lecturers between fully endorsing and banning AI also left students confused about what was considered acceptable with AI. Our study addresses this gap: Institutions must build positive and cohesive social settings among peers through defined faculty policies and student-teacher workshops to harness social norms toward the responsible use of AI in EFL writing.

2.5 Ethical Considerations in AI-Assisted Learning

Concerns regarding the ethical use of AI in education have recently received a great deal of focus as AI is increasingly being integrated into school practices. Some studies focus on issues related to academic misconduct, such as plagiarism, authorship, and the possibility of AI-produced material lessening a student's value to put in the work or effort to generate something (Carobene et al., 2024; Mhlanga, 2023). These issues tend to be more acute in an EFL context because students may need AI authors such as ChatGPT to write material for them, thus losing the originality of their work (Rivera-Lozada et al., 2022).

As previously discussed, the case for unsupervised AI tools such as ChatGPT creates a myriad of problems for the education system. These tools can tremendously improve organizational efficiency and productivity, but at the same time, redefine what evidence of academic work means. There is a tremendous need for institutional policies regarding the application of AI in educational environments. In addition, policy guidelines that enable students to engage critically with AI-generated works and prevent them from using the technology as a crutch will go a long way in resolving the ethical issues raised (Limna et al., 2023; Wood & Moss, 2024).

This study incorporates previous work by focusing on AI literacy as a mitigator of ethical risks. Some students submit work without checking, while others paraphrase or do plagiarism checks on ChatGPT's outputs (Xie et al., 2023). This difference in approach highlights how comprehensive AI ethics education is needed to avert cross-misuse and promote the responsible use of technology. This study is focused on AI ethics by integrating ethical implications into the adoption model of ChatGPT, thereby adding to the body of scholarship concerned with AI

and academic integrity. It proposes adequate strategies for the protection of academic integrity.

As highlighted earlier in the theoretical findings, a conceptual model demonstrating interactions among perceived usefulness, ease of use, ethical concerns, social influence, and behavioral intention to use ChatGPT was developed. The model is illustrated in Figure 1. The model will be used and built upon in discussion and analysis later in the study.

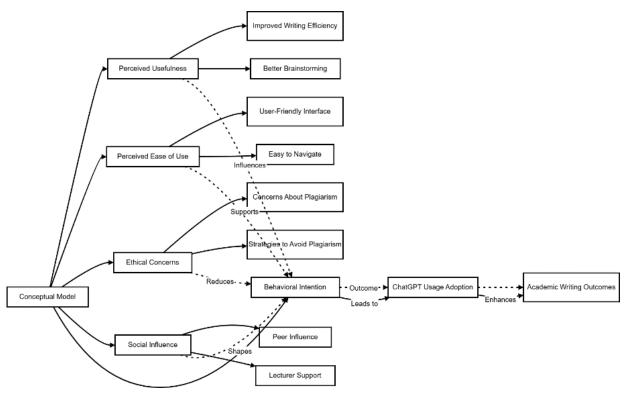


Figure 1: Conceptual model

Several studies (Davis, 1989; Laato et al., 2023; Ma et al., 2025) have pointed out the impact of perceived usefulness and ease of interfacing on students' behavioral intention toward using AI tools such as ChatGPT, which is predominantly favorable. On the other hand, ethical issues have negative ramifications for such an intention. Moreover, social interaction in the classroom, particularly by fellow students and instructors, is a powerful determinant of students' perceptions of educational technology (Naz & Robertson, 2024).

3. Method

3.1 Research Design

This study used a mixed-methods research design, combining quantitative and qualitative strategies to comprehensively investigate students' acceptance and use of ChatGPT in academic writing. This design adheres to the sequential explanatory model of data collection (Plano Clark et al., 2015). Quantitative analysis is conducted first, followed by qualitative data collection to clarify and extend the quantitative findings (Bigirwa et al., 2020). The mixed integration

occurred in two stages. Initially, quantitative survey data were used to select interview participants representing high, medium, and low acceptance or use of ChatGPT. This methodology was proposed by Plano-Clark et al. (2015). Second, during the interpretation phase, both datasets were analyzed side by side using shared display tables and narrative retelling. Some survey data revealed strong behavioral intentions or ethical concerns about using the chatbot, while some interview data had opposing or supporting themes. This was done to identify convergences, such as high perceived usefulness and improved writing fluency, divergences, such as low scores on ethics, and developments that captured nuanced views not explored with fixed-response questions. Our primary role included building the instruments (questionnaire and interview guides – Appendices I and II, respectively), distributing the questionnaire, selecting participants for interviews based on survey responses, conducting the interviews, and analyzing the data. Ethical considerations, including data triangulation, were used to validate the findings.

