MATAI Innovation framed of Longer framed of Longer framed

MATAI: International Journal of Language Education

website: https://ojs3.unpatti.ac.id/index.php/matail

Volume (5) No. 2 (2025)

Pp. 242-253 accepted in 29 April 2025

e-ISSN. 2774-6356

Exploring Students' Views On Chatgpt-3.5 In Writing Research Project

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Abstract

This research explores English Education students' views on the use of ChatGPT-3.5 as a tool in writing research projects. With the growing presence of artificial intelligence in education, particularly through tools like ChatGPT-3.5, this study investigates the factors influencing students' awareness and how they utilize the tool during their research writing process. Employing a phenomenological qualitative approach, data were collected from nine undergraduate students at Pattimura University through semi-structured interviews and document analysis of ChatGPT-3.5 interaction screenshots. Thematic analysis revealed key factors affecting awareness, including familiarity, educational background, and support from lecturers. The study also identified various patterns of usage, highlighting the benefits of ChatGPT-3.5 in idea generation, structuring content, understanding theories, and saving time. However, challenges such as dependency risks, accuracy concerns, and ethical considerations were also noted. The findings underscore the importance of balanced and critical use of AI tools in academic writing and provide practical implications for students, educators, and institutions in supporting ethical and effective AI integration in higher education.

Keywords: ChatGPT-3.5, Writing, research project, students perspective

INTRODUCTION

In recent years, the integration of cultural content into English Language Teaching (ELT) has The emergence of advanced language models such as ChatGPT-3.5 has brought significant transformation to the domain of academic writing and research. Developed by OpenAI based on the Generative Pre-trained Transformer (GPT) architecture, ChatGPT-3.5 is capable of understanding and generating human-like language, making it a valuable tool for supporting various stages of the research process from brainstorming ideas to drafting entire manuscripts.

In recent years, the academic community has increasingly turned its attention to the role of ChatGPT-3.5 in research writing. Scholars have debated its potential benefits, including its ability to assist in idea generation, content structuring, and linguistic enhancement, as well as its limitations, such as the occasional inaccuracies in its output and concerns over data reliability (Pokotylo, 2023; Banik, Pati, & Sharma, 2024; Halaweh, 2023). Despite these mixed perspectives, there is no denying the growing relevance of ChatGPT-3.5 in academic environments, particularly among students engaged in research projects.

This relevance is especially pronounced in educational contexts with limited resources, where students often opt for the freely accessible ChatGPT-3.5 over its premium successor, ChatGPT-4. According to Biswas and Das (2024), students tend to gravitate toward tools that provide functionality without incurring extra costs, reinforcing the importance of examining ChatGPT-3.5 use in budget-sensitive academic settings.

Preliminary research conducted at Pattimura University reveals a similar trend. Although many English-language students are aware of ChatGPT-3.5 and its capabilities, actual usage remains limited. Among those who do use it, the tool is primarily utilized to obtain expert-like input, such as sample interview questions or guidance in elaborating research topics. These findings suggest a gap between awareness and practical application, highlighting the need for a deeper understanding of how students interact with such AI tools in the context of academic writing.

To build on this foundation, the present study aims to investigate the experiences and perceptions of English-language students at Pattimura University regarding the use of ChatGPT-3.5 in writing their research projects. Specifically, this research seeks to identify the factors that influence student awareness of ChatGPT-3.5, how they use the tool during the research writing process, and the benefits or limitations they perceive.

Accordingly, this study is guided by the following research questions:

- 1. What are the factors affecting the awareness of English-language students about ChatGPT-3.5 for research project writing as a tool?
- 2. How do the students use ChatGPT-3.5 as an assisted tool in writing research projects?

By exploring these questions, this study aims to contribute to the ongoing discourse on the integration of AI in higher education and offer practical insights for educators and institutions seeking to enhance students' research writing skills through accessible technological support.

LITERATURE REVIEW

Artificial Intelligence in Academic Writing

Artificial Intelligence (AI) has become an integral part of educational technology, especially in supporting students' academic writing. AI refers to the development of computer systems that can perform tasks requiring human intelligence, such as reasoning, learning, and language understanding. Zebua and Katemba (2024) emphasized that AI can enhance students' writing skills by offering fast and accurate feedback. Bibi and Atta (2024) supported this view, noting that AI-

powered writing tools, like ChatGPT, reduce the time spent on revision and correction, thereby streamlining the writing process.

