



The Benefits of ChatGPT in Supporting Students' Thesis Writing: A Qualitative Case Study

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Article Info	Abstract
Received: 2026-04-07 Revised: 2026-05-19 Accepted: 2026-09-23 Keywords: ChatGPT, thesis writing, academic writing, artificial intelligence, higher education DOI: 10.24256/ideas.v14i2.12612 Corresponding Author: Mukhlash Abrar mukhlash.abrar@unja.ac.id Magister Pendidikan Bahasa Inggris, Universitas Jambi, Kota Jambi, Jambi	<i>This study explores the perceived benefits and challenges of using ChatGPT in supporting students during the thesis writing process. Using a qualitative case study design, data were collected through semi-structured interviews with three master's students who used ChatGPT in writing their theses. Five themes emerged: supporting research idea and topic development, organizing thesis structure and content, supporting literature exploration and conceptual understanding, supporting academic language and writing development, and supporting revision and writing efficiency. Participants perceived ChatGPT as helping them generate research ideas, organize their thesis structure, understand theory and methodology, revise drafts, overcome ideation barriers, and improve their academic writing and writing efficiency. However, participants also reported challenges, including the need to verify AI-generated references and citation information, repetitive responses, and language output that sounded overly complex or machine-generated. The study concludes that, based on these participants' experiences, ChatGPT can serve as a valuable academic writing support tool when used critically and responsibly in higher education contexts.</i>

1. Introduction

The rapid development of artificial intelligence (AI) has significantly transformed educational practices, particularly in academic writing. In higher education, students are increasingly relying on digital technologies to support their learning, research, and writing activities. AI itself refers to technologies designed to mimic human intelligence in decision-making, problem-solving, and providing

automated feedback or support; John McCarthy (2007) describes it as the science and engineering of creating intelligent machines capable of mimicking human thought processes, while Stuart Russell and Peter Norvig (2020) define it as a branch of computer science that develops intelligent agents capable of rational action to achieve specific goals. In education, AI is seen as computer programs and machine learning systems integrated into Industry 4.0 and 5.0 to support learning activities (Bakti et al., 2023). Among its types, Generative AI can create new content such as text, images, and code, and includes tools like ChatGPT and Gemini (Krementz et al., 2025). One of the most influential of these technologies is OpenAI's ChatGPT, a conversational AI system based on Large Language Models (LLMs) that is capable of writing, summarizing, understanding context, and answering questions (Meyer et al., 2023), using Natural Language Processing (NLP) to generate human-like responses from large-scale language data (Hamarashid et al., 2023). ChatGPT has attracted considerable attention from educators, researchers, and students for its ability to generate human-like text, provide explanations, summarize information, and assist with a variety of academic tasks (Kasneci et al., 2023; Tlili et al., 2023).

In higher education, thesis writing is considered one of the most demanding academic tasks, requiring students to demonstrate critical thinking, academic literacy, research competence, and the ability to structure arguments coherently. Many students experience difficulties during the thesis writing process, such as limited academic vocabulary, grammatical issues, lack of confidence, challenges in developing ideas, and difficulties in paraphrasing and synthesizing sources (Hyland, 2004; Murray, 2017). Limited consultation time with supervisors often leads students to seek alternative learning resources and technological support to complete their academic writing more effectively. In this context, AI in writing—understood as computer-based systems that mimic human intelligence to assist in generating, revising, and improving written text—offers a potential source of support. Generative AI technologies such as ChatGPT and Gemini can support idea generation, grammar correction, text prediction, and content development, and UNESCO (2023) reports that AI can improve the productivity and quality of learning in educational writing activities, although human oversight remains essential to maintain academic integrity and accuracy. Pedagogically, this use of AI can be understood through the Writing Process Theory of Flower and Hayes (1981), which views writing as a process of planning, drafting, revising, and editing, with AI potentially supporting each stage through instant feedback. This theory is used in the Discussion to interpret the participants' reported experiences.