To ensure reliability and as part of quantitative validation, the internal consistency of the questionnaire was evaluated at 0.87, which is considered highly reliable (Trabelsi et al., 2024). It is also valid to state that multiple regression analysis was appropriate due to the large sample size (N > 100), which withstood the skepticism regarding parametric analysis with Likert-type data (Norman, 2010). The normality, multicollinearity, and homoscedasticity criteria were checked before the regression, and the model fit was confirmed. Only three main predictor variables were included in the final model to reduce multicollinearity and overfitting.

3.2 Participants and Sampling

The sample group included undergraduate students from the English Language Education program in a state Islamic university in Indonesia. This group is considered advanced as their studies were in progress. At this stage, students can provide perceptive insights based on AI-writing interactions, such as those performed by ChatGPT and other academic tools. Considering the goal of the AI-assisted writing study, it was important to include students who had some prior knowledge of ChatGPT.

Using purposive sampling, the participants were selected based on two inclusion criteria: (1) they had utilized ChatGPT for at least one academic writing assignment and (2) they had the requisite skills needed to write academic papers that aligned with the study's aims. The recruitment was done through university platforms such as WhatsApp groups and class forums, where students who showed interest were directed to a screening form to gauge their suitability. Ultimately, 106 students were recruited for the study and completed an online questionnaire to assess their perceptions and experiences of using ChatGPT for academic tasks (Xu et al., 2020).

In the qualitative segment, 10 students were selected for semi-structured interviews. These participants were selected from the survey sample and varied in their indication of a high, moderate, or low acceptance and use of ChatGPT

(helpful, moderate, or unhelpful) to capture richer perspectives on AI-assisted writing from varied students. We conducted only 10 interviews to maintain depth and rigor in the data obtained.

The main sample was markedly unbalanced in terms of gender, with 90 female participants (84.9%) and 16 male participants (15.1%). This gender disparity shift roughly reflects the actual sample population in the university's English Language Education program. However, it does pose implications for the broader applicability of the findings. In light of these results, there is an evident need for further research to be conducted with more appropriately representative samples if the aim is to improve the generalizability of the outcomes.

3.3 Research Instruments

Two key instruments were utilized for the collection of data. The first survey employed the TAM framework, which is of great significance in analyzing the adoption of new technologies (Guner & Acarturk, 2020). The attitudes scale measured students' perceptions of ChatGPT in terms of usefulness, utility, attitude toward technology, behavioral intention, and ethics. Experts checked the items to ensure that they were stable and precise. Afterward, descriptive statistics and multiple regression analysis were performed to determine the relationships between students' perceptions and their intentions to use ChatGPT. The subset of 10 students participated in interviews with open-ended questions on their reasons for using ChatGPT, the hurdles they encountered while using it, and the ethical considerations of AI in writing. To capture important themes concerning using ChatGPT in academic writing, interviews were recorded, transcribed, and analyzed thematically (Xu et al., 2024).

3.4 Data Collection Procedure

Data were collected in two phases. The first phase consisted of an online survey administered via Google Forms, which was shared on institutional platforms and WhatsApp groups. In the second phase, 20–30-minute semi-structured interviews were conducted with 10 students selected based on a purposive sample. We facilitated both phases of data collection, maintained proper consent protocols, conducted the interviews, and remained impartial while analyzing the data thematically to reduce bias (Lim, 2025).

3.5 Data Analysis

Quantitative data were processed using SPSS software. Descriptive statistics were calculated to summarize perceptions using means and standard deviations. Multiple regression analysis assessed the relationship between various variables, including behavioral intention and ethics. Important statistical parameters, such as *R*-squared, *F*-test, and *p*-value, were calculated for the overall model evaluation. Although there are various factors in the structural model, only three core TAM variables were selected as predictors: perceived usefulness, ease of use, and ethical considerations, which are supported by previous theoretical evidence. Considering the sample size, it was decided not to include other variables to keep it simple and avoid overfitting the model.

