

ChatGPT in EFL Writing: A Study of Undergraduates' Perceived Uses and Barriers

Abdulrahman Ali Y Alqahtani¹, Ghazwan Mohammed Saeed Mohammed¹

¹ Department of English Language and Literature, College of Arts and Letters, University of Bisha, Bisha, Saudi Arabia

Correspondence: Ghazwan Mohammed Saeed Mohammed, Department of English Language and Literature, College of Arts and Letters, University of Bisha, Bisha, Saudi Arabia.

Received: January 5, 2026

Accepted: April 9, 2026

Online Published: July 15, 2026

doi:10.5430/wjel.v16n6p135

URL: <https://doi.org/10.5430/wjel.v16n6p135>

Abstract

This paper aims to investigate the benefits and drawbacks of ChatGPT in the context of EFL writing in Saudi Arabia. Forty-seven university students were selected to participate in the study voluntarily. To combine the depth of qualitative responses with the breadth of quantitative data, they responded to a survey and follow-up interviews. The dataset included both quantitative and qualitative data, which strengthened the scope of analysis. The findings showed that the participants perceived ChatGPT as a helpful tool for improving grammatical structures and vocabulary. Nonetheless, there is less impact on motivation and confidence. Perceptions varied by gender, discipline, and experience with use. The frequency of use strongly correlated with the perceived usefulness of ChatGPT. The interview yielded results supporting ChatGPT's role in enhancing writing accuracy, organization, and self-confidence. Findings also raised some concerns about the output generated by ChatGPT and its potential for overreliance. Based on the findings, the study suggests teacher training on the responsible use of AI tools for writing skills. Some implications and areas of further research were also put forward at the end of the study.

Keywords: ChatGPT, EFL learners, EFL writing, learner perceptions

1. Introduction

Artificial intelligence (AI) has obviously transformed language learning and teaching over the first quarter of the current century (Almahboob, 2025; Alqahtani, 2024; Mali, 2025; Pokrivcakova, 2019). In language education, AI tools offer learners unprecedented opportunities to practice the target language and receive timely, detailed feedback (Wei et al., 2023), as well as engage in meaningful interactions beyond the constraints of traditional classrooms (Ali, 2023; Almaktary & Al-Kadi, 2017; Salwa & Tyas, 2024). These affordances impact English as a foreign language (EFL) education. Researchers (such as Apriani et al., 2025; Song & Song, 2023; Wei et al., 2023) delved into AI's impact on writing skills. Recent advances in LLMs (e.g., ChatGPT and QuillBot) stand as useful tools for sustainable language learning and teaching (Al-Kadi & Rød, 2025). Such AI-based tools offer instant feedback, facilitate revision, and support learners in various language aspects. Writing and its subsumed aspects (coherence, organization, and lexical choice) come under the AI affordances, which have been researched widely. Perhaps this is because writing remains the most demanding skill for EFL learners (Apriani et al., 2025) who often struggle with complex ideas, coherence, and tone (Schofield & Zhou, 2025).

Prior research, categorized under some strands, shows some merits and demerits of AI in language learning. First, studies that highlighted benefits such as linguistic accuracy, fluency, improvements in grammar, sentence structure, and word choice (Al-Kadi, 2025; Mohammed et al., 2023; Winans, 2021; Alqahtani, 2024). Another range of studies (e.g., Amoush & Alhosban, 2025; Jmaiel et al., 2025) examined gains in writing and AI-generated feedback and suggestions for refining structures. A third thematic strand encompasses issues of learner engagement, autonomy, and motivation. One of the studies in this strand is Ali (2023), who suggested ChatGPT for learner autonomy and motivational engagement in writing tasks. Similarly, Teng and Huang (2025) reported a relationship between ChatGPT use and increased engagement in writing activities. A fourth strand of research studies emphasizes feedback-related affordances. Karagoz (2025), for instance, characterized ChatGPT as useful for surface-level feedback when teacher guidance remains integral. Comparable findings have been reported for other AI-assisted tools, such as Grammarly (Al-Kadi, 2025), which has been evident for timely, individualized feedback. Despite these affordances, some caution against overreliance on LLMs is not uncommon (Ahmed et al., 2026). Alwasidi and Al-Khalifah (2025) and Mali (2025) noted pedagogical and ethical concerns, reduced critical engagement, and dependency risks (Ahmed et al., 2026; Mali, 2025).

Arguably, while it is healthy to use LLMs (e.g., ChatGPT) for language learning, including writing skills, they pose challenges regarding the quality of their output and the spoon-fed learning mode (Ahmed et al., 2026; Alwasidi & Al-Khalifah, 2025). There are claims that such AI tools impede critical engagement in learning, as students lack the critical thinking to question the AI-generated content (Ahmed et al., 2026). While the benefits of AI tools at the lower level of writing skills (grammar, vocabulary, and organization) have been well-researched, the impact of such AI tools on higher-order abilities, such as argumentation, tone, and critical reflection, remains largely unexplored. The concerns about AI-generated content, overreliance (Alwasidi & Al-Khalifah, 2025), and critical engagement remain as a

pressing issue that warrants further exploration. These higher-order writing constructions can be conceived through perceptions of developing ideas and their organization and evaluating the feedback. Within this area of inquiry, this study aimed to investigate the uses and limitations of ChatGPT in academic writing contexts in the Saudi EFL setting. The primary focus of the study is to unpack the EFL undergraduates' perceived benefits and challenges, and to examine how these perceptions vary across gender, academic discipline, level of study, and AI skills.

Research questions

To address the objectives of this study, three research questions guided the investigation:

- 1) What are the EFL learners' perceptions of using ChatGPT in enhancing their writing skills?
- 2) To what extent do EFL learners' perceptions vary according to gender, discipline, level of study, and prior ChatGPT use?
- 3) According to EFL learners, what are the barriers to using ChatGPT in writing skills?