Previous literature reports a range of capabilities of ChatGPT that are relevant to academic writing. In language learning, ChatGPT is reported to provide immediate feedback on grammar, vocabulary, organization, and clarity of ideas, helping to improve students' writing skills and learning efficiency (Polakova & Ivenz, 2024); to identify grammatical errors such as tense, punctuation, and word order and explain corrections to strengthen students' grammatical understanding

(Alsaweed & Aljebreen, 2024); and to support vocabulary development through contextual word suggestions and adaptive practice (Luu & Bui, 2025). In the specific context of thesis writing, ChatGPT is reported to provide fast and direct feedback on grammar, sentence structure, paragraph coherence, and research drafts, helping students revise and improve their academic writing more efficiently (Kasneci et al., 2023); to increase student motivation and engagement by offering responsive and personalized support, allowing students to discuss ideas, ask questions, and receive explanations regarding theories or academic writing difficulties, which may increase their confidence in completing their thesis (Lo, 2023); to contribute to improving the quality of academic writing by helping students develop ideas, enrich academic vocabulary, organize arguments, and enhance clarity (Yoon et al., 2023); and to provide access to self-directed and flexible learning, as students can use ChatGPT anytime and anywhere to understand research theories, create a thesis outline, and access academic writing examples, thereby supporting autonomous learning during the thesis writing process (Lo, 2023; Kasneci et al., 2023). These claims reflect capabilities and effects reported in previous literature, which should be distinguished from students' own perceptions of using ChatGPT.

Despite these potential benefits, the use of AI in writing also raises concerns regarding ethics, plagiarism, and originality. Aigrain (2012) and Sharples (2023) emphasize the importance of AI literacy, namely the ability to critically evaluate, verify, and modify AI-generated content, so that AI is used as a supportive and ethical writing tool rather than a substitute for human critical thinking. Accordingly, students still need to critically evaluate AI-generated feedback to maintain analytical depth and academic accuracy.

Recent empirical studies have examined ChatGPT in closely related areas, such as topic selection and refinement (Lee, 2024), the exploration of ideas and multiple viewpoints in academic writing (Dewi, 2024; Zhao et al., 2024), and graduate students' experiences during thesis writing (Rababah et al., 2024). However, most existing research has focused on the general use of AI in education, classroom learning, or English language learning, with limited attention to how students specifically use ChatGPT throughout the thesis writing process. Much of the literature also emphasizes the risks and ethical concerns associated with AI use, such as plagiarism, dependency, and academic dishonesty (Cotton et al., 2023), rather than exploring students' practical experiences and perceived benefits, and tends to rely on conceptual discussions, surveys, or experimental approaches rather than in-depth qualitative evidence on how students interact with ChatGPT during actual academic writing practices. There remains a limited understanding of how ChatGPT supports specific aspects of thesis writing, such as idea development, improving academic language, organizing structure, developing a literature review, and self-directed learning, and the benefits and challenges of ChatGPT from a student perspective have rarely been explored together. A further

gap lies in the limited research conducted in the Indonesian higher education context, where academic writing practices, supervision systems, digital literacy levels, and students' access to technological resources can vary significantly; empirical studies on how master's students experience and evaluate the use of ChatGPT in their thesis writing in this context are therefore scarce.