Before conducting the regression, the assumptions of multiple regression were checked and validated. The normality of residuals was checked using histograms and standard probability plots. Multicollinearity was checked by looking at the variance inflation factor (VIF), which was satisfactory, and all predictors met the acceptable criteria of VIF < 5. Homoscedasticity was evaluated by examining the scatter plots of standardized residuals against predicted values. In addition, the preliminary analysis helped determine the relevance of variables, meaning that even though the model conceptually has more than three factors, it was necessary to reduce it to three predictors to increase statistical significance. Variables with weak correlations or multicollinearity issues were removed to improve model fit and understanding. Qualitative data were analyzed using thematic analysis (Braun & Clarke, 2021). After coding the interview transcripts, two researchers systematically validated themes to cross-check reliability. Thematic groupings yielded categories such as advantages and difficulties, and ethical concerns in ChatGPT use.

3.6 Ethical Considerations

Ethical approval for this study was obtained from the research ethics committee of the participating university. All participants were informed about the study's objectives, voluntary participation, and their right to withdraw without penalty. Digital consent was secured before data collection commenced. To ensure confidentiality, no personal identifiers were collected, and the names of the university and participants remained anonymous throughout the reporting of findings.

Figure 2 illustrates the research design followed in this study. As mentioned, in this model, the study began with the collection of quantitative data through a survey, followed by qualitative interviews, culminating in applying statistical and thematic analysis of the data to produce results regarding the use of ChatGPT by EFL students.

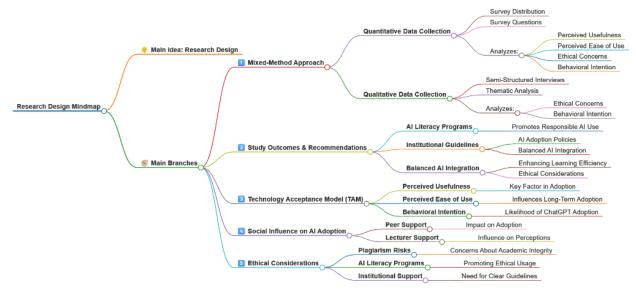


Figure 2: Research design overview

4. Results

4.1 Demographic Profile

The demographic profile of the respondents provided valuable insights into their background and experiences with ChatGPT in academic writing. The details are presented in Table 1. Among the 106 respondents, 15.1% were male and 84.9% were female, indicating a predominance of female students in the user base for ChatGPT within this academic setting. Most respondents (87.7%) were aged 18–20 years, which aligns with the typical age of undergraduate students. Regarding ChatGPT usage, 33% were first-time users, 42.5% had used it for several assignments, and 24.5% were regular users. This distribution indicates diverse levels of experience with ChatGPT among students, providing a broad spectrum of perspectives.

Table 1: Demographic characteristics of respondents

Demographic	Characteristics	Frequency	Percentage (%)
Gender	Male	16	15.1%
Gender	Female	90	84.9%
A 700	18-20	93	87.7%
Age	21-23	13	12.3%
	First time using ChatGPT	35	33.0%
Academic experience	ChatGPT user in several assignments	45	42.5%
	Regular ChatGPT user	26	24.5%
	Bing AI	28	26.7%
AI used other than	Perplexity	15	14.2%
ChatGPT	Gemini	49	46.2%
	Blackbox AI	14	12.9%

4.2 Quantitative Findings

The survey data revealed key insights into students' perceptions of ChatGPT as a writing tool. Table 2 summarizes the key findings. The findings show that respondents generally found ChatGPT helpful (M = 4.02, SD = 0.87) and easy to use (M = 3.85, SD = 0.92). These results suggest that ChatGPT improves students' academic writing efficiency. However, concerns about ethical issues, particularly plagiarism (M = 3.32, SD = 1.12), remain an area of discussion. The behavioral intention to use ChatGPT was high (M = 3.91, SD = 0.95), indicating that students are likely to integrate the tool into their writing process despite ethical concerns. Peer support substantially influenced respondents' attitudes toward ChatGPT (M = 3.40, SD = 1.01) compared to lecturer support (M = 3.05, SD = 1.15).

Table 2: Descriptive statistics of key variables

No	Factor	Mean	Std. Dev.
1	Perceived ease of use	3.85	0.92
2	Perceived usefulness	4.02	0.87
3	Ethical concerns	3.32	1.12
4	Behavioral intention	3.91	0.95
5	Comfort in using ChatGPT	3.55	0.91
6	Concerns about plagiarism	3.32	1.12
7	Effectiveness in completing assignments	3.78	0.89
8	Improvement in writing skills	3.60	0.95
9	Peer support for ChatGPT usage	3.40	1.01
10	Lecturer support for ChatGPT in learning	3.05	1.15
11	Confidence in ChatGPT's suggestions	3.47	0.96
12	Reliability of ChatGPT for writing assignments	3.50	0.99
13	Preference for AI assistance over traditional methods	3.65	1.04

Multiple regression analysis was performed to further investigate the factors influencing students' behavioral intention to use ChatGPT. The regression model assessed the predictive impact of perceived ease of use, perceived usefulness, and ethical concerns on the likelihood of students adopting ChatGPT for academic writing. The results are presented in Table 3.