The benefits of AI in academic writing are multifaceted. Ngo (2023) highlighted AI's ability to assist students in overcoming common writing challenges, such as idea generation and grammar issues. ESMAEIL et al. (2023) added that AI tools can increase students' motivation, as they offer a sense of companionship and immediate assistance. Teng (2024) further noted the effectiveness of AI in improving writing quality, providing a supportive environment for learners to refine their academic texts.

However, the integration of AI into education is not without challenges. Valova et al. (2024) warned that overreliance on AI may impair students' critical thinking and analytical skills. Similarly, Shakil and Siddiq (2024) expressed concerns that AI dependence could weaken students' capacity for analytical writing—a core component of higher education. Kanabar (2023) emphasized the importance of balanced use, arguing that while AI can be supportive, it should not replace the student's own intellectual engagement in writing tasks.

Dilzhan (2024) advocated for continuous independent writing practice to prevent the erosion of essential academic skills. Ultimately, although AI offers powerful support in writing and research, its effectiveness depends on responsible and mindful usage by students.

Understanding ChatGPT-3.5

ChatGPT-3.5, launched by OpenAI in 2022, represents a significant development in AI-driven language generation. Built on the Generative Pre-trained Transformer (GPT) architecture, ChatGPT-3.5 is capable of producing human-like text, supporting users in a range of tasks such as creative writing, summarizing, and academic drafting (Imran, 2023). Singh and Ramakrishnan (2023) described ChatGPT-3.5 as an intelligent assistant that can guide users toward successful task completion through its responsiveness and structured language generation.

Susnjak (2022) noted that ChatGPT-3.5 is capable of producing grammatically accurate and coherent text that often resembles human writing. Van Dis (2023) emphasized the model's ability to generate sophisticated outputs based on extensive training data, making it useful in academic research and education. Nevertheless, concerns have been raised regarding its influence on user autonomy and critical engagement. While the tool provides convenience, users must be cautious not to allow it to replace essential research processes.

In academic settings, especially for students and researchers, ChatGPT-3.5 is often viewed as a supportive tool to help navigate complex writing tasks. It is best understood as a technology that enhances, rather than replaces, human effort in the research process.

The Use of ChatGPT-3.5 in Writing Research Projects

The use of ChatGPT-3.5 in academic writing has been widely discussed in recent studies. Researchers such as Alkaissi and McFarlane (2023), Gilat and Cole (2023), and Salvagno et al. (2023) explored how this AI tool is utilized in drafting academic articles, developing hypotheses, creating methodologies, and even assisting in peer reviews. Van Dis et al. (2023) projected that ChatGPT-3.5 would soon support even more advanced research activities.

The benefits of using ChatGPT-3.5 in research writing include the ability to streamline the writing process, improve clarity, and reduce time spent on literature reviews and data presentation (Arif et al., 2023). The tool can help students generate initial drafts, suggest titles, and assist in writing specific sections such as the methodology and data analysis (Salvagno et al., 2023). Halaweh (2023) pointed out that ChatGPT-3.5 significantly reduces the time required to collect relevant information and generate academic content.

Nonetheless, ethical concerns persist. Chen (2023) and Salvagno et al. (2023) emphasized the potential risks to academic integrity, such as plagiarism or the temptation to bypass genuine intellectual effort. Additionally, Van Dis et al. (2023) noted that while ChatGPT-3.5 may support academic thinking, it can also lead to diminished literature-searching skills.

Therefore, although proponents advocate for ChatGPT-3.5 as a valuable writing assistant, it must be used with caution to ensure the preservation of originality, depth, and ethical academic practices.

Students' Awareness of ChatGPT-3.5 in Research Project Writing

Student awareness of ChatGPT-3.5 in the context of academic research is influenced by multiple factors. According to Abdaljaleel et al. (2024) and Albayati (2024), awareness depends on students' exposure to educational technology and their perception of the tool's usefulness and ease of use. Yan (2023) and Teng (2024) further highlighted the importance of educational background and institutional support in shaping students' comfort and familiarity with AI tools.

In research writing, ChatGPT-3.5 offers various benefits, including real-time feedback, clarity improvement, and structured writing assistance (Teng, 2024; Rababah et al., 2024). Abdelhalim (2024) and Maghamil & Sieras (2024) noted that ChatGPT enhances students' ability to understand complex concepts and organize ideas systematically, leading to improved research outcomes.