Based on the explanation above, this study seeks to address these gaps by providing an in-depth qualitative account of three master's students' experiences of using ChatGPT during the thesis writing process, with attention to its perceived benefits and challenges. The study does not aim to represent Indonesian graduate students broadly; rather, it is expected to provide deeper insights into the integration of AI-based tools in higher education and to contribute to discussions regarding the effective and responsible use of ChatGPT in academic writing practices. The study was guided by the following research question: **How do master's students perceive the benefits and challenges of using ChatGPT during the thesis-writing process?**

2. Method

This study uses a qualitative approach with a case study design to explore the benefits of ChatGPT, and the challenges that accompany them, in master's students' thesis writing process. This approach was chosen because it focuses on understanding participants' experiences and perceptions in the natural context of the study (Creswell, 2014), while the case study is used to explain the phenomenon of ChatGPT use in a specific academic context (Yin, 2018). The research participants were three master's students who were completing or had completed their theses and had experience using ChatGPT during the thesis writing process. Participants were selected using purposive sampling because they were considered capable of providing relevant data in accordance with the research objectives (Patton, 2015). Drex 4exThe non-identifying profiles of the three participants are presented in Table 1, and the participants are referred to as P1, P2, and P3 throughout this article.

Table 1. Participant Profiles

Participant	Study Program	Thesis Stage	Frequency of Use	Main Uses
P1	English Education	On Process	Often	Brainstorming
P2	English Education	On Process	Often	Search anything
P3	English Education	On Process	Often	Brainstorming

Data were collected through semi-structured interviews adapted from Amer

et al. (2025) to explore the benefits of ChatGPT in thesis writing (Kvale, 2009). Interviews were conducted face-to-face by the researcher in Indonesian, lasting 15–30 minutes for each participant. Because the interviews were conducted in Indonesian, participant quotations are presented in the original language, followed by English translations in square brackets.

Data were analyzed using Miles and Huberman's (2014) interactive model, which includes data reduction, data presentation, and drawing conclusions through coding and theme identification. As an illustration, the statement "Saya menggunakan ChatGPT untuk mencari isu penelitian terkini..." (P1) was coded as research-idea generation, grouped under the subtheme identifying research topics, and subsumed under the theme Supporting Research Idea and Topic Development. To enhance the credibility and dependability of the findings, this study employed member checking and an audit trail.

3. Result

Table 2. Themes and Subthemes of the Findings

No	Main Theme	Description	Subthemes
1	Supporting Research Idea and Topic Development	Participants reported that ChatGPT supported them in identifying research topics, generating research ideas, formulating research problems, and overcoming difficulties in developing research focus.	Identifying research topics, brainstorming ideas, developing research titles, formulating research problems, determining research focus, overcoming idea stagnation (writer's block)
2	Organizing Thesis Structure and Content	Participants reported that ChatGPT assisted them in organizing thesis components and structuring academic content systematically.	Thesis outline development, chapter organization, paragraph structure, Introduction chapter structure, conceptual framework, theoretical framework, content organization
3	Supporting Literature	Participants reported	Literature exploration: literature

	Exploration Conceptual Understanding	and	that ChatGPT search, finding recent journals, facilitated academic references, previous orientation to studies matrix, citation guidance. academic Conceptual clarification: theory information (to be explanation, methodological verified in scholarly understanding, concept clarification sources) and supported their understanding of theories and research methodologies.
4	Supporting Academic Language and Writing Development		Participants reported Academic vocabulary, formal that ChatGPT writing style, grammar correction, supported language paraphrasing, coherence and style improvement, sentence development in their construction, revising AI-generated thesis writing text to preserve authorial voice and through language natural academic style refinement and academic style support.
5	Supporting Revision and Writing Efficiency		Participants reported Draft revision, typo checking, that ChatGPT citation checking, bibliography supported their editing, paragraph evaluation, revision workflow, saving time, accelerating writing feedback, efficiency, tasks, information retrieval, and productivity feedback support during thesis writing.

This study explores the benefits and challenges of ChatGPT in thesis writing as perceived by master's students. Based on interviews with three master's students who were writing or had completed their theses, five themes were identified, as summarized in Table 2. All findings are presented as participants' reported experiences and perceptions rather than as objectively demonstrated improvements. The findings are presented below and discussed in the following

section.

How do master's students perceive the benefits and challenges of using ChatGPT during the thesis-writing process?