Table 3: Regression analysis predicting behavioral intention

No	Predictor variable	Beta	<i>t</i> -value	<i>p</i> -value
1	Perceived ease of use	0.27	3.11	.002
2	Perceived usefulness	0.42	5.02	<.001
3	Ethical concerns	-0.18	-2.04	.044

The regression model explained 62.8% of the variance in behavioral intention $(R^2 = 0.628, F(3,102) = 53.87, p < .001)$. Perceived usefulness emerged as the strongest predictor $(\beta = 0.42, p < .001)$, followed by perceived ease of use $(\beta = 0.27, p = .002)$. Ethical concerns negatively impacted behavioral intention $(\beta = -0.18, p = .044)$, indicating that respondents were more concerned about plagiarism and ethical risks and less likely to use ChatGPT for academic writing. These findings support the TAM, showing that when students find AI-powered tools practical and user-friendly, they are more likely to embrace them. However, ethical issues are still limiting, underscoring the necessity of institutional guidelines and AI literacy programs to encourage ethical AI-assisted writing practices.

4.3 Qualitative Findings

Four significant themes about students' experiences using ChatGPT for academic writing were identified through thematic analysis of the 10 student interviews. The efficiency advantages of using ChatGPT in writing, concerns about overreliance, plagiarism ethics, and the necessity of institutional policies to direct AI-assisted learning are the themes.

4.3.1 *Improved writing efficiency*

Many students find ChatGPT helpful for brainstorming, drafting, and editing their academic writing. Some participants reported that reducing time and effort in completing writing tasks was an advantage because, in their view, ChatGPT improved their grammar and offered an organized framework. The high-acceptance group emphasized ChatGPT's effectiveness when drafting, brainstorming, and organizing their academic writing. They noted how it saved them time while also improving their writing.

"I can write faster because ChatGPT offers a structured framework." (P3)

"It's an amazing tool for sentence refinement and clarity in writing." (P1)

Participants in the moderate-acceptance group characterized ChatGPT as supportive, but they had a balanced perspective and regarded it more as a secondary source of aid.

"It helps me keep my writing organized, especially when I get stuck." (P5)

"Even though it's useful for structuring ideas, I wouldn't depend on it too much." (P6)

On the other hand, the low-acceptance group took a more neutral view and used ChatGPT strictly out of necessity, feeling more comfortable without the assistance of the software.

"I do not make frequent use of it because I prefer coming up with ideas on my own." (P2)

"ChatGPT can assist, but I believe I need to improve my writing skills on my own." (P8)

From these responses, it is clear that participants regarded ChatGPT as an assistant and a writing aid that enhances their understanding of the material and the writing process. Regardless of their acceptance level, some participants engaged with ChatGPT not only to save time but also to deepen understanding and clarify concepts. This points to a movement from basic AI reliance toward a more thoughtful approach to writing, especially when students seem to want to use the technology more mindfully. While all groups found ChatGPT helpful to some extent, the high-acceptance group seemed to focus more on productivity and writing extensive pieces, adopting a more instrumental approach. In contrast, the low-acceptance group emphasized self-sufficient effort and imagination, adopting a more traditional approach to technology. The moderate-acceptance group acted as a middle ground, embracing AI assistance while critiquing its lack of creative thought.

4.3.2 Concerns about over-reliance

Participants showed remarkably diverse levels of concern around over-dependence on ChatGPT. ChatGPT's usefulness was widely accepted, but at the same time, there was a consensus that critical thinking and creativity needed to be carved out in academic writing. Participants in the high-acceptance group claimed to use ChatGPT often, but at the same time, they felt a need to manage their use of the tool.

"I try to manage my usage of ChatGPT to avoid being dependent on it." (P7)

"I feel like I use ChatGPT too much, and I try to manage that." (P3)

Participants in the moderate-acceptance group spent as little time as possible using AI, as they restricted themselves to a set period while still appreciating the automated assistance.

"Sometimes I use it to help organize ideas, but I try not to let it do the work for me." (P5)

"It's useful, but I want to keep practicing writing by myself so I don't lose that skill." (P8)

The use of ChatGPT sparked an emphasis on self-reliance and tools among the low-acceptance group, as they indicated using it only when necessary.