However, the downsides are notable. Niloy et al. (2024) and Song & Song (2023) warned that heavy reliance on AI can hinder the development of independent thought, reduce originality, and impair students' creativity. Al-Alami (2024) argued that such dependence may affect students' long-term ability to write without assistance. Ahmed (2023) and Ngo (2023) echoed concerns about technology overuse and its impact on writing autonomy.

Therefore, while ChatGPT-3.5 can serve as an effective support tool in academic writing, educational institutions must promote balanced, ethical usage. Abdaljaleel et al. (2023; 2024) emphasized the importance of guidance and policies to help students maximize AI benefits without compromising academic rigor.

Methodology

This study employed a qualitative phenomenological approach to explore students' views and lived experiences regarding the use of ChatGPT-3.5 in writing research projects. The phenomenological method was chosen to gain in-depth insights into how students perceive and engage with the AI tool in the context of academic writing.

Participants

The participants in this study were nine undergraduate students from the English Education Study Program at Pattimura University, enrolled in the 2019/2020 academic year. They were purposively selected based on a preliminary survey, which showed that they had prior experience using ChatGPT-3.5 during their research writing process. This purposive sampling technique ensured that participants had direct and relevant experiences to share regarding the phenomenon under investigation.

Data Collection Techniques

Data were collected through two main techniques:

1. Semi-Structured Interviews

The researcher conducted in-depth, semi-structured interviews to obtain students' perceptions and experiences. The interview guide included open-ended questions informed by previous studies on AI use in education. These interviews allowed participants to reflect deeply on their familiarity with ChatGPT-3.5, its benefits, limitations, and their strategies for using it during the research project writing process.

2. Document Analysis

To support the interview findings, document analysis was also conducted. This involved reviewing screenshots of students' interactions with ChatGPT-3.5, including how they used the tool to brainstorm ideas, develop outlines, or improve theoretical sections of their research papers. These screenshots were categorized into themes such as frequency of use, feature awareness, and academic task support.

Data Analysis

The data collected were analyzed using **Thematic Analysis** as outlined by Braun and Clarke (2006). The process involved the following steps:

1. Familiarization with the Data

Transcripts were read repeatedly to understand the depth of participants' responses.

2. Generating Initial Codes

Meaningful segments of text were labeled based on recurring ideas and linked to specific research questions.

3. **Searching for Themes**

Similar codes were grouped into overarching themes, such as *Familiarity with ChatGPT-3.5*, *Perceived Benefits*, *Limitations*, and *Challenges*.

4. Reviewing and Refining Themes

Themes were reviewed to ensure they accurately reflected the data and were adjusted if necessary.

5. **Defining and Naming Themes**

Each theme was clearly defined and supported with direct quotations from participants.

6. **Producing the Report**

A comprehensive narrative was developed, integrating both interview data and document analysis to answer the research questions.

FINDINGS

Results and Discussion

This section presents the results and interpretation of the study, which aimed to explore students' awareness and usage of ChatGPT-3.5 in the process of writing research projects. The findings are organized into two primary themes aligned with the research questions: (1) factors affecting students' awareness of ChatGPT-3.5, and (2) students' utilization of ChatGPT-3.5 in research project writing. Data were collected through in-depth interviews and supported by document analysis of screenshots illustrating students' interactions with the AI tool.

Factors Affecting Students' Awareness of ChatGPT-3.5

Familiarity and Exposure through Informal Channels

The results indicate that students' awareness of ChatGPT-3.5 was largely shaped by informal exposure, especially through social media platforms like Instagram and TikTok. Participants (e.g., AN, EK, PL, and SR) reported first encountering ChatGPT-3.5 through short-form content that demonstrated its academic functions, such as generating prompts and structuring outlines. This aligns with research by Abdaljaleel et al. (2024) and Albayati (2024), who emphasized the role of social and digital media in shaping students' early adoption of educational technologies.

Educational Background and Institutional Influence

Another factor influencing awareness was the students' educational background and access to digital tools. Those with higher digital literacy were more inclined to explore and test ChatGPT-3.5 in their research. Furthermore, institutional attitudes and lecturer guidance played a dual role.

While some lecturers supported the ethical use of ChatGPT-3.5 and encouraged participation in AI-related webinars, others remained skeptical due to concerns about plagiarism and overdependence on technology. This diversity in academic environments shaped students' perspectives and confidence in using the tool.

