| **RESEARCH ARTICLE**

The Role of ChatGPT in EFL Research-Paper Writing: BA and MA Students' Use and Perceptions

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| **ABSTRACT**

This study, the second part of a wider examination of the role of ChatGPT in English as a Foreign Language (EFL), investigates its benefits in research-paper writing among female EFL Bachelor's (BA) and Master's (MA) students in Saudi Arabia (SA). The study used mixed-method research through the utilization of a questionnaire that was administered to 26 BA and nine MA students and then complemented by follow-up interviews. The results indicated that ChatGPT is perceived to be valuable in research writing for both BA and MA students, for generating ideas or topics, structuring the paper, checking grammatical mistakes, paraphrasing and summarizing, drafting research-paper sections, analyzing data, and citing and referencing. While the use of ChatGPT among BA students is very high, the use among MA students indicates more careful and advanced use. Furthermore, BA students' use of ChatGPT generally shows a broad and positive, albeit slightly dependent, attitude, whereas MA students' use reflects a more selective and more positive attitude. BA students mainly used ChatGPT for general tasks, like idea generation, paraphrasing, grammar checking, and drafting, viewing it as a helpful and time-saving tool. On the other hand, MA students mostly used it for outlining and refining their work, viewing it as an advanced supportive tool that enhances research quality and critical thinking. Limitations to accurate output, factual information, and ethical use were amongst the most common challenges voiced by both groups. The findings indicate that training is necessary to ensure ChatGPT is integrated effectively and used efficiently, ethically, and in ways that uphold academic integrity.

| **KEYWORDS**

ChatGPT; Writing research; Constructivist Learning Theory; Purposes of use

| **ARTICLE INFORMATION**

1. Introduction

With the current era of educational innovation, the increasing prominence of artificial intelligence (AI) presents both challenges and opportunities for students engaged in research writing. Constraints related to time, restricted access to pertinent resources, and insufficient academic support frequently hinder students, especially non-native speakers of English, from fully realizing the potential benefits afforded by such technological tools. Although there are now an abundance of AI tools available, students often encounter difficulties in exploiting them effectively, due to common concerns regarding ethical considerations, plagiarism, and also limited awareness of the potential advantages these tools may offer within the context of academic research. These factors, in turn, hinder the utilization of AI in research-based writing tasks.

Moreover, the increasing availability of AI tools underscores the need for universities to provide students with essential training, knowledge, and guidelines that enable them to use the tools effectively and ethically. This is particularly important in research-writing courses, where students commonly face difficulties in generating ideas, organizing information, utilizing proper research methodology, and analysis. Tools such as ChatGPT can, in this context, support students through various means, including the generation of ideas, assistance with data analysis, and the improvement of clarity and coherence in their writing. Previous

studies (e.g. Dewi, 2022; Mohammad et al., 2024) have shown that many students have had positive experiences when utilizing similar tools, such as Grammarly and Quillbot, to refine their writing and enhance the quality of their academic writing.

While existing literature provides valuable insights into the general application of AI tools within English language learning and teaching, there is still limited empirical research specifically addressing the benefits and challenges associated with the use of ChatGPT in the context of research writing. In particular, limited attention has been given to the ways in which EFL BA and MA students perceive the usefulness and challenges of ChatGPT in research writing. Consequently, this study aims to address this gap by examining the role that ChatGPT plays in assisting EFL BA and MA students in their research-writing courses. Overall, it is hoped that this investigation will provide a better understanding of how EFL students use ChatGPT to support its effective integration into EFL research writing.

2. Literature review

2.1 Theoretical Framework

The integration of ChatGPT into research writing draws upon a number of established theories within the field of language teaching and learning. Of particular relevance to the current study is Constructivist Learning Theory, which offers insights into the ways in which ChatGPT may support EFL learners in research writing.

The Constructivist Learning Theory includes both Piaget's (1953) cognitive development theory and Vygotsky's (1978) sociocultural theory. Within this framework, learning occurs through active constructive process when students use cognitive tools to interact with their social environment (Fosnot, 2005). Knowledge is not passively received; rather, it is actively constructed as learners interact with cognitive tools and their surroundings (Nassaji & Cumming, 2000). In this context, students can use ChatGPT to conduct structured experiments which will help them understand their learning process and improve their academic and language abilities.

The constructs of the Zone of Proximal Development (ZPD) and scaffolding are especially relevant in conceptualizing ChatGPT's pedagogic value. ChatGPT can help EFL learners bridge the gap between their current level and their potential level under guidance, by acting as a More Knowledgeable Other (MKO) (Jingxin and Razali, 2020; Rasul et al., 2023). For example, students who experience difficulties in generating and organizing ideas, making their arguments stronger, or making their sentences more accurate, may consult the tool for outlining, phrasing, or checking accuracy. This kind of scaffolding promotes autonomy by encouraging students to compare, reflect, and revise. Such a process will in turn help students internalize writing strategies and gradually reduce reliance on external guidance, thus becoming more self-directed in their approach to research writing.

Furthermore, as noted by Ferguson et al. (2022), the use of AI tools such as ChatGPT can assist learners in managing cognitive load by automating lower-level tasks, such as restructuring or replacing words, allowing them to focus on higher tasks such as developing arguments and synthesizing evidence. Such assistance aligns closely with the constructivist emphasis on problem-solving, and active, meaningful engagement with content.

