

Unlocking the Future: EFL Students' Insights on Artificial Intelligences for Academic Writing

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Article Info

Article history:

Received Jun 3rd, 2024

Revised Nov 29th, 2024

Accepted Dec 10th, 2024

Keyword:

AI Technologies

Academic Writing

ChatGPT-App

English as a Foreign Language

Students Perception

ABSTRACT

Lately, the widely used and fiercely debated ChatGPT has attracted the interest of researchers, professors, lecturers, and administrators. Additionally, English as a Foreign Language (EFL) learners require AI feedback on scientific writing to improve their writing abilities. This quantitative study investigated Indonesian EFL learners' perceptions and challenges in a university English program using ChatGPT tools. This study investigated undergraduate students' viewpoints on using AI-powered ChatGPT tools in English academic writing. It focused on the main goal, results, and feedback to improve their second language writing skills. Data were collected from (n=80) students using questionnaires and semi-structured interviews to analyze their impressions. A survey was administered to EFL undergraduates in the English Language Education Study Program at Mataram State Islamic University, Indonesia. Writing ability was assessed online using Google Forms. However, students reported the advantages and difficulties of using ChatGPT for academic writing. These results demonstrate that AI-enabled digital tools can enhance student performance in EFL, academic writing, and other disciplines. The benefits and drawbacks of artificial intelligence must be studied and evaluated, and its implications for academic writing must be developed

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DOI: <http://dx.doi.org/10.24014/ijaidm.v8i1.30307>

1. INTRODUCTION

Recently, Artificial Intelligence (AI) has substantially advanced education and altered the way individuals think. The English as a Foreign Language (EFL) community and scholars have shown significant interest in AI. AI has emerged as a valuable instructional and learning resource [1] [2] [3] AI significantly impacts second language (L2) acquisition and academic writing development [4]. [5] proposed that using AI-powered tools, such as Word Tune, might significantly enhance the writing skills of non-native English speakers. AI-driven ChatGPT technologies designed for academic writing may improve language acquisition and teaching. Studies have indicated that AI enhances EFL learners' language understanding, offers spoken language feedback and grade assignments, and has a beneficial effect on English language education. [3], [6]. However, AI-powered tools help Indonesian students at Mataram State Islamic University. Write end-of-semester projects, cultivate creativity, and ensure the timely completion of thesis papers.

With the emergence of AI, such as ChatGPT, more concerns arise related to the academic authenticity of student writing, which cannot be distinguished from the sophistication of today's stationery. However, how do users maintain the authenticity of their written work by avoiding plagiarism so as not to be excessively dependent on use. As suggested by Aljuaid [7]. AI can change the mindset by eliminating the originality of

ideas poured out due to relying on an innovative application today. However, students need AI facilities as innovative technology to develop a learning experience, especially in the context of EFL. The dependence on AI tools for scientific work can disguise the difference between the two: the result of machine writing and the idea of original thinking [8]. Therefore, this research is urgent because AI technology is developing rapidly in the world of Education, and academic ethics need to be improved. Ensure that the use of AI in Teaching is practical, innovative, efficient, responsible, and systematic [9].

The importance of research is reflected in the rapid adoption of AI technology in education, which is applied responsibly and effectively [10]. Educators and students can adjust their teaching methodologies by integrating AI [11]. Previous research findings have shown that it is important for students to be advised to use AI ethically even though it can help effectively in writing, emphasizing the importance of originality and critical thinking [12], [13]. Therefore, AI applications need to be more careful and wiser in convincing technology to play a role in improving learning without replacing more important academic competencies. It has implications in academic writing that can develop efficient and effective instructional practices [14] [15].

Two primary research inquiries drove this study. These inquiries explored students' perspectives and inclinations regarding AI chatbots in higher education. To achieve this, the author put together the following research questions (RQs): (1) RQ1: How do EFL students perceive the use of AI-ChatGPT in their academic writing?; (2) RQ2: What are the challenges EFL learners need to consider when using AI technology for academic writing?