2. Review of Literature

2.1 Theoretical Background

Studying ChatGPT in the context of EFL learning is underpinned by multiple theoretical frameworks. Because AI tools were not originally designed for language learning, they are re-appropriated through theories of second language acquisition (SLA) (Almaktary & Al-kadi, 2017). For example, the Input Hypothesis (Krashen, 1982), the Output Hypothesis (Swain, 1985), and the Interaction Hypothesis (Long, 1996) back up the theoretical background of this study. Krashen stresses comprehensible input, which is slightly above the learner's current proficiency level. Krashen called it (i+1). When it comes to ChatGPT, it provides such input through text generation in low-anxiety learning situations. Learners can use it with ease, anywhere, at any time (Almaktary & Al-Kadi, 2017). Swain's hypothesis relates to language production. ChatGPT's prompts and responses encourage learners to refine their ideas (Schofield & Zhou, 2025); thus, their output is refined. Long's hypothesis also suggests negotiating meaning, which enhances language acquisition. Indulging in conversations with ChatGPT reflects interpersonal interaction. Swain's Output Hypothesis homes in on language production as it prompts learners to notice gaps in their linguistic resources. It also encourages hypothesis testing and revision. ChatGPT, through iterative prompting and reformulation, supports this output by requiring learners to articulate, refine, and restructure ideas. Similarly, the Interaction Hypothesis is reflected in dialogic exchanges with ChatGPT, where requests and feedback simulate negotiated meaning that facilitates language development.

Apart from SLA theories, the sociocultural theory (Vygotsky, 1978), particularly the concept of the Zone of Proximal Development (ZPD), is relevant to the study of LLMs in language learning. ChatGPT serves as a virtual mediator. It offers support similar, in some way, to that of a peer or teacher. Moreover, the constructivist learning theory views learners as active constructors of knowledge. Putting it in the context of AI tools, these LLMs facilitate language learning construction through iterative feedback between learners and machines (i.e., the AI tools) (Al-Kadi, 2025). This interaction between learners and tools creates interactive opportunities for learners to co-construct meaning, enabling learners to be more involved in the writing process (Ali, 2023).

Language educators have always been in search of a framework that combines theoretical foundations and practical applications for integrating digital AI tools into language learning, supporting both linguistic and non-linguistic aspects. When it comes to writing, tools like ChatGPT, QuillBot, and Grammarly facilitate recursive writing processes: planning, drafting, revising, and reflecting. They also offer immediate feedback (Al-kadi, 2025). They also support teachers in varying their teaching methods, making their job easier and more relevant to what learners do in real life, as they spend most of their time working with such digital tools. According to Pokrivcakova (2019) and Alqahtani (2024), technology-based language learning fosters learner engagement and reduces anxiety. This theoretical grounding demonstrates a conceptual flow from foundational theories to technology-enhanced learning, illustrating how ChatGPT can be tied to Krashen's concept of comprehensible input, Swain's concept of output, and Long's concept of interaction. The tool is also linked to a social phenomenon, which has to do with Vygotsky's sociocultural theory that, in a way, gives scaffolding within learners' ZPD to support cognitive writing processes.

2.2 ChatGPT as an AI Writing Assistant

It is now possible to consider ChatGPT as a writing assistant. As pointed out above, prior research has consistently praised this tool as useful in several ways. The primary benefit is that it facilitates self-directed learning, provides immediate feedback (Pitychoutis, 2024; Royani & Sihombing, 2024), and serves as a source of self-confidence and motivation (Carlini et al., 2025; Tseng & Warschauer, 2023). It could be used at all levels of learning, which means that it is in congruence with diverse learner needs. For instance, Alsaedi (2024) and Syahnaz and Fithriani (2023) pointed out that learners at the beginner level can benefit from grammar and vocabulary support, while those at the advanced level can utilize the tool to refine style and address specific writing needs. The tool is never tired or discouraging and is valuable in addressing writing challenges (Alqahtani, 2024). The dynamic feedback mechanisms, such as paraphrasing and sentence restructuring, are especially useful in academic and professional writing contexts (Huang, 2023; Wei et al., 2023). Its real-time feedback encourages independent learners (Pokrivcakova, 2019). All benefits that previous studies have disclosed are not devoid of recommendations for pedagogical guidance to maximize these benefits within a well-defined framework to ensure contextual relevance and to mitigate overreliance (Al-Raimi et al., 2024; Alqahtani & Alqahtani, 2024).

2.3 Drawbacks

Despite the benefits, there are limitations and barriers to using LLMs in foreign language education. On top of that is the superficiality of AI-generated content that shrewd users of AI in language education always comment on. This superficiality is mainly reflected in the limited depth of reasoning, formulaic development of ideas, and reduced rhetorical sophistication. It also includes insufficient sensitivity to contextual appropriateness, such as task demands, audience expectations, and disciplinary conventions. Also, using AI shakes academic integrity as there is no clear guidance or code of use, which gives way to suspicion and distrust (Al-Kadi, 2025; Winans, 2021). Concerns about plagiarism and originality fuel this skepticism, and many institutions do not allow the use of AI tools (Zhao, 2023). However, the fact is that learners and teachers use these tools either for writing or evaluating writing (Al-Kadi, 2025). In the absence of an ethical code and user guide, using LLMs remains a source of doubts about writing originality in schools and universities. What is more, Valizadeh (2022) warns that overreliance on AI may end up making writing more mechanical and impersonal. Learners may lose their genuine abilities and become entirely reliant on AI text-generation (Wang & Hu, 2020), which risks reducing engagement and critical thinking in writing and language learning.

Perhaps these concerns stem from limitations of the tools themselves. The premium features of these tools are restricted, which limits equitable use among students (Xiao & Zhi, 2023). From a linguistic perspective, AI tools are still incapable of working properly with idiomatic expressions and cultural values in texts (Amyatun & Kholis, 2023). ChatGPT may also misrepresent rhetorical patterns in creative writing (Selim, 2024). The loss of personal voice and originality adds to the limitations. Addressing these limitations in Song and Song' (2023) view requires hard work to compare AI-generated texts with personal drafts to maintain active learning and the intended voice of the writers. Above all, pedagogical guidance ensures learners remain critical and reflective users of AI tools (Ghorbandordinejad & Kenshinbay, 2024).