To illustrate the coding process in thematic analysis, the following table presents selected excerpts from the interview excerpt, coding, identified themes, and researcher interpretations as follow:

No.	Participant	Interview Excerpt	Coding	Theme	Interpretation
1.	AN	"I am very familiar with it, especially for research. ChatGPT-3.5 is very helpful because it provides insights and helps to clarify my research ideas." (AN)	FOA I	Familiarity with ChatGPT-3.5	Demonstrates strong recognition of ChatGPT-3.5 functionality at an early stage of research.
2.	EK	"I first saw ChatGPT-3.5 on social media, specifically Instagram, where I realized that ChatGPT-3.5 helps provide direct information on the points I am looking for, thus optimizing my time."	FOA II	Influence by Educational Background	Social media exposure created initial awareness of ChatGPT-3.5's potential.
3.	NB	"Some lecturers recommend that students attend webinars introducing the use of AI for research writing, but at the same time, students should not become too reliant on ChatGPT-3.5."	FOA III	Support from Lecturers	Lecturers encourage the use of AI in an ethical and balanced manner.

Students' Utilization of ChatGPT-3.5 in Writing Research Projects

Strategic and Routine Use in Early Research Phases

Document analysis revealed that most participants utilized ChatGPT-3.5 in the early stages of their research writing, particularly for brainstorming topics and structuring outlines. For example, participant AN used the tool to refine research questions, while EK employed it to develop a study structure. This reflects a strategic and intentional use of ChatGPT-3.5 to streamline the initial planning phase of academic writing.

Academic Writing Support

Interviews showed that students commonly used ChatGPT-3.5 to elaborate on theoretical frameworks, compose background sections, and draft abstracts. Participant NB mentioned that ChatGPT-3.5 helped organize Chapter I to Chapter V and offered citation suggestions. Similarly, participant SC highlighted its usefulness in generating initial ideas and helping meet writing deadlines. These findings support studies by Arif et al. (2023) and Halaweh (2023), which recognized the tool's potential to accelerate academic writing and support content clarity.

Benefits: Time Efficiency and Clarity

Participants consistently praised ChatGPT-3.5 for saving time and improving clarity. It enabled them to formulate more coherent sentences and provided linguistic suggestions that aligned with academic conventions. SR and KS noted that ChatGPT-3.5 improved their understanding of theoretical concepts by offering simplified explanations and relevant examples. This reflects the model's role not just as a writing assistant but also as an informal tutor in the academic process.

Challenges and Limitations

Despite the benefits, several drawbacks were identified. Participants such as WY and NS pointed out that inaccuracies, especially when prompts were unclear or mistyped, could mislead users. Others struggled to verify AI-generated sources that did not match databases like Google Scholar, highlighting the limitations of ChatGPT-3.5 in terms of academic credibility. This echoes concerns raised by Alkaissi and McFarlane (2023) about the risks of "AI hallucination" in scientific writing.

Additionally, students expressed concerns about the temptation to overuse ChatGPT-3.5, which could diminish their creativity and critical thinking. However, many participants addressed this by adopting responsible usage strategies, such as paraphrasing, verifying information, and using the tool as a brainstorming partner rather than a content generator. These findings reinforce the importance of promoting digital literacy and ethical use policies within educational institutions

To illustrate the coding process in thematic analysis, the following table presents selected excerpts from the interview excerpt, coding, identified themes, and researcher interpretations as follow:

2.	Sr	"Chatgpt-3.5's Can Help Explain The Meaning Of The Theories We Are Using, Making It Easier For Us As Researchers To Understand What These Theories Actually Mean. Chatgpt-3.5's Has Helped Me By Providing Links To Journals When I Was Searching For Specific Journals For The Development Of My Research Project."	Use Ii	The Advantage Of Chatgpt- 3.5 (Use Ii)	Providing Clear Explanations And Additional Information About The Figures Or Sources Of The Theory
3.	Ks	"Yes, I Only Use Chatgpt-3.5 To Develop My Research, But After That, I Paraphrase To Avoid Plagiarism Detection." (Ks)	Use Iii	Balance The Use Of Chatgpt-3.5	Critical Use And Don't Copy Directly, But Adapt.
4.	Sc	"Chatgpt-3.5 Is Very Helpful In Providing Quick Responses, Such As Generating Initial Ideas For Structuring The Research Methods, Saving Time And Helping Me Meets Deadlines."	Use Iv	Impact Of Chatgpt-3.5	Providing Quick Responses And Initial Ideas That Can Be Further Developed Independently
5.	Wy	"A Drawback I Encountered With Chatgpt-3.5 Is When I Made A Typo In The Prompt, So The Response It Provided Wasn't What I Expected."	Use V	Negative Effects Of Chatgpt-3.5	Writing Prompts Can Affect The Quality Of Responses Generated By Chatgpt-3.5
6.	Ns	"I Tried Searching For Articles From Theories In Chapter Two, But The Sources That Chatgpt-3.5 Showed Were Not Available On Google Scholar."	Use Vi	Challenges In Using Chatgpt-3.5	Limitation In The Reliability And Accessibility Of Chatgpt-3.5-Generated Sources