Based on this theoretical perspective, this study examines how ChatGPT can assist Saudi EFL students to structure and organize ideas and improve the overall quality of their research writing. ChatGPT operates within students' Zone of Proximal Development, providing them with guided feedback that encourages them to think independently and to actively engage in academic writing tasks. Moreover, ChatGPT's effectiveness depends on how students interact with the tool and whether they are able to apply their AI literacy skills and critically assess its outputs.

2.2. ChatGPT in Academic Research Writing

The application of ChatGPT in academic contexts has been increasingly associated with a range of pedagogical benefits, particularly for EFL students engaged in research writing. Existing studies demonstrate that ChatGPT supports the development of essential academic writing skills, including idea generation, organization, paraphrasing and summarizing, grammar, and learners' critical self-evaluation. However, to ensure that ChatGPT is integrated effectively, it is essential to address any ethical concerns the students might encounter.

One of the acknowledged advantages of using ChatGPT in writing is its potential to facilitate idea generation by offering immediate, context-specific prompts and alternative perspectives. For instance, Tseng and Lin (2024) found that the use of ChatGPT in a university-level English as a Foreign Language (EFL) writing course accelerated the writing process by providing immediate generation of content ideas and enhanced cohesive organization, guiding students to structure their thoughts more logically. Acting as an alternative to traditional peer review, ChatGPT offered constructive and useful feedback that students could apply to

improve their drafts. Such use fostered critical thinking and empowered learners to take an active role in the writing process, rather than just being passive recipients of knowledge. Similarly, when investigating how upper-intermediate EFL participants with over ten years of English learning experience collaborated with ChatGPT during an argumentative-writing task, Huang and Wang (2025) noticed that ChatGPT served as an alternative virtual collaborator that helped students generate ideas by offering topics, arguments, and examples, and assisted learners in finding relevant evidence.

Research also shows that ChatGPT can improve text organization and coherence. For example, in a study of 48 EFL students who participated in a genre-based writing program over six weeks and completed writing tests before and after the program, Tai et al. (2025) discovered that students' writing structure improved after instruction, including the presentation of claims, evidence, and counterarguments. The students acknowledged that ChatGPT was valuable for forming and organizing ideas, which made them feel more confident and competent when using the language. Similarly, a study of EFL learners in Thailand and Vietnam by Meniado et al. (2024) found that students who engaged with ChatGPT in lessons were able to organize their ideas and written arguments more clearly and logically.

Another advantage of using ChatGPT in writing is its potential to improve paraphrasing skills among EFL students. Previous studies have explored ChatGPT's ability to assist EFL students in rephrasing and rewriting content without changing the core meaning. Cheng (2023), for instance, studied the role of ChatGPT alongside online resources in a guided paraphrasing course that ran for more than four months. Findings indicated significant improvements in students' ability to produce accurate paraphrasing and to select suitable vocabulary. Students used ChatGPT to find synonyms and restructure sentences effectively.

In a similar vein, Ho (2023, p.85) investigated how ChatGPT can help ESL students by offering clear examples and constructive feedback. The study demonstrated ChatGPT's efficacy by acting as "virtual paraphrase tutor" through providing students with clear paraphrasing techniques and demonstrative examples. In particular, ChatGPT was shown to deliver clear explanations, examples of both successful and unsuccessful paraphrases, and help students refine their initial paraphrased drafts through various prompts. The study highlights that ChatGPT can help students improve their paraphrasing skills when used as a supplementary tool.

The use of ChatGPT has also been associated with the development of grammar and learners' critical self-evaluation. For instance, Xiao and Zhi (2023) found that ChatGPT functioned as a pedagogical support tool that assisted students to reflect on their linguistic choices and revise their work based on the feedback provided. Such interaction with the tool allowed learners to assess the relevance of feedback, revise accordingly, and gradually develop more critical and self-regulated writing behaviors. Likewise, Su et al. (2023) observed that ChatGPT assisted learners in argumentative writing by helping them to improve their reasoning and critically evaluate the strength and clarity of their arguments themselves. Moreover, Diasamidze and Tedoradze (2024) found that intermediate-level ESL students who used ChatGPT for drafting and revising improved their writing scores by 6%, compared to a 3% increase in the control group. The students' progress was particularly evident in grammar, vocabulary, and text organization. They were also able to express themselves more clearly and accurately. ChatGPT's prompt feedback and personalized learning support thus contributed to a significant improvement in the quality of assignments. ChatGPT supported students' self-regulation by promoting goal-setting, reflection, and time management. By addressing simple queries and providing immediate, non-judgmental feedback, ChatGPT also helped reduce writing-related anxiety, particularly among EFL learners who might have difficulties correcting their grammatical mistakes.

2.3 Challenges and Concerns

Although previous studies have demonstrated that ChatGPT has many benefits as an educational tool, they have also raised concerns about its use in academic writing, including input quality, students' overdependence, and challenges related to originality and maintaining academic integrity. Ho (2023) observed that ChatGPT sometimes produces awkward or inaccurate responses, emphasizing the need for students to review its output carefully. When students accept ChatGPT's responses without critically considering and adapting them, there is a significant risk of 'patchwriting', a type of close paraphrasing that poses a risk of plagiarism (Ho, 2023). Moreover, unclear or poorly phrased prompts from the user (Korucu-Kış, 2024) or ChatGPT's difficulty in handling long or complex responses without mistakes (Huang & Wang, 2025) may also lead to unexpected or awkward results.