"I prefer generating my concepts without relying on something like ChatGPT." (P2)

"If I overuse it, I feel like my brain becomes sluggish." (P6)

These reactions highlight a developing understanding among students of the ethical challenges and the cognitive risks of using AI tools. Moreover, it was noted that regardless of acceptance level, participants across groups tried to balance preserving independence, academic honesty, and engagement with advanced synthesis or using previous knowledge. This means that students appreciate ChatGPT as a tool but, at the same time, are negotiating the terms of its use to maintain personally constructed pathways to learning. The perceptions of over-dependence were notable for the lack of consensus. Participants in the low-acceptance group framed AI use as one-dimensional and a simplistic assault on critical thinking. Meanwhile, moderate users exhibited some balance between seeking assistance and working independently. Strikingly, high-acceptance users tended to be frequent users but also voiced some self-restraint, showing signs of emerging digital literacy.

4.3.3 Ethical considerations and the risk of plagiarism

Other ethical issues surfaced as well, particularly concerning plagiarism. Some participants seemed to check semantics to ensure originality, while others candidly admitted using ChatGPT's output without expecting any inventiveness.

"Plagiarism is my concern. Other than that, ChatGPT just seems too simple." (P4)

"I use ChatGPT as a starting point, but I always edit it. I run the final version through a plagiarism checker before submitting my work." (P8)

These comments capture the perceptions of participants toward AI ethics. While some participants admitted that they did nothing after using ChatGPT, the notion of academic dishonesty deceived many others. These contradictory comments reveal differences in participants' understanding and grappling with ethical issues related to academic work involving AI technology. Some showed clear signs of dealing with the issue of plagiarism and taking measures to avoid it, while others seemed disengaged or oblivious. This indicates a need for better-defined policies and organizational guidance on how students may educate themselves regarding the responsible use of AI content. The results also suggest an ethical gap concerning the use of AI technology in education, where factors of accessibility and simplicity could prevail at other times over ethical considerations. There also appeared to be an imbalance in ethical awareness across groups. The participants in the low-acceptance group demonstrated stronger ethical concerns, focusing on checking paraphrasing and originality. On the other hand, some high-acceptance students appeared more careless, as if they lacked guidance on ethics, even among the most proficient technology users.

4.3.4 Institutional support and policy needs

Regardless of their acceptance level, participants universally considered the need for clearer institutional policies regarding using ChatGPT in an academic context. Although participants highlighted some support from faculty, others were confused by mixed perceptions of instructors. Most participants from this group were willing to accept ChatGPT's use in academic work and expressed the need for policies to encourage responsible use.

"I genuinely believe that having an artificial intelligence policy in place would allow us to use the technology more responsibly." (P9)

Moderate users voiced a lack of clear direction from educators and the institution as a reason for their uncertainty.

"While some of the professors are fine with using ChatGPT, others do not talk about it at all. It would be nice if we had clearer policies to follow." (P10)

"I would be more confident to use it if the university explained how to interact with it." (P5)

Although these participants may be less reliant on AI tools, they stressed the importance of policies to mitigate confusion or misuse among peers.

"I may not be the biggest user of ChatGPT, but others are, and without rules, people may abuse them." (P2)

"With the clarity of the rules from the school, everyone knows what is okay and what is unacceptable." (P6)

There appeared to be a desire among the participants to receive help from the institution through defined policies regarding the use of AI and teaching sessions

on AI literacy. The uncertainty leads students to procrastinate too much, vary their practices in different classes, and navigate poorly defined ethical boundaries. These policies would enable students to engage with AI responsibly, furnishing policies that foster the educational use of AI tools while maintaining academic integrity in the learning environment. Regardless of different usage levels, all groups understood the importance of institutional policies. The conservative, low-acceptance group considered policy a safeguard intended to prevent exploitation by others. By contrast, the active, high-acceptance group regarded policy as an enabling framework that encourages innovation within certain boundaries.

The thematic analysis of the interviews with the 10 participants revealed several themes using qualitative analysis methods, including writing efficiency, overreliance, and ethical debates regarding using ChatGPT in academic writing. These themes were combined in a diagram, shown in Figure 3.



Figure 3: Qualitative analysis themes on the use of ChatGPT in academic writing

4.4 Integration of Quantitative and Qualitative Data

The combination of quantitative and qualitative findings provides deeper insight into students' use of ChatGPT in academic writing. Statistical descriptions indicate that the students found ChatGPT useful (M = 4.02) and easy to use (M = 3.85). This aligns with qualitative responses, where participants stated that ChatGPT helped them write and organize their ideas.