CONCLUSION AND SUGGESTION

This study examined the awareness and experiences of English education students in using ChatGPT-3.5 for writing their undergraduate research projects. The findings revealed that while students were increasingly aware of ChatGPT-3.5 primarily through social media their actual use of the tool varied depending on individual digital literacy and institutional support. ChatGPT-3.5 was mainly used during the initial stages of writing, including brainstorming, outlining, and elaborating theoretical frameworks. Students appreciated its ability to enhance writing efficiency and clarity, yet concerns arose regarding accuracy, overdependence, and academic integrity. Therefore, students are encouraged to use ChatGPT-3.5 critically and responsibly, treating it as a complementary tool rather than a substitute for their own thinking. Educators and institutions should provide guidance and AI literacy training to ensure ethical and effective usage. Future research is recommended to explore students' engagement with other AI tools and investigate the long-term effects of AI on academic skill development.

RERERENCES

- Abdaljaleel, M., Barakat, M., Alsanafi, M., Salim, N. A., Abazid, H., Malaeb, D., ... & Sallam, M. (2024). A multinational study on the factors influencing university students' attitudes and usage of ChatGPT. *Scientific Reports*, 14(1), 1983.
- Abdaljaleel, M., Barakat, M., Alsanafi, M., Salim, N. A., Abazid, H., Malaeb, D., ... & Sallam, M. (2023). Factors influencing attitudes of university students towards ChatGPT and its usage: a multi-national study validating the TAME-ChatGPT survey instrument.
- Abdelhalim, S. M. (2024). Using ChatGPT to promote research competency: English as a Foreign Language undergraduates' perceptions and practices across varied metacognitive awareness levels. *Journal of Computer Assisted Learning*.
- Ahmed, M. A. (2023). ChatGPT and the EFL classroom: Supplement or substitute in Saudi Arabia's eastern region. *Information Sciences Letters*, 12(7), 2727-2734.
- Al-Alami, S. E. (2024). EFL Learners' Attitudes Towards Utilizing ChatGPT for Acquiring Writing Skills in Higher Education: A Case Study of Computing Students. *Journal of Language Teaching and Research*, 15(4), 1029-1038.
- Albayati, H. (2024). Investigating undergraduate students' perceptions and awareness of using ChatGPT as a regular assistance tool: A user acceptance perspective study. *Computers and Education: Artificial Intelligence*, *6*, 100203.
- Alkaissi, H., & McFarlane, S. I. (2023). Artificial hallucinations in ChatGPT: Implications in scientific writing. Cureus, 15(2).
- Arif, T. B., Munaf, U., & Ul-Haque, I. (2023). The future of medical education and research: Is ChatGPT a blessing or blight in disguise? Medical Education Online, 28(1), 1-2. https://doi.org/10.1080/10872981.2023.2181052
- Banik, D, Pati, N, & Sharma, A (2024). Systematic exploration and in-depth analysis of ChatGPT architectures progression. *Artificial Intelligence Review*, Springer, https://doi.org/10.1007/s10462-024-10832-0
- Bibi, Z., & Atta, A. (2024). The role of ChatGPT as AI English writing assistant: A study of student's perceptions, experiences, and satisfaction. *Annals of Human and Social Sciences*, 5(1), 433-443.
- Biswas, C., & Das, S. (2024). ARIA-QA: AI-Agent based Requirements Inspection and Analysis through Question Answering.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative research journal*, 9(2), 27-40.
- Colomb, G. G., & Griffin, J. A. (2004). Coherence On and Off the Page: What writers can know about writing coherently. *New Literary History*, 35(2), 273-301.
- Denzin, Norman K. (1973). *The research act: A theoretical introduction to sociological methods*. New Jersey: Transaction Publishers.
- Dilzhan, B. (2024). Teaching English and Artificial Intelligence: EFL Teachers' Perceptions and Use of ChatGPT. *SDU University (Dissertation)*.
- Esmaeil, a. A. A., maakip, i., matanluk, o. O., & marshall, s. (2023). Understanding student perception regarding the use of ChatGPT in their argumentative writing: A qualitative inquiry. *Jurnal komunikasi: Malaysian journal of communication jilid*, 39(4), 150-165.