A recurring concern in earlier studies is that students may become too dependent on ChatGPT and lose the ability to think critically for themselves (e.g. Tai et al., 2025, Xiao and Zhi, 2023). Algraini (2020) warned that undergraduates, in particular, risk relying too heavily on ChatGPT, which could potentially hinder the development of their own writing skills. Similar views were expressed by Rahma and Fithriani (2024), whose study found that teachers were concerned about students using the tool incorrectly without adequate training, although they appreciated ChatGPT's effectiveness in correcting language and helping students develop ideas. Consequently, students should be encouraged to be critical when adopting ChatGPT's outputs (Xiao and Zhi, 2023). Alqahtani (2024) further emphasized that ChatGPT is most effective when used as a support tool, not as a replacement

for students' own independent thinking and creativity. Therefore, it is essential that students are given clear instructions about how to use ChatGPT purposefully and ethically, ensuring that they learn to think for themselves rather than depending on the tool.

Insights from previous research on AI literacy provide valuable guidance for ChatGPT's effective integration (Pandey & Bhusal, 2024; Warschauer et al., 2023). Warschauer et al. (2023, p. 4) describe AI literacy as "a newly emerged but critical aspect of literacy skills that is necessary for L2 writers to effectively navigate and integrate AI technologies into their writing tasks." They proposed a framework known as "UAPCI," consisting of five different elements: Understand, Access, Prompt, Corroborate, and Incorporate. This is designed to help students write independently without AI and also to use the tool in an informed and ethical way. Additionally, Pandey and Bhusal (2024) stress that, in order to integrate ChatGPT successfully, it is important that students develop practical skills, such as providing clear prompts, setting clear parameters, and adapting outputs to align with academic standards. They analyzed 23 academic texts generated using AI, and the results demonstrated that ChatGPT can produce writing that is coherent and appropriate for academic use when students apply such skills effectively. This highlights the importance of the tutor's role in fostering students' AI skills and in guiding them to use AI tools ethically and autonomously.

To conclude, recent studies indicate that ChatGPT can support EFL students in improving many elements of their research writing, particularly their ability to paraphrase accurately, write more fluently, organize their ideas effectively, and self-evaluate. However, ChatGPT is most beneficial when used thoughtfully and when supported by clear instructions and guidance.

3. Methodology

3.1. The aim of the study

Building on the previous review, this study aims to answer the following research questions:
1. What is the current use of ChatGPT in research-paper writing among Saudi female EFL BA and MA students?
2. What are the purposes of using ChatGPT in research-paper writing?
3. What are the students' perceptions, perceived limitations, and recommendations of using ChatGPT in research-paper writing?

To achieve the goal, the current study employed a mixed-methods approach, similar to the first part of the study (Aljohani, 2024), following a sequential explanatory design, in which quantitative data was collected first, followed by qualitative data for in-depth investigation (Creswell & Plano Clark, 2011).

3.2. Participants and the context

The study was conducted between May 2024 and August 2024. The number of participants was 26 Bachelor's and nine Master's students enrolled in the Applied Linguistics program at a university in Saudi Arabia.

3.3. Design and procedure

The first part of the study involved distributing questionnaires to the participants to gather data on how frequently they use ChatGPT in their research writing and whether they think it is a useful tool. The questionnaires investigated specific ways in which ChatGPT assists students with tasks, such as developing ideas, structuring content, and improving the language of their research papers.

Within the sequential explanatory design, the study used a follow-up explanatory model. Following the collection of quantitative data to identify any emerging trends and patterns, a qualitative phase was conducted for context and deeper insight into those findings. Qualitative data were obtained through open-ended responses to the questionnaires, followed by semi-structured interviews with a purposively selected subsample of 10 BA and four MA students who had great familiarity with ChatGPT and relied on it most frequently for various purposes. This provided a clearer understanding of the quantitative results and revealed the subtle and varied ways in which students use ChatGPT in their research-paper writing, their reliance on the tool, and the challenges they face when integrating it into their academic work.

The research followed ethical guidelines. Participation was voluntary for students, and anonymity was ensured, allowing for honest answers. The participants were also informed that they could withdraw from the study at any time without facing any repercussions.

Furthermore, to ensure that the questionnaire and interview data aligned with the study's objectives, an expert carefully reviewed the content and construct validity. Furthermore, items about students' perceived value on ChatGPT's usefulness, effectiveness, and satisfaction were highly reliable ($\alpha = 0.86$).

Overall, by combining both quantitative and qualitative data and using sequential explanatory design, the research highlights the ways in which students use the tool in research writing and their perceived usefulness. By implementing these ethical standards and a structured research design, the study maintained the reliability of the results and the integrity of the data.