2.4 Context of this Study

Placing this issue in the local context, it is important to pinpoint that language learning in Saudi Arabia is updated now and then to remain up to date. Nevertheless, for informed decision-making, there is a need for research. The existing body of AI research in language education is expanding. Alshammri (2024) explored ChatGPT's benefits for structuring content and providing personalized feedback in the context of Saudi female undergraduates. The study is also not devoid of concerns about academic integrity and overreliance on AI tools. In another study, ChatGPT was viewed as beneficial for grammar correction and motivational support, with obvious uncertainty about its depth of explanation (Othman, 2025). Besides, instructor and AI-generated feedback were compared in a study by Aljasser (2025), showing that while ChatGPT offered responses, human feedback was more effective in refining academic writing. When it comes to aspects of writing, Alwasidi and Al-Khalifah (2025) found ChatGPT helpful in enhancing female learners' topic sentences and the supporting details in a paragraph. The study also has a salutary warning against overdependence on AI tools. Ali (2023) identified both benefits of ChatGPT for learner autonomy and writing fluency as well as technical and ethical concerns, such as plagiarism, dependency, superficial engagement with content these tools generate.

Taken together, it is fair to say that ChatGPT's impact on EFL writing is noteworthy, despite concerns about the efficiency and ethics of using AI in general. Prior studies focused on outcomes such as improved structure and grammar. Nevertheless, empirical work remains limited in explaining how these perceptions vary across learner characteristics and experience within specific educational contexts. This study builds upon previous research and strengthens the understanding of AI integration in writing enhancement. It explores the perceived benefits and barriers from the standpoint of the learners themselves. By doing so, the study aims to extend research on AI EFL programs. It contributes to a deeper understanding of how AI chatbots can be effectively re-positioned as well-defined and research-based tools in EFL writing instruction.

3. Method

A convergent mixed-methods design was employed to integrate both quantitative and qualitative paradigms concurrently and analyzed separately. Both components were integrated during the interpretation stage to provide a complementary, triangulated understanding of learners' perceptions of ChatGPT use in EFL writing. This combination is supported by Creswell and Creswell's (2018) model of mixed-methods approach. The former involved numeric data collected through the survey, and the latter involved elaborate responses gathered through interviews. This combination strengthened the methodology of this study and its credibility and interpretive analysis of the learners' perceptions on the uses and challenges of ChatGPT in EFL writing.

3.1 Participants

Forty-seven participants took part in this study. They are undergraduate EFL students affiliated with the University of Bisha. This modest sample size is relatively modest and may exhibit a noticeable gender imbalance, which may affect generalizability. However, it provides valuable exploratory insights into the EFL learners' perceptions with the context at hand. During this study, they attended general English courses. The focus was to explore their perceived benefits and challenges in using ChatGPT in writing. In terms of gender, the sample was skewed toward male participants. Most of the participants had prior experience of using ChatGPT in their university studies. Teachers were not included in the study because that would have shifted the focus toward instructional practices rather than learner-centered engagement with AI tools. Table 1 outlines the main characteristics of the sample in this study. Even though the participants come from medical and science disciplines, the study is situated within a General EFL framework. The academic background of participants is used to explore variation in perceptions, not to tailor the instruction or analysis to discipline-specific language use.

Table 1. Summary of Participant Demographics (N= 47)

Variable	Category	N	%
Academic Level	Level 1	27	57.4%
	Level 2	20	42.6%
Discipline	Medical	25	53.2%
	Science	22	46.8%
Gender	Male	39	83.0%
	Female	8	17.0%
ChatGPT Usage	Users	36	76.6%
	Non-users	11	23.4%

3.2 Instruments

Data collection was undertaken in two phases. In the first phase, the survey was distributed electronically, and all 47 students completed it, resulting in a 100% response rate. In the second phase, semi-structured interviews were conducted with six purposively selected students.

3.2.1 Questionnaire

The primary instrument used in this study was a questionnaire to investigate students' experiences with ChatGPT in the context of English language learning. The items were organized into three thematic domains: perceived benefits of ChatGPT on writing skills (including vocabulary, grammar, and organization), higher-order cognitive engagement (e.g., idea development, creativity, and evaluative use of feedback), and perceived barriers to its use. The questionnaire was designed in light of relevant literature (viz, Alqahtani & Alqahtani, 2024; Alwasidi & Al-Khalifah, 2025; Apriani et al., 2025; Salwa & Tyas, 2024). Used as a touchstone, these studies guided the survey design that aligned with established theoretical and empirical research findings. The scale used in the questionnaire adopted Likert's five-point measure (from 1 to 5). The participants were asked to tick the score that represents their perceptions of each item on the survey. All items were related to using ChatGPT for EFL writing skills at the university level. The internal consistency of the questionnaire and expert validity of the content were checked by two specialists in applied linguistics and educational technology at the University of Bisha. Likewise, reliability was checked through Cronbach's alpha. The overall alpha coefficient (.903) indicated the reliability of the tool.

3.2.2 Interviews

A semi-structured interview was also used for collecting in-depth data from a subsample of participants (n=6) to enhance and complement the survey findings. A protocol was developed for this purpose. The protocol included five open-ended questions to elicit in-depth insights into students' use of ChatGPT: its perceived benefits for writing development and challenges encountered during use, and suggestions for improvement. The questions were based on Carlini et al. (2025) for its wide relevance to writing development through ChatGPT, as well as Alshammri (2024) and Alqahtani and Alqahtani (2024) for their relevance to the Saudi context. Each interviewee was interviewed individually within a range of 10-15 minutes. The interviews were in either English or Arabic, based on each participant's language preference. Before the interview, informed consent was obtained from all participants.

3.3 Procedures

Two datasets were treated: quantitative and qualitative. The former involved the survey data, which were analyzed statistically via SPSS (version 26). This yielded statistical measures (means and standard deviations) of the participants' responses. The Mann-Whitney U test was applied to examine differences between variables. Pearson correlation analysis was used to calculate the relationships among variables. After the survey analysis, each interview was transcribed, and the transcripts were analyzed using thematic analysis. The inductive coding generated themes from the data. Theme validation was achieved through iterative comparison and consensus to enhance trustworthiness. The perceived benefits and limitations of ChatGPT in EFL writing that surfaced from the thematic analysis were supported by examples and explanatory insights tabulated later in the Results section.