According to a study on the implementation of chatbots in EFL writing, students created a learning community with Argumate, using various mediating tools to support their interactions. However, students' requirement for additional scaffolding beyond what Argumate provided presented obstacles to their cooperative efforts. [16]. The significance of security and privacy considerations, among others, in influencing students' choice to use AI chatbots to answer questions about library references, admissions, courses, and academics cannot be overstated. Additionally, it is crucial to understand students' perspectives on using AI chatbots in academic writing and how they perceive their usefulness in this context. Furthermore, AI chatbots in education offer immediate support, function as virtual instructional tools, and personalize the learning process. Nevertheless, obstacles include dependability, ethical implications, and user acceptance. Chatbots improve efficiency in academic writing, offer criticism, and assist in identifying plagiarism. Ensuring successful implementation in educational contexts requires careful consideration of both advantages and potential issues. The second question focused on the challenges faced by EFL learners in using AI chatbot apps for academic writing. To enhance the writing skills and confidence of EFL learners, deliberate techniques are necessary, despite the valuable assistance provided by AI chatbots. Given the current challenges, exploring strategies for effectively incorporating AI chatbots into the educational system while resolving the concerns above is critical.

The rest of this paper is organized as follows: The investigation examined learners' perspectives and opinions regarding the effectiveness of ChatGPT in generating ideas, as well as the potential consequences for enhancing personalized language support and promoting lifelong learning in higher education. The study "Indonesian EFL Learners' Perceptions of AI-ChatGPT-Apps Technologies for Academic Writing" is based on a theoretical framework that underpins the research [17]. The study, conducted at three high schools in Central Java, utilized a case study design that combined quantitative (Likert scale questionnaires) and qualitative methods (mobile messaging interviews). This research aimed to explore viewpoints, obstacles, and recommendations for enhancing the use of AI in teaching Indonesian academic writing, without analyzing AI's role of AI in ensuring authenticity and accuracy. The research demonstrated that AI-based resources were helpful in the planning and drafting stages of academic writing and identifying research topics. However, these tools had a limited impact on the overall quality of the paper despite the students' interest. This study identified obstacles, such as a need for editing features for Indonesian texts. Research has recommended enhancing the editing features and promoting AI literacy to overcome these obstacles.

Additional research may be necessary to assess the ability of these technologies to confirm the genuineness and accuracy of the articles. This study aims to explore the viewpoints of Indonesian EFL learners regarding the use of messaging apps with AI for academic writing. This study aims to investigate the impact of these tools on the writing process, identify possible advantages and obstacles, and suggest ways to improve their effectiveness in an EFL classroom setting in Indonesia.

Based on the previous study. This study examines how Indonesian students who are learning English as a foreign language view AI technology like ChatGPT for academic writing. It offers important insights into how these tools can provide personalized language support and promote lifelong learning in higher education. This research is different from previous studies because it focuses specifically on the unique challenges and opportunities faced by Indonesian EFL learners when using AI for academic writing. Unlike earlier research that broadly looked at AI's impact on writing processes without considering the local context, this study provides insights into the specific needs and preferences of Indonesian EFL students, filling a gap in the

literature on using AI in non-Western educational settings [18] [19]. This study found that AI tools such as ChatGPT assisted in drafting but did not significantly improve the quality of academic writing [20] [21]. It emphasizes critical use rather than dependency and highlights issues such as limited Indonesian language editing features, urging a better understanding of AI and tools for different languages [22] [23].

The study further enriches the field by offering practical recommendations for educators and policymakers. It calls for improved editing capabilities in AI tools and emphasizes the importance of fostering AI literacy among students. These steps are vital for addressing challenges in effective AI utilization [24]. This contribution is especially significant within ongoing debates on AI's role in education, where striking a balance between harnessing technology and upholding academic integrity remains a critical issue [25].