4. Findings and discussion

4.1 The Use of ChatGPT in Writing Research Papers

Participants were asked whether they use ChatGPT to help them with writing their research papers. As can be seen in Figure 1, while all MA students indicated that they use ChatGPT for research-paper assistance, the majority of BA students (84.62%) used ChatGPT for this purpose. This indicates that students recognize the value of ChatGPT in assisting them with various research-paper writing tasks, such as generating ideas, paraphrasing and summarizing content, organizing content, and improving clarity and coherence. However, the variation in percentage between the two groups could be because MA students are involved in courses that require research writing, with multiple research papers to submit. Also, as students at this stage are expected to demonstrate advanced writing abilities and critical thinking, ChatGPT appears to play a more central role in MA students' writing tasks.
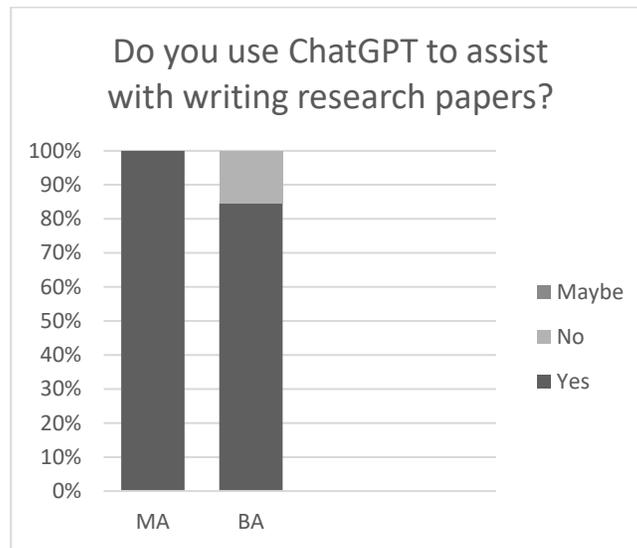

Figure 1. The use of ChatGPT in writing research papers

Only a minority of BA students (four students) indicated that they do not use ChatGPT for writing research papers, which might be connected to their unfamiliarity with ChatGPT's capabilities in research writing, or a preference for more traditional academic writing methods.

Overall, the results indicate that both BA and MA students recognize the usefulness of ChatGPT in research writing, with MA students relying on it more. The following provides greater detail of such use.

4.2 Purpose of Use

When asked about the purpose of using ChatGPT for research writing, students reported that ChatGPT is most useful in areas related to idea generation, paper structure, paraphrasing, grammar correction, and drafting research paper sections (see Table 1) as will be explained in the following sections.

Table 1. Purpose of using ChatGPT for research writing

Main Purpose: BA Students (n=22) MA Students (n=9)	Detailed Function	BA Number of Students / Percentage	MA Number of Students / Percentage
1.Generating Ideas or Topics 22 BA (100%), 9 MA (100%)	Exploring different angles for a chosen topic.	14 (63.6%)	3 (33.3%)
	Brainstorming new research topics.	8 (36.4%)	5 (55.6%)
	Both brainstorming & exploring.	0 (0%)	1 (11.1%)
2.Structuring the Paper	Organizing sections logically	19 (86.4%)	4 (50%)

22 BA (100%) 8 MA (88.9%)	Developing an outline	3 (13.6%)	4 (50%)
3.Grammar and Spelling Correction 22 BA (100%) 7 MA (77.8%)	Improving sentence structure. Identifying & correcting grammatical errors.	13 (59.1%) 9 (40.9%)	1 (14.3%) 6 (85.7%)
4.Paraphrasing and Summarizing Information 21 BA (95.5%) 7 MA (77.8%)	Summarizing lengthy articles / research findings. Rewriting for clarity or style.	12 (54.5%) 9 (40.9%)	4 (57.1%) 3 (42.9%)
5. Drafting Research Paper Sections 22 BA (100%) 6 MA (66.7%)	Expanding bullet points into full paragraphs. Developing thesis statements. Writing introductions and conclusions. Using all listed drafting options.	8 (36.4%) 9 (40.9%) 5 (22.7%) 0 (0%)	1 (16.7%) 3 (50%) 1 (16.7%) 1 (16.7%)
6. Analysing Data 8 BA (37.5%) 7 MA (77.8%)	Using ChatGPT for analytical guidance or interpretation.	8 (37.5%)	7 (77.8%)
7. Citing and Referencing 14 BA (63.6%) 1 MA (11.1%)	Formatting references (APA, MLA, etc.). Creating bibliographies.	10 (71.4%) 4 (28.6%)	1 (100%) 0 (0%)

4.2.1 Generating Ideas or Topics

Generating ideas or topics for research writing was the most reported benefit by all students in both groups (see Table 1). More than half of the BA students indicated that they used ChatGPT to explore different angles within an already chosen topic (63.6%), while a smaller number used it to brainstorm possible research topics (36.4%). Such results were not surprising, because BA students were given a list of topics they could choose from, since this was their first time doing research. In this case, they might only need to focus on exploring different angles, expanding arguments, or developing themes and sub-themes for their topics. With regard to MA students, over half used ChatGPT to brainstorm entirely new topics (55.6%), only one third (33.3%) used it to explore alternative angles within an existing topic, and one student reported doing both. One MA student stated:

> When using ChatGPT a lot to doing your research, It will make your mind full of many ideas about everything related to your research. And when you research it could be easy to find the gaps and research question. It's really helpful.

Overall, BA students tend to develop their chosen topics further with ChatGPT, whereas MA students focus more often on generating new topics for research. This distinction also likely reflects the differing academic expectations, where undergraduate research is often conducted within established frameworks or guided themes, while postgraduate work requires originality and specificity from the outset.