Theme 1: Supporting Research Idea and Topic Development

The interview results indicate that participants perceived ChatGPT as supporting them in writing their theses, particularly in generating research ideas and developing research topics. Participants reported using ChatGPT to identify current issues, create research titles, develop research problems, and determine research focus areas. This is illustrated by the following participant statement:

"Saya menggunakan ChatGPT untuk mencari isu penelitian terkini, mengembangkan judul penelitian, dan memeriksa apakah judul penelitian tersebut layak dan menarik untuk diteliti." (P1)

[English translation: "I use ChatGPT to find current research issues, develop research titles, and check whether the research titles are feasible and interesting to study."]

Participants perceived that the tool allowed them to explore various perspectives on a topic and helped them choose a viable research project. P2 as a one of three participants reported that ChatGPT offered ideas for possible research topics and provided guidance on how to approach research writing more systematically. Participants also emphasized the importance of ChatGPT in overcoming ideation barriers during the writing process. This is illustrated by the following participant statement:

"ChatGPT membantu menghasilkan ide, poin penelitian utama, teori yang relevan, dan referensi akademis yang sesuai dengan topik penelitian." (P2)

[English translation: "ChatGPT helps generate ideas, main research points, relevant theories, and academic references that suit the research topic."]

Participants reported using ChatGPT to obtain examples, alternative perspectives, and recommendations for further exploration when they encountered problems or difficulties in defining their research objectives. They perceived that this tool helped them think through and develop clearer research objectives, made it easier to initiate their thesis projects, and reduced the time needed to generate ideas by providing immediate feedback and a variety of options.

Theme 2: Organizing Thesis Structure and Content

The interviews indicate that participants used ChatGPT to organize thesis structure and academic content. Participants reported using the tool to create a thesis outline, organize chapters and subchapters, and organize paragraph development. They also reported that ChatGPT explained the content to be included in each chapter, particularly in the introduction and literature review chapters. This is illustrated by the following participant statements:

"Saya menggunakan ChatGPT untuk membuat kerangka bab dan subbab tesis"

saya sehingga pembahasannya menjadi lebih sistematis dan lebih mudah dipahami.”
(P2)

[English translation: “I use ChatGPT to create the chapter and subchapter outline of my thesis so that the discussion becomes more systematic and easier to understand.”]

According to participants, this assistance enabled them to develop a clearer understanding of thesis organization and to maintain a logical flow throughout their writing. Participants also noted that ChatGPT supported the development of conceptual and theoretical frameworks. This is illustrated by the following participant statement:

“Saya menggunakan ChatGPT untuk membuat kerangka tesis, mengatur isi Bab 1 dan 2, dan membantu meningkatkan tulisan saya.” (P2)

[English translation: “I use ChatGPT to create the thesis framework, arrange the content of Chapters 1 and 2, and help improve my writing.”]

By providing examples of thesis structures and outlining key components within each chapter, the tool was perceived as helping participants organize ideas systematically. Although one participant noted that some explanations were sometimes repetitive or overly detailed, the overall perception was that ChatGPT made a positive contribution to the organization of thesis content.

Theme 3: Supporting Literature Exploration and Conceptual Understanding

Based on the interviews, participants stated that ChatGPT served as a source of academic support by facilitating their orientation to the literature and enhancing their understanding of theoretical and methodological concepts. Participants used ChatGPT to search for potentially relevant journals, identify possible academic references, create matrices of previous research, and obtain explanations of theories related to their research topics. This is illustrated by the following participant statement:

“ChatGPT membantu memahami teori dan konsep akademis melalui fitur-fitur seperti School GPT, Deep Research, dan Thinking, yang membantu dalam pencarian jurnal dan analisis teori.” (P1)

[English translation: “ChatGPT helps in understanding academic theories and concepts through features such as School GPT, Deep Research, and Thinking, which help in searching for journals and analyzing theories.”]