Overall, this study explores Indonesian EFL learners' views on AI-assisted writing and highlights the need to tailor AI tools to meet diverse learners' needs. It shows AI's potential for personalized learning while stressing the importance of ethical use and critical engagement in education.

2. RESEARCH METHOD

This research project employed a quantitative research methodology. To gather data, two distinct online questionnaires were developed and distributed through Google Forms to student participants.

2.1. Research Design

This study adopts a qualitative approach to answer the research question, explicitly using a case study design. As Yin [1], [2] outlined, this methodology often combines interviews and observations to identify key elements that emerge from open exploration. Through this methodology, the study delves deeper into the types of AI-based writing tools EFL student's use. It examines their perspectives on how these tools affect the quality of student writing, especially when it comes to content development and organizational structure.

2.2. Participant

In the study, a group of participating students who had completed academic writing in the previous semester were included eighty respondents. A total of $n = 80$ participants who have completed the final project of lectures in the final semester 9 in the form of a thesis in the undergraduate English Language Education study program. UIN Mataram University -Indonesia

2.3. Instrument

2.3.1 Online Questionnaires

The online survey for student participants consisted of 10 items, all of which are outlined below. The survey aims to gauge participants' experiences with ChatGPT in writing scientific papers, including their opinions on the ease of use, impact on creativity, and the effectiveness of ChatGPT's suggestions for improving the quality of scholarly writing. Additionally, the survey aimed to assess the impact of ChatGPT on the organization of content, writing speed, adaptability to different writing styles, understanding of academic writing guidelines, and overall quality of scientific work produced. The survey also sought to understand participants' preferences compared to traditional scientific paper writing methods and any suggestions they may have for further development of ChatGPT in support of scientific writing. Finally, the survey aimed to gather participants' expectations regarding the future development and use of ChatGPT in writing technical papers.

2.3.2 Interviewed

The second instrument in the study uses in-depth interviews with students. The goal is to obtain detailed qualitative data on the use of advanced machines in the form of AI as a scientific writing tool and to see the effect on the quality of student writing, especially concerning content and structure. To develop relevant interview questions, we consulted several key studies. Research by Nazari et al. [3], Dale and Viethen [4], M. Lee et al. [5], moreover Zhao [2], [6] provides significant guidance.

2.4. Procedures

Participants who finished writing a thesis were given 10–15 minutes to answer all questions online using Google Forms. SPSS 24.0 was used to examine each question to ascertain its specific statistical outcomes. Each of the 10 items represents a distinct.

3. RESULTS AND ANALYSIS

The subsequent sections will showcase and delve into the principal discoveries that emerged from the examination of the data amassed through the two questionnaires. 1. RQ1: How do EFL students perceive the use of AI-ChatGPT in their academic writing? 2. RQ2: What are the challenges EFL learners need to consider

when using AI technology for academic writing?

3.1. Student's' responded

The survey shows mixed opinions on using ChatGPT for scientific writing. Many respondents found it helpful for idea generation, improving writing quality, and organizing content. However, some were unsure about its impact on creativity and understanding scientific writing standards.

Table 1. EFL Student Perceive the use of ChatGPT Tool for Academic Writing, Cited from Ngo. [37]