Such results also echoed previous research that emphasized the effectiveness of ChatGPT for idea generation (Chatti, 2024; Tai et al., 2025). Chatti (2024) commented that ChatGPT can act "as an idea generator into the EFL writing realm" (p. 6). Most of the EFL MA students were able to add one idea in the post-test compared to the pre-test, which proved the efficiency and potential of ChatGPT to enhance students' writing creativity (Chatti, 2024).

4.2.2 Structuring the Paper

The second most commonly reported function of ChatGPT in research writing was structuring research papers, as stated by all BA students and 88.9% of MA students, as can be seen in Table 1. This indicates that students at both levels recognize the importance of organization in academic writing, with ChatGPT supporting planning and later refinement to ensure a logical flow.

Among BA students, organizing sections logically was the most frequently reported function (86.4%). This suggests that BA students often turn to ChatGPT to improve coherence by linking together the main arguments in each paragraph and maintaining a consistent progression of ideas. One BA student explained:

I sometimes lose track and flow in my writing. ChatGPT can help me reorganise my sentences, so it makes sense.

By contrast, 13.6% of BA students used ChatGPT to develop an outline at the start. MA students showed, on the other hand, a more balanced pattern where half of them used ChatGPT to develop an outline and the other half to organize sections logically. The relatively high use for outlining at the postgraduate level likely reflects the greater complexity of graduate research, where a clear framework from the beginning is essential. One MA student stated:

For me, it's very useful in the planning stage. I want the structure and the plan to be clear before I even start drafting.

This indicated ChatGPT's effectiveness in aiding the logical structuring of students' papers. Previous studies noted similar results when comparing students' outlines with and without ChatGPT's assistance, and found that ChatGPT helps enhance logical structure and the content of student writing (Xu et al, 2024).

4.2.3 Correcting and Checking Grammar

Grammar and spelling checks were also among the most frequent uses of ChatGPT. All BA students who used ChatGPT for research reported using it for grammar/spelling checking, while 77.8% of MA students did so. Among BA students, 59.1% used ChatGPT to improve sentence structure, and 40.9% to identify and correct grammatical errors. Among MA students, 85.7% used it for identifying and correcting grammatical errors. This suggests that BA students tend to use ChatGPT for both style and grammar, while MA students mainly use it for grammatical precision. Such usage may be partly due to ChatGPT's ability to provide an easier and quicker way to check grammar, offering direct corrections rather than only suggestions, as with Grammarly, or even rephrasing, as with QuillBot. Also, the fact that only one MA student used ChatGPT for improving sentence structure may be due to fears surrounding ethical usage. She commented:

I use ChatGPT to provide me when I feel my sentences sound too simple. It makes them read more smoothly.

So selective use suggests that MA students are more focused on accuracy than on broader syntactic clarity. These findings also resonate with the results of Diasamidze and Tedoradze's (2024) study (see Section 3.2), where ESL students used ChatGPT to rephrase complex structures, clarify ideas, and enhance academic style. The use of AI enabled learners to handle tasks more efficiently and saved time by providing them with immediate suggestions, allowing them to focus on main ideas and to manage multiple research papers and work commitments within tight deadlines.

4.2.4 Paraphrasing and Summarizing Information

Another function of ChatGPT in research writing was related to paraphrasing and summarizing information, which was mentioned by 95.5% of BA students and 77.8% of MA students, who stated they had used ChatGPT for one or both of these purposes. Given ChatGPT's ability to condense any length of research article, it is not surprising that students would turn to it for this purpose. Furthermore, as BA students might face some complex texts and have difficulties in paraphrasing certain structures, the use of ChatGPT can support them in overcoming this challenge, which justifies the higher usage rate among BA students compared to MA students.

The ways in which both groups use these features were also largely similar. For instance, a majority of both BA (54.5%) and MA students (57.1%) reported using ChatGPT to summarize lengthy texts, showing the potential of the tool to extract key ideas efficiently. The remaining students (40.9% of BA students and 42.9% of MA students) primarily used it to rewrite content for improved clarity and stylistic refinement. These findings indicate that students across both levels value ChatGPT for its capacity to enhance textual comprehension and streamline the revision process. This may be because ChatGPT can produce summarized text with one click, so students use it to save time and to focus on the key ideas without needing to read the entire text.

One BA student stated:

It saves my time. I don't have to read the whole thing. I can also upload several articles and ask ChatGPT to summarise it.

Similarly, an MA student mentioned:

As you know, we are required to write many research papers in a short time and I have a job. It is almost impossible to read many articles in different areas and understand them all. ChatGPT helps me a lot in understanding the results and deciding whether a certain research article is useful or not.

However, another student emphasized the importance of the prompts given to ChatGPT for an efficient reply:

The most important thing is to know what to write to ChatGPT. You need to be specific and ask for what exactly you want so it helps you a lot to keep asking until you both understand each other.

This reflects Pandey and Bhusal's (2024) observation that the usefulness of AI for paraphrasing and summarizing depends on the user's "AI literacies," such as prompting and qualifying (see also Section 2.3). Without the skills to adjust prompts and adapt outputs, the benefits reported in both studies could be significantly reduced.