"I can write faster because ChatGPT provides a clear framework." (P3)

However, the results also showed that the students had moderate ethical doubts (M = 3.32) and feelings of anxiety about plagiarism, a common thread explored from qualitative themes related to dependency and the importance of developing critical thinking. For example, although the students appreciated ChatGPT's help, many emphasized the need to maintain originality and did not fully follow the tool.

"ChatGPT can help, but I believe I need to develop my writing skills independently." (P8)

The regression analysis also indicated that perceived usefulness and ease of use had a notable bearing on behavioral intention to use ChatGPT, while ethical concerns negatively impacted this intention. As some students noted in the interviews, a reasonable concern about self-development and academic integrity made them less willing to depend on ChatGPT. This triangulation reveals that there is a general perception of ChatGPT as applicable. However, its application in academic writing raises deeper concerns about ethics and the need for controlled pedagogy. Using qualitative and quantitative data alongside statistical data paints a more holistic perspective that supports TAM but enriches the understanding of students' narratives through reflective storytelling.

5. Discussion

5.1 Perceived Usefulness as a Key Driver of Adoption

The results, consistent with the TAM, confirmed that perceived usefulness is the strongest predictor of behavioral intention to use ChatGPT (β = 0.52, p < .001). The students highlighted enhanced idea generation and coherence and quicker revision cycles that allowed more time for deeper content reflection—an aspect less emphasized in prior EFL AI studies (Naz & Robertson, 2024). A high mean score for perceived usefulness (M = 4.02, SD = 0.87) indicates strong recognition of ChatGPT's utility. This extends research by Tarihoran, Fachriyah et al. (2022) by demonstrating that AI tools can streamline mechanical tasks and free cognitive resources for higher-order writing processes. AI-powered tools such as ChatGPT can encourage students to engage more actively with writing tasks. These findings align with previous research that emphasizes the advantages of AI-powered tools in assisting EFL learners in academic writing. Similarly, AI-based tools in educational settings significantly enhance students' engagement and learning outcomes, particularly in primary school environments.

However, there is concern that ChatGPT is over-relied upon (Rane et al., 2023). Many participating students noted that frequent use of these tools could decrease motivation toward self-writing and in-depth thinking. This supports previous findings which suggest that over-reliance on AI could limit students' ability to develop their writing skills. Students appreciate the value of using ChatGPT, but moderation is essential to ensure their cognitive involvement in writing tasks and academic growth. This study uniquely investigated EFL students' perceptions of ChatGPT in an Indonesian tertiary context, extending existing TAM-based AI research by integrating ethical and social-influence dimensions not previously examined together. Unlike prior work focusing solely on usefulness and ease of use, our findings reveal how institutional policy ambiguity and peer dynamics jointly shape adoption behaviors.

5.2 Ease of Use and Accessibility

Ease of use was one of the critical contributing factors that influenced the students' intention to utilize ChatGPT for academic writing. The quantitative data revealed that the respondents had a high mean score for perceived ease of use (M = 3.85, SD = 0.92), suggesting that most respondents found the system easy and convenient to use. This confirms pre-existing studies arguing that the adoption of technology increases when users consider the system easy to navigate (Wang, 2024).

Students noted that ChatGPT offered assistance in eliciting information about vocabulary and sentence formation, making it easier for them to engage in academic writing tasks. This supports the TAM assertion that ease of use indirectly promotes intention via usefulness. Some other students reported challenges when dealing with AI responses perceived as vague, out of context, or irrelevant and that are difficult to work with. This adds to the body of knowledge suggesting that students need to be taught the AI literacy skill of critique, where information generated by an AI tool is assembled and adjusted instead of finalized in the form presented to them. Educators should incorporate AI literacy into the language curriculum as a direct recommendation. Such initiatives must incorporate the practical side of using technology and the application of evaluation and ethics to protect students interacting with AI from academic misconduct.