| No | Statements | Responses (%) | | | | |
|----|--|---------------|----|----|---|----|
| | | SA | A | N | D | SD |
| 1 | How was your first experience using ChatGPT in writing scientific papers? | 15 | 31 | 33 | 3 | 3 |
| 2 | Your creativity in generating ideas for scientific papers can be impacted by using ChatGPT. | 14 | 43 | 21 | 4 | 3 |
| 3 | ChatGPT is designed to enhance the quality of writing by offering scientific language and grammar advice. To what extent is it effective in this regard? | 16 | 36 | 28 | 1 | 4 |
| 4 | Could you use ChatGPT to assist in organizing the content of your scientific paper? | 11 | 46 | 20 | 4 | 4 |
| 5 | Using ChatGPT speeds you up writing scientific papers | 10 | 44 | 25 | 2 | 4 |
| 6 | The versatility of ChatGPT allows it to be utilized in a variety of ways when writing scientific papers. | 16 | 41 | 23 | 2 | 3 |
| 7 | Using ChatGPT improved my understanding of academic writing guidelines | 10 | 40 | 27 | 5 | 3 |
| 8 | The use of ChatGPT negatively impacted the overall quality of my scientific work. | 10 | 39 | 31 | 2 | 3 |
| 9 | Using ChatGPT helped me understand the applicable scientific writing standards | 10 | 32 | 34 | 6 | 3 |
| 10 | ChatGPT is effective in providing feedback on my scientific papers | 12 | 41 | 26 | 3 | 3 |

EFL students typically hold a positive perception of ChatGPT when it comes to academic writing. They emphasize the utility of this tool in enhancing idea generation, organizing content, and boosting writing quality. It is often believed that it aids in understanding writing principles and standards. Nevertheless, there are students who exhibit apathy or disagreement regarding the impact of this on the caliber of their scientific work. The researcher shown clearly below:

1. What were your original thoughts about using ChatGPT to write scientific papers?

The data reflects EFL students' reactions to using ChatGPT to write scientific articles for the first time. Notably, 15% strongly agreed and 31% agreed that their first encounter with ChatGPT was positive, indicating a substantial proportion of favorable experiences. A notable 33% remained neutral, suggesting that the sizable group was neither strongly positive nor negative about their initial use. In contrast, 3% disagreed and another 3% strongly disagreed, indicating a minor fraction with negative sentiments towards ChatGPT for scientific writing. Overall, most participants had either positive or neutral perspectives on their first encounters, emphasizing the potential utility of the ChatGPT in this academic context.

2. Your creativity in generating ideas for scientific papers can be impacted by using ChatGPT?

The findings suggest that a notable proportion of EFL (English as a Foreign Language) student participants, particularly those who strongly agree (14%) and agree (43%), believe that using ChatGPT has a favourable impact on their creativity in devising ideas for scientific papers. This implies that these participants collectively recognized the beneficial role of ChatGPT in enhancing their creative thinking in academic writing. However, 21% remained neutral on this issue, indicating a significant portion with neither a strong positive nor a negative stance. In contrast, 4% disagree and 3% strongly disagree, indicating a minor proportion with a negative outlook on ChatGPT's influence on creativity. Overall, the data imply a mostly positive connection between ChatGPT usage and the improvement of creative thinking in scientific paper development, despite some variation in the level of agreement among the participants.

3. ChatGPT is designed to enhance the quality of writing by offering scientific language and grammar advice. To what extent is it effective in this regard?

The data indicate that a considerable number of EFL student participants found ChatGPT's influence on the quality of their writing to be positive, with 16% strongly agreeing and 36% agreeing. This suggests a general agreement that ChatGPT significantly improves the overall quality of scientific language and grammar in academic writing. Additionally, 28% of participants had a neutral stance on this issue, suggesting a group with no strong opinion. Only 1% disagreed and 4% strongly disagreed, indicating a small minority with a

negative view of ChatGPT's writing improvement capabilities. Overall, the data suggest that the majority of participants see ChatGPT as a useful tool for enhancing the standards of scientific language and grammar in academic writing.

4. Could you use ChatGPT to assist in organizing the content of your scientific paper?

The results indicate that a significant proportion of EFL students, with 11% strongly agreeing and 46% agreeing, find ChatGPT useful in organizing content for their scientific papers. This suggests a prevailing positive sentiment towards ChatGPT's contribution to the structure and arrangement of academic writing. However, 20% were neutral on this matter, indicating a considerable group with neither a strong positive nor a negative view. On the other hand, 4% disagree and 4% strongly disagree, indicating a small minority with a negative outlook on ChatGPT's effectiveness in organizing content. In summary, the data suggests that most participants view ChatGPT as a helpful tool for content organization in their scientific papers, although some variation exists in their level of agreement.