4.2.5 Drafting Research-Paper Sections

All BA students who used ChatGPT for their research papers used it for drafting research-paper sections. However, only 66.7% of MA students used it for this purpose. The results revealed differences in how BA and MA students use ChatGPT. BA students reported using it to develop thesis statements (40.9%), to expand bullet points into full paragraphs (34.6%), and for assisting in writing introduction and conclusion sections (20%). This indicates the usefulness of the tool to help students bridge the transition from outline to full draft and to write a strong thesis statement. In these cases, ChatGPT acts almost like a writing bridge, helping students move from fragmented notes to cohesive, academically styled sections.

With regard to MA students, the results showed that half of them (50%) used ChatGPT to develop thesis statements, underlining the importance of identifying or ensuring that their thesis statement is clear and accurate. The rest used it to expand bullet points into paragraphs (16.7%) or to draft introductions and conclusions (16.7%), perhaps reflecting greater confidence in their own drafting ability. Interestingly, another 16.7% reported using ChatGPT for all the listed drafting tasks; a sign that for a small subset of postgraduates, the tool is fully embedded in their writing process.

Overall, BA students appear more likely to use ChatGPT as a drafting companion, especially when turning skeletal outlines into full prose or clarifying the central thesis. MA students use it less often at this stage, with a significant share opting to maintain full control over their drafts, a choice that may stem from the higher originality demands and stylistic expectations placed on postgraduate work.

4.2.6 Analyzing Data

This category showed a marked discrepancy between BA and MA students. Among BA students, only 37.5% stated that they used ChatGPT to help them analyze data, suggesting they either have a limited awareness about ChatGPT's capabilities for analyzing data, or they use Sketch Engine for this purpose instead. This may be because advanced interpretation was not required, or because many of the BA students were corpus-based and considered Sketch Engine to be sufficient and further analysis unnecessary.

Conversely, 77.8% of MA students stated that they used ChatGPT for this purpose, which may reflect either a greater need for the tool among postgraduates or a stronger awareness of its potential.

4.2.7 Citing and Referencing

Similarly, citation and referencing showed a clear divergence between the two groups, as 63.6% of BA students reported using ChatGPT for citation guidance compared to only 11.1% of MA students, making it one of the least common uses for the tool (see Table 1). However, despite the low usage for this purpose, both groups used citation-related features in noticeably different ways. This suggests that students either do not completely trust the accuracy of ChatGPT for referencing, or they prefer other specialized citation tools, such as Zotero, Mendeley, or EndNote. This reluctance may also stem from uncertainty about how to prompt ChatGPT to format references correctly, or from concerns about mistakes and inconsistencies that could affect the quality of their work.

Among BA students, formatting references was the most common citation-related task (71.4%). This underlines the fact that undergraduates may find it difficult to comprehend citation rules, and highlights the importance of having a quick, accessible tool to help them ensure correct and consistent formatting. A smaller proportion (28.6%) used ChatGPT to create bibliographies.

MA students, on the other hand, showed a more selective approach. The students who indicated that they used ChatGPT for citation tasks reported only using it to format references but not to create bibliographies. It would be interesting to check such results after some time to observe whether their answers would change, knowing that ChatGPT can help with formatting.

In summary, the results indicate that BA students typically use ChatGPT for both smaller tasks (e.g., sentence structure and grammar) and larger tasks (e.g., organizing sections) when taken into account with the findings on paraphrasing, summarizing, and grammar checks. However, MA students appear to be more selective about how they use the tool, using it where they think it will be most beneficial. They concentrate on particular stages of the writing process, like final grammar checks or early outlining.

4.3 Perceived Value, Challenges, and Recommendations

4.3.1 Perceived Value in Research-Writing Skills

When participants were asked about the impact of ChatGPT on their research writing, most believed that ChatGPT had a positive impact on their research-writing skills, with more than 50% of BA students and 90% of MA students answering "yes," and no participants indicating "no" among both groups (see Figure 2). The rest of the participants (46.2% of BA students and 11.1% of MA students) selected "maybe," showing uncertainty about its impact. This may be related to their unfamiliarity with the features that ChatGPT can offer for research-paper writing.

Overall, these results show that, while both groups largely perceived the tool to have a positive impact, there is still some uncertainty, especially among BA students.
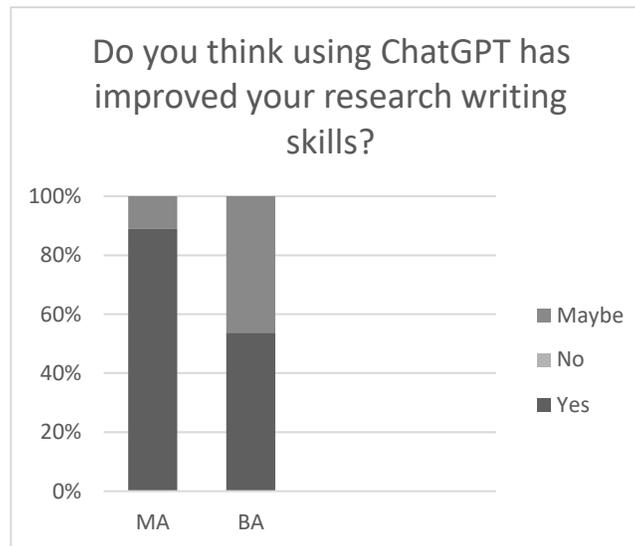

Figure 2. Perceived Impact of ChatGPT on Research Writing Skills

Students were also asked to rate how effective ChatGPT was in supporting their research on a five-point scale (Figure 3). Among BA students, almost half (42.3%) rated it as highly effective. Almost 25% rated it a 4, which suggests they saw value in it but also experienced some limitations. A further 23.1% rated it a 3, meaning they found it helpful in certain parts of their work but not all. Only one student (3.8%) rated it not effective at all, showing that very few found it unhelpful.