5.3 Ethical Concerns and Academic Integrity

As students began to adopt ChatGPT in academic writing, ethical concerns significantly moderated their intentions. Regression analysis revealed that ethical concerns negatively affected behavioral intention (β = -0.18, p = .044), meaning that greater ethical risks resulted in lower intentions to use ChatGPT. Interview data also support these findings. For some students, paraphrasing AI-generated outputs and running them through plagiarism checkers were the last steps, while others submitted the results as they were. This discrepancy exemplifies EFL students' lack of a shared ethical framework guiding their AI writing practices regarding basic principles. These concerns support other research (Uğraş et al., 2024) arguing that integrated AI tools will likely undermine academic integrity unless institutions provide clear policies. This study attempted to merge ethical concerns with the TAM in EFL contexts, demonstrating how moral reservations may pose a significant challenge to adopting AI technologies. Academic institutions must devise comprehensive guidelines on applying AI technology, compliance policies requiring plagiarism detection software in AI-assisted writing, and workshops that foster an understanding of academic honesty. AI must be treated as an additional resource to aid students rather than a replacement for active cognitive participation in the writing process.

5.4 The Role of Social Influence in Adoption

The results of this study highlight that social influence is significant in students' decision-making on whether to incorporate ChatGPT into their academic writing. The survey results showed that respondents perceived peer support (M = 3.40, SD = 1.01) to be greater than lecturer support (M = 3.05, SD = 1.15), indicating that the attitudes and behaviors of peers impacted students more. Student community members disrupted the status quo by recommending AI tools, which helped foster a culture that boosted their adoption. Recommendations by students and other ChatGPT users have been frequently cited as strong motivating factors for their usage (Mamo et al., 2024). On the other hand, support from the institution and the faculty was comparatively lacking and unfocused. Some instructors supported responsibly testing AI, while others rejected or banned it. This inconsistency added to students' uncertainties regarding safe and ethical boundaries.

The findings of the study reiterate the commitment of foundational policies and faculty advancement plans in hiring interdisciplinary personnel to outline a particular strategy for AI integration in educational institutions. Policies regarding the use of AI in teaching and the guidance provided to teachers about their roles should support educational innovation. In this case, by extending the TAM, the study highlights that social norms, particularly peer influence, may be as important as, or even more important than, individual perceptions of usefulness or ease of use when adopting technologies in EFL classrooms. This study offers practical contributions for teachers using AI in the classroom, with empirical evidence on the impact of AI on student engagement and theoretical insights by applying the TAM in an EFL context.

5.5 Institutional and Pedagogical Implications

As noted in the findings, educators and educational institutions need to pay close attention to and enhance their efforts to optimize their AI functionality. We recommend the following strategies based on the students' perceptions of AI interference.

1. Curriculum integration

Embed AI literacy modules in writing courses, where students practice generating, evaluating, and revising AI-assisted drafts under instructor guidance. Design scaffolded assignments that alternate between AI-supported and traditional writing tasks, ensuring cognitive engagement and skills development.

2. Faculty development

Organize workshops for lecturers on best practices for framing AI tools as collaborative partners rather than replacements. Provide exemplar lesson plans demonstrating how to critique AI output and deepen subject-matter discussion.

3. Institutional policy and support:

Develop guidelines on acceptable AI usage, specifying requirements for attribution, paraphrasing, and originality checks. Establish an AI resource center or helpdesk that offers one-on-one consultations and ethical training sessions.

5.6 Limitations and Future Research

While the results assist in fostering an understanding of students' perceptions concerning using ChatGPT as an academic writing tool, a significant flaw in this study is the absence of measuring students' outcomes through self-reported data. As a result, any claims made regarding educational advancements from using ChatGPT are only speculative and do not have empirical validation. Further studies should adopt an interpretive framework wherein perception surveys are combined with performance measurements, such as pre- and post-test evaluations or rubric scoring of students' work. This would enhance the results, offering a more precise response on whether the favorable perceptions toward ChatGPT stem from real academic development. Additionally, the impact of the sustained use of AI tools on students' ability to write independently over time could be investigated through longitudinal studies.

6. Conclusion

This research examined EFL students' perceptions of and experiences with ChatGPT in academic writing, its advantages, and its challenges. Findings indicate that students experienced high usability and usefulness with ChatGPT yet had major ethical concerns with plagiarism and over-reliance. The results highlight the impact of social influence, indicating that peer support contributed more than instructor support in the adoption of AI. The participating students, nonetheless, indicated a willingness to use ChatGPT in the future, while expressing a need for more straightforward institutional guidelines regarding their policies on AI and education and programs aimed at developing AI literacy. The research argues that educational institutions must formulate policies that foster responsible AI applications without compromising academic honesty.

Additionally, AI literacy should be incorporated into the curriculum and faculty development programs to prepare students and educators to address the ethical challenges surrounding AI in education. The findings suggest the need for a more objective investigation into students' perceptions of and learning outcomes through using AI tools such as ChatGPT. This study added another dimension to the discourse on AI adoption by providing practical frameworks to augment the effective and ethical integration of AI tools in students' writing.