4. Results

The results are presented in this part according to the research questions. Numeric data generated by statistical measures are organized in tables where they fit. The qualitative data, which were subjectively analyzed, are summarized in Table 6. Both data sets combine depth and strengthen the findings.

RQ1: What are the EFL learners' perceptions of using ChatGPT in enhancing their writing skills?

Table 2 outlines participants' perception scores. As data in the tables show, learners perceived ChatGPT as a beneficial tool for EFL writing. The mean scores are arranged from highest to lowest. The highest score belongs to the first item in the tables (ease of use) (M=4.36, SD=0.73), followed by grammar support (M=4.15, SD=0.98) and task completion (M=4.10, SD=1.04). Learners also reported improvements in organizing ideas (M=3.81), generating creative content (M=3.89), and overall writing quality through feedback (M=3.91). The lower the items appear in the table, the lower the scores. For instance, the score associated with the vocabulary is (M=3.72), confidence (M=3.61), enjoyment (M=3.81), reduced anxiety (M=3.74), and feedback (M=3.87), as well as the value of the tool for writing (M=3.85). Compared to the traditional method, ChatGPT was preferred at a mean rate of (M=3.81). However, motivation to write was rated (M=3.57), indicating that while ChatGPT supports writing skills, the participants find it does not fully address motivational factors. Its impact is more obvious in the technical aspects of writing than in affective ones.

Table 2. Descriptive Analysis of Participants' Perceptions of Effectiveness of ChatGPT

No.	Items	Mean	Std. Deviation
1	It is easy to use ChatGPT for writing tasks	4.3617	0.73501
2	When writing in English, ChatGPT provides me with helpful suggestions to improve my grammar	4.1489	0.97755
3	With the help of ChatGPT, I can complete my writing tasks.	4.1064	1.04744
4	The quality of my writing is improved when ChatGPT provides me with constructive feedback.	3.9149	1.11958
5	With ChatGPT, I can generate creative ideas for my writing	3.8936	1.23771
6	The feedback/suggestions provided by ChatGPT are trusted	3.8723	0.89969
7	ChatGPT is valuable for enhancing my writing skills	3.8511	1.19744
8	I find writing more enjoyable when using ChatGPT	3.8085	1.07619
9	ChatGPT supports me better than traditional writing methods	3.8085	1.19124
10	My ability to organize ideas in my writing has been enhanced by using ChatGPT.	3.8085	1.20935
11	When writing in English, my anxiety is reduced with ChatGPT	3.7447	1.07275
12	My vocabulary usage in writing has improved when interacting with ChatGPT	3.7234	1.17403
13	When using ChatGPT, I feel confident about my writing	3.6170	1.15256
14	I get motivated to write more when using ChatGPT	3.5745	1.13721

RQ2: To what extent do EFL learners' perceptions vary according to gender, discipline, level of study, and prior usage of the tool?

This question was addressed through comparing the means (Table 3), testing significance (Table 4), and correlation analysis (Table 5). To begin with, Table 3 indicates significant differences in group comparisons of the participants' perceptions. Female learners had higher mean scores for both effects ($M=4.63$) and perceptions ($M=4.55$) than males ($M=3.74$ and $M=3.72$, respectively) and lower barriers ($M=2.83$ vs. $M=3.01$). Medical students also rated the tools more positively in terms of effects ($M=4.17$) and perceptions ($M=4.10$) compared to science students ($M=3.57$ and $M=3.58$), with slightly lower barriers ($M=2.81$ vs. $M=3.17$). When it comes to the level of study, students of the second level showed marginally higher scores than students in the first level.

Statistical tests show significant differences based on gender of the participants, both in effects ($p=.006$) and perceptions ($p=.007$), but not in barriers ($p=.921$). Discipline showed a significant difference in effects ($p=.020$), with perceptions and barriers approaching significance. No significant differences were found by academic level. Prior usage of ChatGPT was a strong predictor of positive outcomes: frequent users reported significantly higher effects ($p=0.002$) and perceptions ($p=0.002$), although barriers were perceived similarly across users and non-users ($p=0.820$). Correlation analysis further supported these findings. Frequent use of ChatGPT was positively correlated with perceived effects ($r=0.428$, $p=0.003$) and perceptions ($r=0.489$, $p<0.001$), but not with barriers ($r=0.044$, $p=0.769$). A strong correlation was also found between perceived effects and perceptions ($r=.852$, $p<.001$). This suggests a relationship between learners' prior use of the tool and their attitudes towards it.

Table 3. Mean comparison of the factors across groups

	Gender		Discipline		Level of Study	
	Male	Female	Science	Medicine	Level 1	Level 2
Effect of using ChatGPT on improving writing skills	3.7363	4.6250	3.5714	4.1657	3.8042	4.0000
Perceptions of learners towards using ChatGPT for writing skills	3.7179	4.5536	3.5844	4.1029	3.7884	3.9571
Barriers to using ChatGPT for writing skills	3.0085	2.8333	3.1667	2.8133	3.0617	2.8667

Table 4 outlines significant differences between male and female learners in both effects ($p=.006$) and perceptions ($p=.007$), but not in barriers ($p=.921$). A significant difference was also observed between medical and science students in terms of effects ($p=.020$), while perceptions ($p=.057$) and barriers ($p=.061$) approached significance. On the other hand, significant differences between students based on their level of study were not observed. This suggests that learner gender and discipline play a role in shaping perceptions about ChatGPT use. It highlights the need for context-sensitive integration where the variables of gender and disciplines are considered. Taking the data in Table 4, it is obvious that individual and contextual factors are salient in shaping learners' engagement with ChatGPT effectively for writing skills. Gender and discipline have shown their influence on learners' evaluation. Prior use of the tool is also a key factor in how the participants recognize its benefits. Academic level, however, did not appear to play a significant role.