With regard to MA students, none rated ChatGPT below 4, with 77.8% rating it as highly effective, suggesting that they saw it as effective in almost all stages of their work, especially in more advanced tasks, such as refining arguments, improving clarity, and structuring complex content.

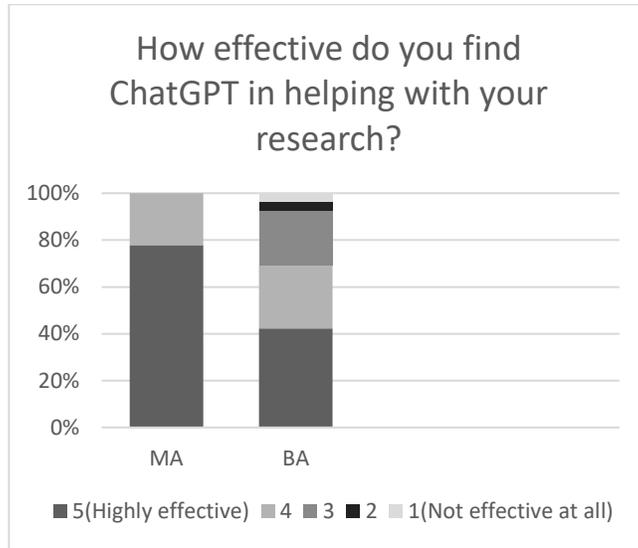## How effective do you find ChatGPT in helping with your research?

Figure 3. Perceived Effectiveness of ChatGPT in Supporting Research

A similar pattern was noticed in satisfaction ratings for research-paper writing, with 77% of BA students rating it as either highly satisfied or satisfied (30.8%) (Figure 4). Only a small group were less satisfied, with just 7.7% not satisfied at all. MA students again showed greater satisfaction, with 77.8% either highly satisfied or satisfied, and only 22.2% were neutral, rating it 3 (Figure 4).

Overall, both BA and MA students found ChatGPT useful. The differences underline MA students' positive experience when using ChatGPT, possibly due to the intensive research they have to undertake during the semester and the type of assistance ChatGPT offers.
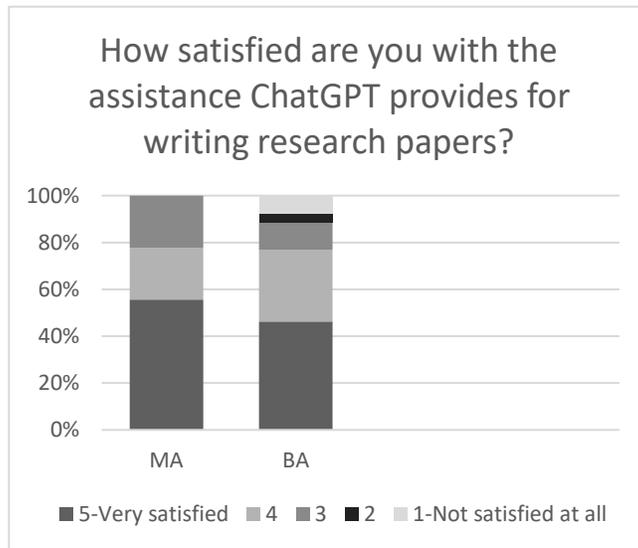
How satisfied are you with the assistance ChatGPT provides for writing research papers?

Figure 4. Satisfaction with ChatGPT's Assistance in Research Writing

4.3.2 Limitations and Challenges in Using ChatGPT

When students were asked about the challenges and limitations they faced while using ChatGPT in research writing, several students voiced concerns about its accuracy and ethical use. They commented that ChatGPT can produce errors or misinterpret prompts, possibly due to the large amount of data it has, which makes it necessary to check its outputs. Two BA students stated:

I think it's a great tool to use, but you can't rely on it completely; you still have to revise its results and double-check everything as it sometimes can make mistakes or misunderstand your input.

It needs to be updated with real and new information.

Similarly, MA participants expressed the same concern, emphasizing that the tool should supplement, rather than substitute, independent research. One MA student commented:

A researcher must not depend on it fully, since some of the information provided by ChatGPT is not very reliable. It can be used to refresh your mind.

Furthermore, a number of students highlighted the ethical issues and plagiarism concerns of using ChatGPT's output in generated content for academic work. Two MA students commented:

Very useful, but we need training, and most importantly, the ethical guidelines to ensure careful usage and clarify boundaries.

I mainly use it when I need to simplify a complicated source, but I usually write things myself to make sure it is not plagiarized and reflects my own understanding.

Such limitations and concerns were also echoed by previous research (see Section 2.3 for more details), which pointed to the need for verification and academic caution. While ChatGPT can offer substantial convenience and was generally seen as beneficial, its use must be accompanied by critical thinking and the user's own judgement.