- Gilat, R., & Cole, B. J. (2023). How will artificial intelligence affect scientific writing, reviewing and editing? The future is here.... Arthroscopy, 39(5), 1119-1120.
- Colomb, G. G., & Griffin, J. A. (2004). Coherence On and Off the Page: What writers can know about writing coherently. *New Literary History*, 35(2), 273-301.
- Halaweh, M. (2023). ChatGpt in education: Strategies for responsible implementation. Contemporary Education Technology, 15(2), 1-11.
- Hong, K-S. Ridzuan, A. A, & Kuek, M-K. 2003. STUDENTS' Attitudes Toward the use of the Internet for Learning. A Study at University in Malaysia. Educational Technology & Society, 6(2), 45-49. (ISSN 1436-4522).
- Imran, A. A., & Lashari, A. A. (2023). Exploring the world of Artificial Intelligence: The perception of the university students about ChatGPT for academic purpose. *Global Social Sciences Review, VIII*.
- Kanabar, V. (2023, June). An Empirical Study of Student Perceptions When Using ChatGPT in Academic Assignments. In *International Conference on Computer Science and Education in Computer Science* (pp. 385-398). Cham: Springer Nature Switzerland.
- Maghamil, M., & Sieras, S. (2024). Impact of ChatGPT on the Academic Writing Quality of Senior High School Students. *Journal of English Language Teaching and Applied Linguistics*, 6(2), 115-128.
- Lexy J. Moleong; . (2007). *Metodologi penelitian kualitatif edisi revisi /* . Bandung : Remaja Rosdakarya
- Ngo, T. T. A. (2023). The perception by university students of the use of ChatGPT in education. *International Journal of Emerging Technologies in Learning (Online)*, 18(17), 4.
- Niloy, A. C., Bari, M. A., Sultana, J., Chowdhury, R., Raisa, F. M., Islam, A., ... & Hossen, M. A. (2024). Why do students use ChatGPT? Answering through a triangulation approach. *Computers and Education: Artificial Intelligence*, 6, 100208.
- Pokotylo, P (2023). Perspectives of the Use of ChatGPT as a Tool for Online Education of English. *Educological discourse*, od.kubg.edu.ua, https://od.kubg.edu.ua/index.php/journal/article/view/1002
- Rababah, L. M., Rababah, M. A., & Al-Khawaldeh, N. N. (2024). Graduate Students' ChatGPT Experience and Perspectives during Thesis Writing. *International Journal of Engineering Pedagogy*, 14(3).
- Salvagno, M., Taccone, F. S., & Gerli, A. G. (2023). Can artificial intelligence help for scientific writing? Critical Care, 27(1), 1-5.
- Shakil, E., & Siddiq, S. (2024). ESL teachers' perceptions about ChatGPT as a threat to analytical writing abilities of ESL learners at graduate level. *Pakistan Languages and Humanities Review*, 8(1), 115-128.
- Singh, S., & Ramakrishnan, N. (2023). Is ChatGPT biased? A review.
- 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.
- Susnjak, T. (2022). The role of ChatGPT in text generation: Opportunities and challenges. Journal of Natural Language Processing, 29(3), 301-318.
- Teng, M. F. (2024). "ChatGPT is the companion, not enemies": EFL learners' perceptions and experiences in using ChatGPT for feedback in writing. *Computers and Education:* Artificial Intelligence, 100270.

- Valova, I., Mladenova, T., & Kanev, G. (2024). Students' Perception of ChatGPT Usage in Education. *International Journal of Advanced Computer Science & Applications*, 15(1).
- Van Dis, E. A., Bollen, J., Zuidema, W., van Rooij, R., & Bockting, C. L. (2023). ChatGPT: Five priorities for research. Nature, 614, 224-226.
- Vehovar, V., Toepoel, V., & Steinmetz, S. (2016). *Non-probability sampling* (Vol. 1, pp. 329-45). The Sage handbook of survey methods..
- Yan, D. (2023). Impact of ChatGPT on learners in a L2 writing practicum: An exploratory investigation. *Education and Information Technologies*, 28(11), 13943-13967.
- Zebua, J. A. Z., & Katemba, C. V. (2024). Students' Perceptions of Using the OpenAI ChatGPT Application in Improving Writing Skills. *Journal of Language and Literature Studies*, 4(1), 110-123.1
- Züll, C. (2016). Open-Ended Questions (Version 2.0).