7. Practical and Theoretical Implications

Considering the findings of this study, higher education institutions should create AI literacy programs for students and faculty with a particular emphasis on ethics and academic integrity. Such programs should teach students how to use AI applications such as ChatGPT responsibly, while empowering faculty to guide students appropriately. Moreover, institutions must actively seek to promote and establish guidelines for the responsible use of AI that stress academic integrity and the appropriate use of AI in writing in educational settings. These measures will mitigate the disadvantages of AI technologies while ensuring that critical thinking and academic rigor are maintained.

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Appendix I (Questionnaire)

A. Research Questionnaire

Research Title: Student Perceptions of Using ChatGPT in Completing Writing Assignments at the State Islamic University of Sultan Maulana Hasanuddin Banten

Filing Instructions:

Fill out this questionnaire by marking (\checkmark) on one of the numbers corresponding to your opinion. The scale used is:

- 1= Strongly disagree
- 2= disagree
- 3= Neutral
- 4= Agree
- 5= Strongly agree

Part 1: Demographic Data

- 1. Gender:
 - Male
 - Female
- 2. Age: _____ years
 - **18-20**
 - **21-23**
 - 24 and above
- 3. Academic experience:
 - First time using ChatGPT
 - ChatGPT user in several assignments
 - Regular ChatGPT user
- 4. AI used other than ChatGPT
 - Gemini
 - Blackbox AI
 - **____**

Part 2: Perceptions of ChatGPT

1) Ease of Use

No	Questions	1	2	3	4	5
5	I find ChatGPT easy to access					
6	The ChatGPT interface is easy to understand					
7	I am comfortable using ChatGPT to write					
	assignments.					

2) Benefits and Challenges of Using ChatGPT

No	Questions	1	2	3	4	5
8	ChatGPT helps me generate ideas for writing					
	assignments					
9	ChatGPT speeds up my writing process					
10	I am concerned that using ChatGPT will cause					
	dependency in completing assignments					
11	ChatGPT can improve the quality of my writing					
	in terms of coherence and structure					
12	Using ChatGPT reduces my ability to think					
	critically					
13	Using ChatGPT can be risky in terms of					
	plagiarism.					

Part 3: Acceptance Factors

1) Perceived Usefulness

No	Questions	1	2	3	4	5
14	ChatGPT helped me complete my writing					
	assignments more effectively					
15	Using ChatGPT improved my writing skills					

2) Social Influence

16	My friends support the use of ChatGPT to			
	complete writing assignments			
17	My lecturer supports the use of ChatGPT in			
	learning			

3) Trust in Technology

18	I feel confident in the results provided by ChatGPT			
19	ChatGPT provides reliable suggestions for writing assignments			

4) Attitudes Towards Technology

20	I feel positive about using technology such as ChatGPT for academic assignments			
21	I prefer using technology to assist in the writing process over traditional methods			

Appendix II (Interview)

B. Research Interview Guide

Purpose: This interview guide was used to explore the experiences, challenges, and factors influencing the acceptance of using ChatGPT in writing assignments. Semi-Structured Interviews: These interviews allowed students to talk more broadly about using ChatGPT and perceived benefits, challenges, and acceptance factors.

- 1. Part 1: Experience Using ChatGPT
 - 1) How was your first experience using ChatGPT to write an assignment?
 - 2) How often do you use ChatGPT to complete a writing assignment?
 - 3) What ChatGPT features do you use most often in writing?
- 2. Part 2: Benefits of Using ChatGPT
 - 4) How does ChatGPT help you develop ideas or compose writing?
 - 5) In your opinion, what are the main benefits of using ChatGPT when completing writing assignments?
- 3. Part 3: Challenges in Using ChatGPT
 - 6) Do you feel dependent on ChatGPT to complete your assignments? If so, how do you deal with it?
 - 7) Have you ever had difficulty understanding or utilizing the results provided by ChatGPT?
 - 8) How do you deal with concerns about plagiarism when using ChatGPT?
- 4. Part 4: Acceptance Factors
 - 9) What makes you feel more confident in using ChatGPT?
 - 10) How do your friends or lecturers influence your decision to use ChatGPT in writing assignments?

- 11) What are your views on the use of technology like ChatGPT in education?
- 5. Part 5: Overall Rating
 - 12) How would you rate ChatGPT in helping you write your academic assignments?
 - 13) Will you continue to use ChatGPT for future writing assignments? Why?