5. Using ChatGPT speeds you up writing scientific papers?

The results indicate that a substantial proportion of EFL student participants, with 10% firmly agreeing and 44% agreeing, consider ChatGPT a useful tool for accelerating their writing of scientific papers. This suggests a prevalent belief among the participants that ChatGPT positively affects the efficiency and speed of their academic writing. However, 25% remained neutral on this issue, indicating a substantial subgroup with no clear stance. Conversely, only 2% disagree, and an additional 4% strongly disagree, suggesting a relatively small group with a negative viewpoint regarding ChatGPT's effectiveness in hastening the writing of scientific papers. In summary, the data suggest that a substantial majority of the participants perceive ChatGPT as a tool that enhances the speed of their scientific paper writing, although there is some diversity in the level of agreement among participants.

6. The versatility of ChatGPT allows it to be utilized in a variety of ways when writing scientific papers?

The results indicate that a significant proportion of EFL students, with 11% strongly agreeing and 46% agreeing, find ChatGPT useful in organizing content for their scientific papers. This suggests a prevailing positive sentiment towards ChatGPT's contribution to the structure and arrangement of academic writing. However, 20% were neutral on this matter, indicating a considerable group with neither a strong positive nor a negative view. On the other hand, 4% disagree and 4% strongly disagree, indicating a small minority with a negative outlook on ChatGPT's effectiveness in organizing content. In summary, the data suggests that most participants view ChatGPT as a helpful tool for content organization in their scientific papers, although some variation exists in their level of agreement.

7. Using ChatGPT improved my understanding of academic writing guidelines?

The findings indicate that a substantial proportion of EFL student participants, with 10% strongly agreeing and 40% agreeing, believe that ChatGPT has improved their understanding of academic writing guidelines. This shows a common perception among the participants that ChatGPT has a positive impact on their comprehension of the principles and guidelines related to academic writing. However, 27% of the participants were neutral on this issue, suggesting a significant group with no strong positive or negative stance. On the other hand, 5% disagree and 3% strongly disagree, indicating that a relatively small number of participants had a negative view of ChatGPT's influence on their understanding of academic writing guidelines. In conclusion, the data suggest that a large majority of participants perceived ChatGPT as a useful tool for enhancing their understanding of academic writing guidelines, although there was some variation in the level of agreement among participants.

8. The use of ChatGPT negatively impacted the overall quality of my scientific work?

The findings suggest that a substantial proportion of EFL students believe that ChatGPT has a positive impact on the quality of their scientific work. Specifically, 10% strongly agree and 39% agree, whereas only 2% disagree and 3% strongly disagree. This indicates a significant sentiment among the participants that ChatGPT contributes positively to the quality of their academic output. However, 31% of the participants remained neutral on this aspect, suggesting a noteworthy subgroup with neither a strong positive nor negative stance. In summary, the data imply that a substantial majority of the participants believe that ChatGPT positively affects the overall quality of their scientific work, although there is some diversity in the extent of agreement among participants.

9. Using ChatGPT helped me understand the applicable scientific writing standards?

The study's data revealed that a significant proportion of EFL student participants, with 10% firmly agreeing and 32% agreeing, confirmed that utilising ChatGPT has enhanced their comprehension of scientific writing standards applicable to their field. This suggests widespread recognition among participants that ChatGPT serves as a valuable tool for clarifying and improving their understanding of academic writing standards. However, 34% are neutral on this issue, indicating a notable subgroup with no strong positive or negative stance. On the other hand, 6% disagree, and an additional 3% strongly disagree, indicating a small but significant group with a negative view of ChatGPT's usefulness in comprehending scientific writing standards. In conclusion, the data suggest that the majority of participants perceived ChatGPT as an effective tool in aiding their understanding and adherence to scientific writing standards, although there was some variability in the level of agreement among participants.