These accounts concern the use of ChatGPT to identify and search for potential sources, that is, for literature orientation. Because ChatGPT can generate inaccurate or nonexistent references, sources identified in this way need to be confirmed in verified academic databases; participants themselves emphasized that information generated by ChatGPT must be validated before being incorporated into their work (see Theme 5). Participants perceived that ChatGPT helped them access academic information and find literature relevant to their studies. Participants also emphasized that ChatGPT made complex theories and concepts easier to understand, which they found particularly valuable when they

struggled with theoretical frameworks or research methodologies. This is illustrated by the following participant statement:

"Ketika saya kesulitan memahami suatu teori atau metode penelitian, ChatGPT menjelaskannya dengan bahasa yang lebih sederhana sehingga saya dapat memahami materi tersebut dengan lebih cepat."

[English translation: "When I have difficulty understanding a theory or research method, ChatGPT explains it in simpler language so that I can understand the material more quickly."]

Although one of the three participants preferred to learn the methodology from their instructors or previous theses, they acknowledged that ChatGPT was still useful for clarifying concepts and identifying important elements to discuss in the literature review chapter. This is illustrated by the following statement from a participant:

"Mengetahui metodologi penelitian, saya lebih banyak belajar dari kuliah dan skripsi saya. Namun, ChatGPT membantu saya memahami teori dan bagian-bagian yang perlu dibahas di Bab 2."

[English translation: "Regarding research methodology, I mostly learned from lectures and my undergraduate thesis. However, ChatGPT helped me understand the theory and the parts that need to be discussed in Chapter 2."]

Taken together, participants' accounts suggest that ChatGPT functioned as a resource for literature orientation and conceptual clarification: participants perceived it as helping them locate potentially relevant articles and understand theory, while, for methodology, it complemented rather than replaced learning from lectures and senior theses.

Theme 4: Supporting Academic Language and Writing Development

The interviews indicated that participants perceived ChatGPT as supporting the quality of their academic writing. Participants reported that the tool helped them improve their grammar, enrich their academic vocabulary, refine their sentence construction, and develop a more formal academic style. This is illustrated by the following participant statement:

"ChatGPT sangat membantu dalam meningkatkan tata bahasa dan membuat kalimat lebih akademis. Saya juga mempelajari kosakata baru yang lebih formal sehingga tulisan saya terlihat lebih ilmiah dan terstruktur."

[English translation: "ChatGPT is very helpful in improving grammar and making sentences more academic. I also learn new, more formal vocabulary so that my writing looks more scientific and structured."]

Furthermore, according to participants, ChatGPT helped improve the quality and professionalism of their writing by converting informal expressions into more scientific language. This is illustrated by the following participant statement:

"ChatGPT membantu dalam penggunaan kosakata akademis dan gaya bahasa formal."

[English translation: "ChatGPT helps in the use of academic vocabulary and formal language style."]

Participants also reported that ChatGPT helped them make their writing more coherent and clear, and they often used the tool to check paragraphs and identify areas for improvement. This is illustrated by the following participant statement:

"Saya biasanya meminta ChatGPT untuk memeriksa koherensi, tata bahasa, dan kejelasan paragraf agar saya tahu di mana saya perlu melakukan perbaikan."

[English translation: "I usually ask ChatGPT to check the coherence, grammar, and clarity of paragraphs so that I know where I need to make improvements."]

However, the participants reported that the language generated by ChatGPT sometimes seemed too complex or unnatural, making the text sound machine-generated. As a result, these participants frequently revised and paraphrased ChatGPT's output to ensure that the finished work reflected their own academic voice. This is illustrated by the following participant statement:

"ChatGPT membantu menghasilkan bahasa akademis, tetapi bahasanya terkadang terlalu tingkat tinggi dan terlihat seperti tulisan AI, sehingga perlu diubah secara manual atau menggunakan alat lain."

[English translation: "ChatGPT helps produce academic language, but the language is sometimes too high-level and looks like AI writing, so it needs to be changed manually or by using other tools."]