Table 4. Group Differences in Effects, Perceptions, and Barriers of Using ChatGPT

		Effect of ChatGPT on improving EFL writing skills	Learners' perceptions of ChatGPT for writing skills	Barriers to using ChatGPT for writing skills
Asymp. Sig. (2-tailed)	Gender	.006	.007	.921
	Discipline	.020	.057	.061
	Level of Study	.738	.597	.256
	ChatGPT users and non-users	.002	.002	.820

Table 5 outlines the correlation analysis (Table 5). The variables reported in Table 5 (*effects*, *perceptions*, and *barriers*) were calculated by averaging responses across the relevant questionnaire items in each domain. These composite scores represent analytically derived subscales based on thematic grouping of items, with internal consistency assessed rather than externally validated constructs. As displayed in the table, a positive relationship between frequent use and its perceived effects on writing abilities, with statistical values of $r=.428$ and

$p=.003$. The $r=.489$, $p<.001$ represents the overall perception of the tool's usefulness. These values indicate that familiarity with ChatGPT and the perceived benefits are correlated. Participants who reported familiarity with the tools had more positive attitudes toward their role in EFL writing. Strong correlation was found between perceived effects and perceptions ($r=.852$, $p<.001$), which suggests that learners improve their writing and develop more positive views of ChatGPT, which in turn encourages continued use. In contrast, no significant correlations were found between frequent use and perceived barriers ($r=.044$, $p=.769$), nor between barriers and other factors. This suggests that challenges such as ethical concerns, accuracy issues, and over-reliance persist regardless of usage frequency or learners' attitudes.

Table 5. Correlation among the variables of using ChatGPT and Factors

		Frequent use of ChatGPT	Effect of ChatGPT on EFL writing	Learners' perceptions towards ChatGPT for writing skills	Barriers to using ChatGPT for writing skills
Do you use ChatGPT frequently?	Pearson Correlation	1	.428**	.489**	.044
	Sig. (2-tailed)		.003	.000	.769
	N	47	47	47	47
Effect of using ChatGPT on improving learners' writing skills	Pearson Correlation	.428**	1	.852**	.099
	Sig. (2-tailed)	.003		.000	.509
	N	47	47	47	47
Perceptions of learners towards using ChatGPT for writing skills	Pearson Correlation	.489**	.852**	1	.159
	Sig. (2-tailed)	.000	.000		.284
	N	47	47	47	47
Barriers to using ChatGPT for writing skills	Pearson Correlation	.044	.099	.159	1
		.769	.509	.284	
		47	47	47	47

**. Correlation is significant at the 0.01 level (2-tailed).

Additional data on the perceptions of the participants are outlined in Table 6 below. They emerged from the response to the interviews. Responses of the six interviewees were analyzed, and each one's response has been outlined as themes in the table. To illustrate, the first interviewee in the table from the medical track made sense of ChatGPT for grammar and vocabulary as it provided accuracy and confidence, which strengthens similar numeric evidence above. However, this participant stressed the need for teacher guidance and more critical thinking skills for better and trustworthy use of the tool. To elaborate more on the data in the table, the fourth interviewee, who belongs to the science track, found the tool useful for brainstorming and a variety of expressions. It also motivated him to write more creatively. Nevertheless, concerns are also related to overreliance and plagiarism issues. Considering the results in Tables 5, 6, and 7, it becomes obvious that differences are attributed to the variables of gender, discipline, and prior use of the tool. The level of study shows descriptive but not significant variation. Tying the results in Tables 5 and 6 with those in Table 7, the correlation analysis confirms that barriers are not significantly linked to usage frequency or perceptions.

Table 6. A Summary of Participants' Responses to the interview questions

	Summary of the interview responses
Student 1 (Female, Medical Track)	• Uses ChatGPT mainly for revising grammar and vocabulary. • Reports improved accuracy and confidence. • Concerned about accepting AI suggestions without critical checking. • Believes ChatGPT made writing feel "less stressful." • Suggests teachers should guide students in evaluating AI outputs.
Student 2 (Male, Medical Track)	• Uses ChatGPT for summarizing texts and paraphrasing. • Finds it particularly useful for academic tasks. • Notes barrier of needing internet access. • Reports more positive feelings about English writing after using it. • Suggests blending ChatGPT with peer-review activities.
Student 3 (Male, Medical Track)	• Uses ChatGPT for generating outlines. • Finds it helpful in organizing ideas but feels it gives "generic" content. • Reports difficulty in making text sound personal. • Thinks it encourages him to write longer essays. • Suggests integrating AI literacy sessions into the curriculum.
Student 4 (Male, Science Track)	• Uses ChatGPT for brainstorming and stylistic alternatives. • Notes a significant improvement in the variety of expressions. • Concerned about over-reliance and plagiarism.

Student 5 (Female, Science Track)	• Claims it motivates him to write more creatively. • Suggests teachers emphasize ethical use.
	• Relies on ChatGPT mainly for drafting reports. • Finds it time-saving and efficient. • Reports occasional factual inaccuracies. • Believes ChatGPT helps her focus on structure rather than language errors. • Suggests more training in evaluating the accuracy of outputs.
	• Uses ChatGPT for editing and stylistic polishing. • Appreciates the feedback but feels it lacks “human nuance.” • Concerned about reduced originality in his essays. • Thinks it increased his awareness of writing conventions. • Suggests teachers highlight ChatGPT as a supportive tool, not a replacement.
Student 6 (Male Science Track)	• Uses ChatGPT for editing and stylistic polishing. • Appreciates the feedback but feels it lacks “human nuance.” • Concerned about reduced originality in his essays. • Thinks it increased his awareness of writing conventions. • Suggests teachers highlight ChatGPT as a supportive tool, not a replacement.

RQ3: According to EFL learners, what are the barriers to using ChatGPT in writing skills?

Table 7 displays six shortcomings of the tool in question. They are arranged in the table from the largest to the smallest means values and standard deviations. As in the table, over-reliance ($M=3.66$) was a major concern that learners felt could hinder independent writing. The impersonal nature of the tool ($M=3.15$), irrelevant suggestions ($M=2.93$), and difficulty accessing technology ($M=2.89$) had lower mean scores but still are important to consider in discussing the merits and demerits of the AI tools. The least mean value describes the difficulty of using feedback in writing tasks ($M=2.49$). This means most of the learners who took part in the study were high ChatGPT users and hence used feedback effectively in their writing.