10. ChatGPT is effective in providing feedback on my scientific papers?

The findings indicate that a substantial proportion of EFL student participants, with 12% strongly agreeing and 41% agreeing, perceived ChatGPT as effective in offering feedback on their scientific papers. This suggests that the ChatGPT is viewed as a valuable tool for receiving constructive feedback on academic writing by a significant number of participants. However, 26% remained neutral on this matter, indicating a notable subgroup with neither a strong positive nor a negative stance. On the other hand, only 3% expressed disagreement, and an additional 3% strongly disagreed, suggesting a relatively small number of participants with a negative viewpoint on the efficacy of ChatGPT in offering feedback on their scientific papers. In conclusion, the data imply that a substantial majority of participants found ChatGPT effective in providing feedback on their scientific papers, although there was some variability in the level of agreement among participants.

3.2. Answering RQ1, RQ2

Based on the EFL Students' Perception for Academic Writing Exploring the perspectives of EFL students on academic writing uncovers enlightening details. By examining responses 1–10, a thorough comprehension arises, providing valuable information about their mindsets and encounters in this essential area.

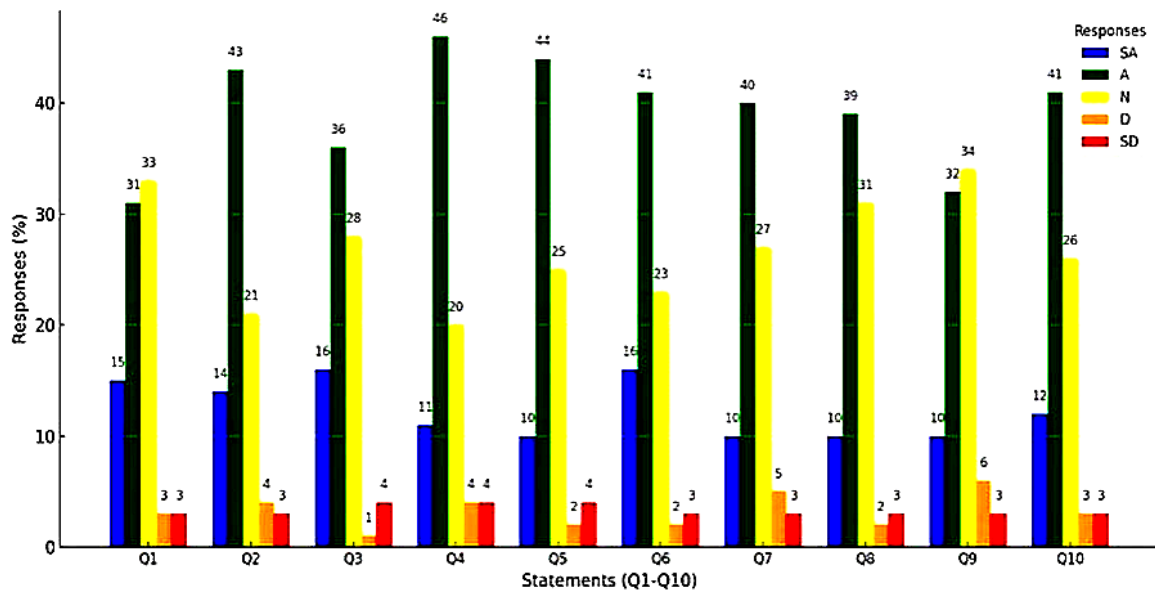


Figure 2. Frequency of EFL Students' Perception the use of ChatGPT for Academic Writing

The table 2 displayed above depicts the frequency of respondents providing Linkert scale answers to questions 1 to 10, allowing for a clear and detailed view of the results.

3.2.1. Students' challenges faced by EFL learners in using AI-ChatGPT apps for academic writing?

Interview results Together with students who have used ChatGPT to write theses and scientific articles, researchers randomly took 6 people, 3 women and 3 men, with the first question.