4.3.3 Recommendations and Future Prospects

When asked whether they would recommend ChatGPT to other EFL students (Figure 5), 80.8% of BA students agreed, while the rest stated "maybe," with none stating "no." Among MA students, 88.9% recommended ChatGPT, and only one participant (11.1%) said "no.". This again shows high satisfaction with the tool. One BA student commented:

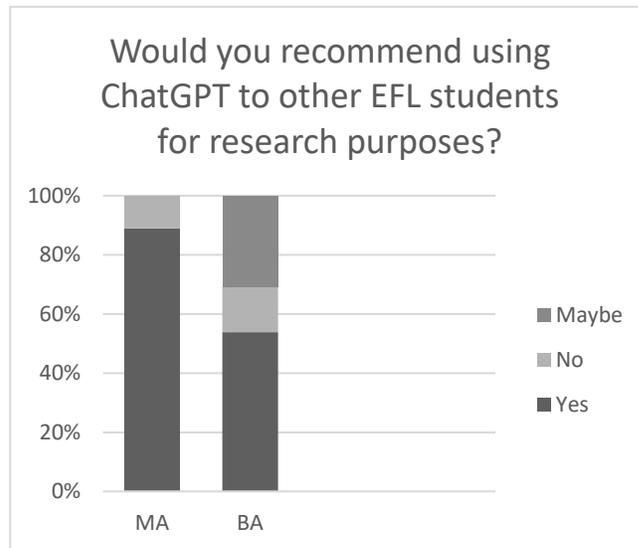It is so helpful and can shorten the time, especially when I feel stuck or unsure about what to do.

Figure 5. Recommendations for ChatGPT Use in Research

Participants were asked to suggest ways to improve ChatGPT and to consider how it could be used in future academic contexts. BA students frequently proposed ideas for practical enhancement, such as the provision of curated reading lists tailored

to different English proficiency levels, an increase in the range of topics covered, and the integration of voice-based features to support them when practicing pronunciation and speaking. One BA student proposed:

> Broadening its horizons to include research and studies... would help students outline a better experience.

Another student mentioned that ChatGPT could help students gain a clearer understanding of research topics. These suggestions reflect that students would like to see ChatGPT develop into a more versatile tool for academic support.

MA students, on the other hand, emphasized the importance of structured training, ethical guidance, and AI literacy. One participant stated:

> We need training, and most importantly the ethical guidelines and clear instruction about its use.

Another MA student noted how regular use of ChatGPT in research helped them refine their thinking:

> When using ChatGPT a lot for your research, it could be easy to find the gaps and research question.

In general, students stated that ChatGPT helped to save them time, overcome writer's block, and develop their ideas and understanding of research topics. BA students mostly used ChatGPT to support and inspire them, whereas MA students found the tool beneficial to help them determine the direction of their research and to improve their academic writing. These findings indicate that ChatGPT can serve as a useful tool for supporting EFL students in their academic writing, with the right guidance, training, and improvements in reliability and functionality.

Overall, the responses from both groups suggest that students consider ChatGPT to be a valuable academic writing tool, that it supports students' independent thinking rather than replaces it. However, as emphasized in past research, the students' comments also indicate that, if ChatGPT is to be seamlessly integrated into educational practices, clear training and policies are necessary for ethical use (see Section 2.3).

5. Study Limitations

The study is limited by its small and context-specific sample, as the focus was restricted to BA and MA female Saudi students, excluding other academic levels whose perspectives might have provided broader insights. Therefore, the findings cannot be generalized to a wider population. Being cross-sectional, it investigates students' views during a specific time, which may not reflect changes that could occur with longer-term experience, especially when referring to AI tools. Furthermore, the use of voluntary, self-reported data also carries the possibility of bias. In addition, some factors, such as AI literacy, over-reliance on AI, and institutional policies, were mentioned but not examined in detail. These limitations suggest the need for future research that includes larger and more diverse samples and that adopts longitudinal methods.

6. Conclusion and Implications

This paper examined the role ChatGPT plays in assisting research-paper writing for both BA and MA female Saudi EFL students. The main findings show that while both BA and MA students found ChatGPT useful for research writing in general, their usage and dependency on the tool differ according to their academic level. The results indicate that as students advance in their academic level, their usage shifts from requesting assistance with writing mechanics, such as structuring papers, drafting sections, and checking grammar, to seeking help with what to investigate, such as interpreting data and finding novel ideas. This suggests that BA students had a higher reliance on the tool for almost the entire process of research writing, as they use it as a holistic writing consultant for every stage of writing the paper. On the other hand, MA students employ the tool for more advanced and specific postgraduate requirements, which include research outline, topic novelty, and data analysis assistance. Overall, satisfaction with ChatGPT among MA students was high and positive, but more varied among BA students. However, while students perceived the value of this tool, they stressed the need to verify information, avoid dependency, and follow ethical principles.

The research findings yield two essential implications: first, educational institutions need to integrate AI literacy into academic programs that train both teachers and students on the appropriate and ethical use of ChatGPT and other AI tools, focusing on various skills such as precise prompting and adapting outputs to academic standards; second, the importance of instructor guidance to show proper use, use AI tools for initial drafting while maintaining critical revision, and reinforce ethical practice. As students can benefit from AI tools in research-writing, they need a thorough, detailed and clear ethical guidelines that help them integrate AI properly into their academic work. Future research could investigate the potential of ChatGPT across specific

disciplines, its impacts on learning outcomes in the long run, and whether training in explicit prompts can support students in improving organization, coherence, and the quality of their arguments.

Conflicts of Interest: The authors declare no conflict of interest.
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