Taken together, participants perceived ChatGPT as helping them find formal vocabulary and clarify sentences so that they understood where to improve. At the same time, because ChatGPT sometimes produced overly high-level or formal language, participants reported revising the output manually or with other tools to preserve their own authorial voice and a natural academic style.

Theme 5: Supporting Revision and Writing Efficiency

The interviews indicate that participants perceived ChatGPT as supporting them during the revision process and as increasing their writing efficiency. Before submitting drafts to their supervisors, participants reported using the tool to check grammar, coherence, citation accuracy, bibliographic formatting, and typographical errors. This is illustrated by the following participant statements:

"ChatGPT membantu menemukan kesalahan ketik, ketidaksesuaian kata, kesalahan kutipan, dan kesalahan dalam daftar pustaka sebelum direvisi bersama pembimbing."

[English translation: "ChatGPT helps find typos, word mismatches, citation errors, and errors in the reference list before they are revised together with the supervisor."]

"Ya, karena saya bisa mendapatkan bantuan dengan cepat tanpa harus mencari terlalu lama di internet. ChatGPT membantu menghemat waktu dalam merevisi dan memahami materi."

[English translation: "Yes, because I can get help quickly without having to

search the internet for too long. ChatGPT helps save time in revising and understanding the material.”]

Additionally, participants reported that ChatGPT helped provide immediate feedback, allowing them to identify gaps in their writing and revise their drafts as needed. This is also illustrated by the following participant statements:

“mendapatkan bantuan dan masukan dengan cepat. Proses penulisan juga terasa lebih mudah dan tidak membingungkan.”

[English translation: “getting help and input quickly. The writing process also feels easier and less confusing.”]

“Saya biasanya meminta ChatGPT untuk memeriksa koherensi, tata bahasa, dan kejelasan paragraf sehingga saya tahu bagian mana yang perlu saya tingkatkan.”

[English translation: “I usually ask ChatGPT to check the coherence, grammar, and clarity of paragraphs so that I know which parts I need to improve.”]

Participants also perceived ChatGPT as a tool that made them more productive and reduced the time needed to complete academic tasks. The participant reported that the AI system helped prepare research materials, expedite information searches, and provide quick responses when needed. Consequently, these participants regarded ChatGPT as an efficient tool for assisting them in writing their theses. However, they emphasized that the information it generated must be validated before being incorporated into their work. Another participant stated that ChatGPT sometimes provided repetitive information or the same sentences as before. This is illustrated by the following participant statements:

“ChatGPT dianggap sangat efisien karena membantu menemukan informasi dengan cepat, tetapi hasilnya tetap perlu diperiksa ulang.”

[English translation: “ChatGPT is considered very efficient because it helps find information quickly, but the results still need to be rechecked.”]

“Saya jarang menggunakan ChatGPT untuk revisi karena hasil revisinya seringkali mirip dengan tulisan aslinya dan jawabannya cenderung berulang.”

[English translation: “I rarely use ChatGPT for revision because the revised results are often similar to my original writing and the answers tend to be repetitive.”]

Taken together, participants perceived ChatGPT as helping them find information quickly and revise their theses before consulting their supervisors. However, paraphrases and other suggestions provided by ChatGPT need to be double-checked before being incorporated into the thesis, because ChatGPT sometimes provides repetitive information or the same sentences as before revision.

Table 3 shows which participants’ accounts support each theme and challenge, so that readers can see whether a theme reflects all participants or only individual experiences.

4. Discussion

The discussion is organized around Writing Process Theory (Flower & Hayes, 1981), which views writing as a process of planning, drafting, revising, and editing. The five themes correspond to these stages: idea generation and outlining (planning), content and language assistance (drafting), coherence, grammar, and feedback (revising), and typographical, citation, and format checking (editing). Because the data are self-reports from three participants, the findings are discussed as perceived benefits and challenges rather than as demonstrated effects of ChatGPT on thesis-writing quality.