The first themes

“Artificially intelligent chatbots present obstacles for EFL learners, including language nuances, contextual accuracy, idea expression, and successful academic tool use.”

EFL learners sometimes need help comprehending complex language structures and sophisticated academic vocabulary. AI chatbot applications may find it challenging to comprehend and produce content with the necessary level of complexity, which can limit their capacity to offer useful support in academic writing activities. The other answer Providing tailored feedback to cater to individual learners needs continues to pose a significant challenge. Although AI chatbots offer generic recommendations, these suggestions may not address particular weaknesses or areas for improvement, thereby limiting their ability to help EFL students overcome personalized obstacles in academic writing.

The second themes.

“What is the consensus among EFL learners concerning the efficacy of AI chatbots in aiding them in their scholastic writing difficulties?”

Diverse viewpoints exist among EFL learners regarding the efficacy of AI chatbots in resolving the challenges associated with academic writing. While some appreciate the immediate feedback and guidance offered by AI chatbots for grammar correction and basic writing conventions, others raise concerns about their inability to understand nuanced languages and cultural contexts. In addition, AI chatbots are limited in their ability to provide in-depth feedback on complex academic concepts. In conclusion, while AI chatbots can provide quick assistance, EFL students have a nuanced perspective, recognizing their benefits and acknowledging the need for improvement in addressing more advanced and context-specific writing challenges.

The third themes.

“What specific aspects or traits of AI chatbot software hinder English as a Foreign Language (EFL) students when it comes to academic writing in particular contexts?”

What is the perception? Interviews with English as a Foreign Language (EFL) students pointed to particular drawbacks of AI chatbot software that hinder their academic writing experiences. One significant issue is the software's inability to understand contextual subtleties, especially in specialised writing, where precise vocabulary is essential. Another challenge is AI's lack of adaptability to diverse cultural contexts, which can result in an inability to accurately comprehend or address cultural intricacies present in academic writing. Moreover, the limited scope of AI chatbots to provide detailed feedback on complex writing skills, such as argumentation and critical analysis, restricts EFL learners from receiving comprehensive assistance in academic settings. of EFL learners on the effectiveness of AI chatbots in overcoming challenges in their academic writing?

4. DISCUSSION

In this section, research findings are discussed related to the issues raised by the research question, which include EFL Indonesian students' perceptions of AI-ChatGPT-Apps technology for academic writing, then What are the challenges faced by EFL students in using AI-chatbots applications for academic writing?

4.1. RQ 1: How do EFL students perceive the use of AI-ChatGPT in their academic writing?

Based on the recent research has examined the application of ChatGPT in academic writing, highlighting both advantages and drawbacks. ChatGPT is recognized for aiding in idea generation, enhancing linguistic clarity, and boosting efficiency, yet concerns over plagiarism and excessive dependence remain [35]. Students often perceive ChatGPT positively, appreciating its ability to save time and offer personalized learning support [37] Nevertheless, they also raise issues about its limitations in verifying source credibility and providing accurate citations [37]. To mitigate these challenges, experts recommend cross-checking ChatGPT's outputs with trustworthy references, using it as a supplementary tool, and fostering adherence to academic ethics [37]. According to the discussion above, it can be visualized in the form of a figure 3.

4.2. RQ2: What are the challenges EFL learners need to consider when using AI technology for academic writing?

Language models such as ChatGPT may enhance academic discussions and writing for students learning English as a Foreign Language (EFL). These tools can help students generate original text, provide conversation cues, and simplify complex instructions, all of which can be beneficial for their academic success [31]. EFL students often encounter difficulties when using AI chatbots for academic purposes. One such

challenge is that they may become overly dependent on chatbots for prescriptive responses, leading to impersonal and fewer therapeutic interactions, which could result in deskilling [32]. In addition, utilizing AI chatbots may pose the risk of unreliable or biased information as they occasionally produce inaccurate or misleading content [33]. EFL learners must assess the drawbacks and potential hazards of using AI chatbots in academic writing and discussions while acknowledging the advantages they provide as a valuable resource [34]. According to the discussion above, it can be visualized in the form of a figure 4.