Table 7. Descriptive Analysis of Barriers to ChatGPT in EFL Writing

Items	Mean	Std. Deviation
Over-reliance on ChatGPT does not affect my writing tasks	3.65960	1.16613
I find using ChatGPT impersonal in comparison	3.14890	0.88413
Some irrelevant/unhelpful suggestions that ChatGPT provides	2.93620	1.18696
Difficulty of accessing technology hinders my use of ChatGPT	2.89360	1.30607
The suggestions and feedback provided by ChatGPT are difficult to understand	2.74470	1.16969
I find it difficult to use ChatGPT's feedback in my writing	2.48940	1.01879

5. Discussion

This study provides compelling empirical evidence that ChatGPT impacts EFL undergraduates' writing development, particularly in grammar accuracy, coherence, and task completion. Interview data reinforced learners' strong perceptions of ChatGPT's support for linguistic accuracy. For instance, Student 1 (Table 6) (female, medical track) pointed out that using ChatGPT mainly for revising grammar and vocabulary and associated this use with improved accuracy and confidence, describing the writing process as less stressful. Such perceptions align with the quantitative ratings for grammar-related support and ease of task completion. This suggests that learners primarily value ChatGPT as a tool for reducing linguistic burden rather than for advancing higher-order writing skills.

Connecting the findings with theoretical frameworks of Krashen's input hypothesis, Swain's output hypothesis, and Vygotsky's sociocultural theory evinces a confirmation of theory and practices in that ChatGPT functions as a tool for scaffolding and interaction, which enriches EFL writing instruction. However, this support is mediated and non-human in nature, differing from peer-to-peer or student-teacher interaction in its absence of intentionality, contextual judgment, and pedagogical agency. The learners in this study described ChatGPT as a medium for confidence-building. It helps them move from assisted to independent performance. The strong correlation between effects and perceptions is high ($r=.852$), which suggests a connection between familiarity with the tool (ChatGPT) and positive views in this regard. This leads to more use of the tool. From a constructivist perspective, the tool positions learners in learning situations where they become active knowledge creators rather than consumers (Almaktary & Al-kadi, 2017). ChatGPT facilitates this by providing iterative feedback and opportunities for reflection (Al-Kadi, 2025; Ali, 2023). Using ChatGPT, EFL learners co-construct texts, revise them, and reflect on the writing process. These are essential components of constructivist learning. Aligned with cognitive theory, writing is a recursive process that involves planning, drafting, revising, and reflecting. ChatGPT supports these writing stages as it offers real-time suggestions to help learners navigate the complexities of the writing process.

These findings also align with several previous studies, which praised digital technology for language learning and acquisition through interactive and learner-centered approaches (Almaktary & Al-kadi, 2017; Alqahtani, 2024). Carlini et al. (2025) also discussed an array of AI affordances and risks that are echoed in the current study. The previous studies are similar to the study at hand in that they relied on SLA insights and sociocultural and constructivist models. It follows that such tools act as mediators of language learning and a source of interaction that is free of anxiety and the pressure of time. They promote autonomy and timely feedback. This facilitates the recursive nature of the writing process.

Despite the benefits, the findings include some barriers and limitations. Over-reliance on technology, plagiarism, and questionable outcomes of AI tools, which were reported in the results, resonates with Carlini et al. (2025), Valizadeh (2022), and Xiao and Zhi (2023), who investigated similar concerns. Students also questioned ChatGPT's ability to handle idiomatic or context-specific language, consistent with Amyatun and Kholis (2023). Such a limitation is illustrated by the interview data in Table 6. For example, Student 3 (male,

medical track) reported that while ChatGPT helped generate outlines, the resulting content often felt “generic,” making it difficult to produce writing that sounded personal. Likewise, Student 5 (female, science track) acknowledged the efficiency of ChatGPT for drafting reports, but the student noted occasional factual inaccuracies. This highlights the need for critical evaluation when incorporating AI-generated content into academic writing. With a flashback on the literature, concern-related findings parallel Winans (2021) and Ghorbandordinejad and Kenshinbay (2024), who touched on passive consumption of ideas without critical mediation when the AI outcome is taken for granted.

The perceived benefits and drawbacks differed, to some extent, based on the variables of gender, discipline, and prior use of ChatGPT. Those differences based on gender and discipline are consistent with Alqahtani (2024), who noted that learners’ attitudes toward technology, and with Alqahtani and Alqahtani (2024), who emphasized that ESP learners benefit from structured and formal outputs. Although no significant differences were found based on level of study, the data suggest that learners’ backgrounds and disciplines shape both their patterns and perceived benefits of such an AI tool. As no significant correlations were evident between barriers and other variables, challenges such as ethical concerns and dependency issues persist independently of learners’ engagement.

6. Implications

The study has implications for language pedagogy. ChatGPT is now a reality and could be integrated into EFL writing strategically. The findings suggest that this tool has potential for writing in a way that supports human originality. It is basically a useful source for writing mechanics, formatting, spelling, and grammatical structures, so that classroom activities could be more fun and more effective through ChatGPT. Based on the findings, students’ use of ChatGPT may help them reduce anxiety and increase confidence in what they write. It may also foster a more positive attitude toward college writing. Nevertheless, it should not be a source of reliance on digital technology, as it stimulates staying in the comfort zone. Hence, teachers’ supervised use of such a tool maintains a certain pedagogic purpose.

There are also implications for the ethical use of AI tools. That is to say, the integration should be transparent and declared so that both agencies, learners, and teachers are aware of how it is used and under which conditions. Because there is no agreed-upon protocol for using AI in learning and teaching, clear guidelines should be established between teachers and students at the beginning of each course (or to be included in the course syllabus).

The variation in participants’ responses based on gender and discipline implies variability of learners’ needs. Medical students may benefit from ChatGPT-based summaries and formal writing. Other disciplines may need more narrative-based use of ChatGPT. Learners’ prior experience with AI tools also provides implications for tailored support accordingly. As accessibility to AI varies, it should not be assumed that all learners have similar capabilities in using ChatGPT in academic writing. Here comes the need for awareness of digital skill variability among students. Educational institutions and curriculum designers should provide training in responsible use, including prompt writing skills (Carlini et al., 2025), promote academic integrity, and ensure that all students have access to the necessary tools. Integrating ChatGPT into curricula should focus on utilizing AI to support, rather than replace, traditional writing instruction.