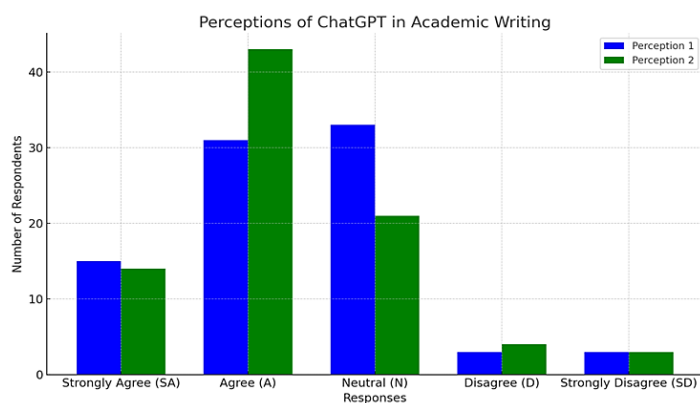


Figure 3. How do Student's perceptions in use of AI-ChatGPT in Their writing.

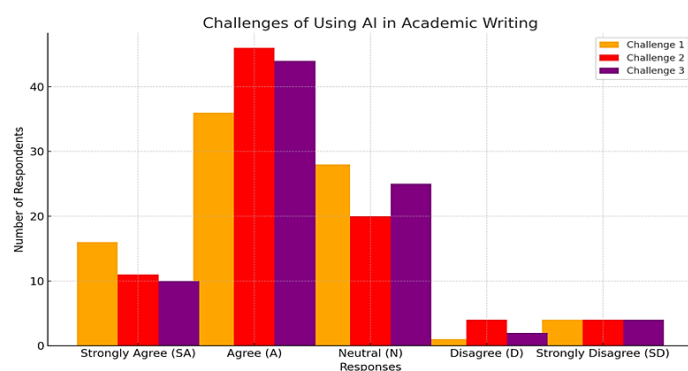


Figure 4. What are the challenges EFL learners in using AI technology for academic writing?

5. CONCLUSION

Artificial intelligence (AI) in English as a Foreign Language (EFL) instruction presents exciting possibilities and significant obstacles. AI-powered technologies, such as ChatGPT, can possibly improve language acquisition and academic writing by delivering personalized feedback and streamlining the draughting process. However, academic integrity and reliance on this technology remain significant concerns. This study demonstrates that, while AI tools can make writing jobs easier, they do not necessarily improve the quality of academic work, emphasizing the significance of instilling ethical use and critical thinking in students. It also emphasizes the importance of developing advanced editing capabilities specific to the Indonesian language and boosting AI expertise. Educators can support innovation by employing tactics that utilize the advantages of AI while preserving academic norms.

The survey found that most English as a Foreign Language (EFL) learners positively viewed the ChatGPT, citing its impact on creativity, writing quality, organization, and understanding of academic standards. However, some limitations were identified, such as complex language and generic feedback. Opinions on AI chatbots were mixed, with appreciation for their speedy assistance but concerns about their ability to understand nuanced language and cultural contexts. chatbots that use provide rapid advice, but face issues such as dependency on sophisticated language and generic input, as well as a lack of ability to handle subtle linguistic structures and cultural nuances, which has an impact on improving the level of writing.

Finally, Indonesian EFL learners are often optimistic about artificial intelligence (AI). ChatGPT-Apps offers scholastic writing technology, as they recognize the benefits of these tools in fostering creativity, improving writing quality, and simplifying content organization. However, challenges arise when using AI chatbots, such as the limitations experienced by EFL learners with intricate language and the need for more customized feedback. The opinions on the overall usefulness of AI chatbots in addressing academic writing difficulties among learners are varied.

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