7. Conclusion

Using ChatGPT as an AI-enabled tool in EFL writing is no longer an exception in the context of this study. Whereas the learners in the study found it useful for the writing mechanism, its impact on motivation and higher-order writing skills is still an issue that warrants more empirical research. Learners’ background in digital skills, discipline, and gender plays an important role in engaging with AI. For effective integration of ChatGPT, it should not be a substitute for human instruction. It should be treated as a complementary resource that enhances learner autonomy and technology-enhanced support to compensate for the shortcomings of formal instruction, such as the limited exposure to the target language, among other aspects of language learning.

It is important to note that the study has some limitations that should be considered when interpreting the findings. The convenience sampling technique is one of the limitations that limit the generalizability of the results. Also, the gender imbalance in the sample may have influenced the results in areas where gender differences were statistically significant. Despite these limitations, the study raises important questions for further investigations. The long-term impact of ChatGPT on writing abilities remains an area that requires a longitudinal study to measure the long-term effect of AI tools on EFL writing. A longitudinal research design is beneficial for ascertaining how the sustained use of ChatGPT impacts learners’ writing over time. Future research may also aim for more balanced gender representation to showcase the correlation between gender and engagement with AI tools. Last but not least, the study focused on writing skills, which means the findings are not necessarily applicable to the other language skills, and this gives way to further studies on the effectiveness of ChatGPT on reading, speaking, and listening, to have a broader understanding of the impact of AI tools on foreign language learning in general.

Acknowledgments

The authors are thankful to the Deanship of Graduate Studies and Scientific Research at the University of Bisha for supporting this work through the Fast-Track Research Support Program.

Author contributions

Dr. Abdulrahman Ali Alqahtani was responsible for writing the introduction and literature review. Dr. Ghazwan Mohammed Saeed Mohammed was responsible for data collection, data analysis and interpretation, and writing the discussion. All authors read and approved the final manuscript.

Funding

Not applicable

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

References

- Ahmed, R., Al-Kadi, A., & Namusiginyi, B. (2026). Generative AI and redefining scope of language curriculum: TESOL educators' voices. In B. Al-Sowaidi & T. Mohammed (Eds.), *Human-AI collaboration and the evolving role of educators* (pp. 251-270). IGI Global. <https://doi.org/10.4018/979-8-3373-4521-5.ch009>
- Ali, J. K. M. (2023). Benefits and challenges of using ChatGPT: An exploratory study on the English language program. *University of Bisha Journal for Humanities*, 2(2), 629-641.
- Aljasser, A. (2025). Investigating EFL students' perceptions of feedback: A comparative study of instructors and ChatGPT-generated responses in academic writing. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-025-13649-8>
- Al-kadi, A. (2025). Fostering a 'human with AI' approach for evaluating students' writing. *Studies in Linguistics, Culture, and FLT*, 13(1), 140-159. <https://doi.org/10.46687/VFBZ9792>
- Al-kadi, A., & Rød, A. (2025). Sustainable language education through multimodality, DEI, and AI integration. Proceedings of UiB Learning Conference, October 17, Bergen, Norway.
- Almahboob, T. (2025). Exploring the impact of AI technologies on EFL writing proficiency. *Forum for Linguistic Studies*, 7(7), 270-282. <https://doi.org/10.30564/fls.v7i7.9952>
- Almaktary, H., & Al-kadi, A. (2017). CALL in the post-method era. *Indonesian Journal of EFL and Linguistics*, 2(2), 133-146. <https://doi.org/10.21462/ijefll.v2i2.33>
- Alqahtani, A. A. (2024). Using technology to assist in EFL vocabulary acquisition and reading comprehension. *English Language Teaching*, 17(4), 70. <https://doi.org/10.5539/elt.v17n4p70>
- Alqahtani, A., & Alqahtani, A. (2024). The effectiveness of using Grammarly to improve Saudi students' academic writing skills. *Journal of Research in Language & Translation*, 4(2), 84-102. <https://doi.org/10.33948/JRLT-KSU-4-2-5>
- Al-Raimi, M., Mudhsh, B. A., Al-Yafaei, Y., & Al-Maashani, S. (2024). Utilizing artificial intelligence tools for improving writing skills: Exploring Omani EFL learners' perspectives. *Forum for Linguistic Studies*, 6(2), 1177. <https://doi.org/10.59400/fls.v6i2.1177>
- Alsaedi, N. (2024). ChatGPT and EFL/ESL writing: A systematic review of advantages and challenges. *English Language Teaching*, 17(5), 41-56. <https://doi.org/10.5539/elt.v17n5p41>
- Alshammri, A. (2024). ChatGPT in English writing: Experiences and perceptions of Saudi EFL students. *Amazonia Investiga*, 13(78), 47-57. <https://doi.org/10.34069/AI/2024.78.06.4>

- Alwasidi, M. A., & Al-Khalifah, K. S. (2025). Assessing the impact of ChatGPT on EFL students' writing productivity and proficiency. *Journal of Language Teaching and Research*, 16(3), 986-995. <https://doi.org/10.17507/jltr.1603.29>
- Amoush, K. H., & Alhosban, A. A. (2025). Mastering EFL writing with ChatGPT: A systematic review of benefits, challenges, and best practices. *Theory and Practice in Language Studies*, 15(8), 2576-2583. <https://doi.org/10.17507/tpls.1508.14>
- Amyatun, R. L., & Kholis, A. (2023). Can artificial intelligence (AI) like QuillBot assist students' writing skills? *ELE Reviews: English Language Education Reviews*, 3(2), 135-154. <https://doi.org/10.22515/elereviews.v3i2.7533>
- Apriani, E., Hamidah Daulay, S., Aprilia, F., Marzuki, A. G., Warsah, I., Supardan, D., & Muthmainnah, (2025). A mixed-method study on the effectiveness of using ChatGPT in academic writing and students' perceived experiences. *Journal of Language and Education*, 11(1), 26-45. <https://doi.org/10.17323/jle.2025.17913>
- Carlini Versini, D., Huang, J., Polo-Perez, N., & Zaher, A. (2025). Developing writing skills and feedback in foreign language education with ChatGPT: a multilingual perspective. *Language Learning in Higher Education*, 15(2), 463-483. <https://doi.org/10.1515/cercles-2024-0102>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Ghorbandordinejad, F., & Kenshinbay, T. (2024). Exploring AI-driven adaptive feedback in the second language writing skills prompt. *Journal of Effective Teaching Methods*, 2(3). <https://doi.org/10.30998/scope.v7i2.14882>
- Huang, J. (2023). Engineering ChatGPT prompts for EFL writing classes. *International Journal of TESOL Studies*, 5(4), 73-79.
- Jmaiel, H. A., Abukhait, R. O., Mohamed, A. M., Shaaban, T. S., Alkhresheh, M. H., & AlQadri, A. H. (2025). The role of ChatGPT in enhancing EFL students' ESP writing skills: An experimental study of gender and major differences. *Discover Education*, 4, 240. <https://doi.org/10.1007/s44217-025-00700-6>
- Karagoz, I. (2025). AI-generated feedback in English writing instruction for language learners: A systematic review. *The Reading Matrix*, 25(1), 51-67. Retrieved from <https://www.readingmatrix.com/files/34-9gp90gjo.pdf>
- Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press.
- Lee, Y. J., Davis, R. O., & Lee, S. O. (2024). University students' perceptions of artificial intelligence-based tools for English writing courses. *Online Journal of Communication and Media Technologies*, 14(1), e202412. <https://doi.org/10.30935/ojcm/14195>
- Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413-468). Academic Press. <https://doi.org/10.1016/B978-012589042-7/50015-3>
- Mali, Y. C. G. (2025). Exploring the use of ChatGPT in EFL/ESL writing classrooms: A systematic literature review. *Journal of Language and Education*, 11(2), 137-156. <https://doi.org/10.17323/jle.2025.21793>
- Mohammed, A. Q., Al-ghazali, A., & Khalid A. S. Alqohfa. (2023). Exploring ChatGPT uses in higher studies: A case study of Arab postgraduates in India. *Journal of English Studies in Arabia Felix*, 2(2), 9-17. <https://doi.org/10.56540/jesaf.v2i2.55>
- Othman, A. K. A. (2025). EFL students' perceptions on using ChatGPT as an AI tool for developing academic writing skills: A case study at University College of Haql. *Journal of Curriculum and Teaching*, 14(3), 18-32. <https://doi.org/10.5430/jct.v14n3p18>
- Pitychoutis, K. M. (2024). Harnessing AI chatbots for EFL essay writing: A paradigm shift in language pedagogy. Arab World English Journal (AWEJ) Special Issue on ChatGPT. 197-209. <https://doi.org/10.31235/osf.io/xrvth>
- Pokrivcakova, S. (2019). Preparing teachers for AI-powered technologies in foreign language education. *Journal of Language and Cultural Education*, 7(3), 135-153. <https://doi.org/10.2478/jolace-2019-0025>
- Royani, I., & Sihombing, M. R. (2024). ChatGPT in the academic writing classroom. *ESTEEM*, 7(2). <https://doi.org/10.31851/esteem.v7i2.15615>
- Salwa, A., & Tyas, N. (2024). Exploring students' perception of EFL on the use of ChatGPT to complete the English writing task. *Berumpun: Journal of Social, Politics, and Humanities*, 7(1), 80-92. <https://doi.org/10.33019/berumpun.v7i1.186>
- Schofield, L., & Zhou, X. (2025). AI-assisted writing and editing. In X. Zhou & H. Al-Samarraie (Eds.), *Institutional guide to using AI for research* (pp. 149-165). Springer, Cham. https://doi.org/10.1007/978-3-031-94809-1_7
- Selim, A. S. M. (2024). The transformative impact of AI-powered tools on academic writing: Perspectives of EFL university students. *International Journal of English Linguistics*, 14(1), 14-30. <https://doi.org/10.5539/ijel.v14n1p14>
- Song, C., & Song, Y. (2023). Enhancing academic writing skills and motivation: Assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in Psychology*, 14, 1260843. <https://doi.org/10.3389/fpsyg.2023.1260843>
- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235-253). Newbury House.
- Syahnaz, M., & Fithriani, R. (2023). Utilizing artificial intelligence-based paraphrasing tool in EFL writing class: A focus on Indonesian

- university students' perceptions. *SCOPE: Journal of English Language Teaching*, 7(2), 210-218.
<https://doi.org/10.30998/scope.v7i2.14882>
- Teng, M. F., & Huang, J. (2025). Incorporating ChatGPT for EFL writing and its effects on writing engagement. *International Journal of Computer-Assisted Language Learning and Teaching*, 15(1), 1-21. <https://doi.org/10.4018/IJCALLT.367874>
- Tseng, W., & Warschauer, M. (2023). Prompt engineering in EFL writing classrooms: Crafting effective prompts for ChatGPT. *International Journal of TESOL Studies*.
- Valizadeh, M. (2022). The effect of comprehensive written corrective feedback on EFL learners' written syntactic complexity. *Journal of Language and Education*, 8(1), 196-208. <https://doi.org/10.17323/jle.2022.12052>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wang, L., & Hu, X. (2020). The role of AI in English teaching: Current applications and future directions. *International Journal of Artificial Intelligence in Education*, 30(4), 688-706.
- Wei, P., Wang, X., & Dong, H. (2023). The impact of automated writing evaluation on second language writing skills of Chinese EFL learners: A randomized controlled trial. *Frontiers in Psychology*, 14, 1249991. <https://doi.org/10.3389/fpsyg.2023.1249991>
- Winans, M. D. (2021). Grammarly's tone detector: Helping students write pragmatically appropriate texts. *RELC Journal*, 52(2), 348-352. <https://doi.org/10.1177/00336882211010506>
- Xiao, Y., & Zhi, Y. (2023). An Exploratory Study of EFL Learners' Use of ChatGPT for Language Learning Tasks: Experience and Perceptions. *Languages*, 8(3), 212. <https://doi.org/10.3390/languages8030212>