At the planning stage, the findings indicate that participants perceived ChatGPT as supporting them in generating research ideas and developing thesis topics. P1 stated that ChatGPT was used to identify current research issues, develop research titles, and evaluate the feasibility of research topics. This finding is consistent with Lee (2024), who found that ChatGPT helped students select and refine research topics by providing suggestions and narrowing the research focus. Furthermore, participants perceived that ChatGPT allowed them to explore multiple perspectives before deciding on a research topic. These results support Zhao et al. (2024), who reported that ChatGPT facilitated the exploration of ideas and helped students consider multiple viewpoints in academic writing.

P2 explained that ChatGPT helped generate ideas, identify key research points, suggest relevant theories, and recommend academic references. This finding aligns with Dewi (2024), who found that ChatGPT helped students overcome writing barriers and generate ideas during academic writing. Furthermore, participants reported that ChatGPT provided guidance in organizing research more systematically and clarifying research objectives. This finding is supported by Rababah et al. (2024), who concluded that ChatGPT served as a useful academic assistant by offering direct feedback and guidance throughout the thesis writing process. Overall, the findings suggest that participants perceived ChatGPT as a valuable tool for brainstorming, topic development, and research planning, and as helping them work more efficiently during the early stages of thesis writing.

The research results also showed that participants perceived ChatGPT as supporting them in structuring their theses and developing academic content, which likewise corresponds to the planning stage. Participants reported using ChatGPT to create a thesis outline, organize chapters and subchapters, and develop ideas in an organized manner. One participant stated that ChatGPT helped create a framework for chapters and subchapters, making the thesis more organized and easier to understand. This finding aligns with Dewi (2024), who found that students use ChatGPT to organize and structure academic writing more effectively. Participants also reported that ChatGPT provided guidance on the content to be included in each chapter, particularly the introduction and literature review. This finding supports Rahman et al. (2024), who reported that ChatGPT helps students understand the organization of academic texts and develop various sections of research writing. Furthermore, ChatGPT was perceived as useful in developing

conceptual and theoretical frameworks. One participant explained that ChatGPT helped organize Chapters 1 and 2 and improve the quality of their writing. These results are consistent with Rababah et al. (2024), who found that graduate students used ChatGPT to organize literature and clarify theoretical concepts during thesis writing. Overall, the findings indicate that participants perceived ChatGPT as contributing positively to the organization of their theses by helping them organize ideas, develop chapter content, and maintain coherence throughout the writing process. These findings are supported by Zhao et al. (2024), who concluded that ChatGPT facilitates academic writing by improving planning and organization.

The results of the study indicate that participants perceived ChatGPT as helping them access academic literature and understand theories related to their research. Participants used ChatGPT to search for journals, find references, and obtain explanations of theoretical concepts. This finding is consistent with Dewi (2024), who found that ChatGPT supported students in exploring academic sources and understanding research topics. Participants also reported that ChatGPT explained complex theories and research concepts in simpler language, making them easier to understand. These results support Rahman et al. (2024), who stated that ChatGPT helps students understand difficult academic concepts through clear and accessible explanations. Furthermore, although the participant preferred learning research methodology from lecturers and previous theses, they acknowledged that ChatGPT was useful for clarifying concepts and identifying key points for literature reviews. This finding aligns with Rababah et al. (2024), who found that ChatGPT helped graduate students understand the theoretical and methodological aspects of thesis writing. Overall, the findings suggest that participants perceived ChatGPT as a valuable academic support tool for understanding theory, orienting themselves to relevant literature, and clarifying research concepts. At the same time, the literature-related findings need to be interpreted with caution, as discussed below.

The results of the study also indicate that participants perceived ChatGPT as helping them improve the quality of their academic writing, particularly in grammar, vocabulary, sentence structure, and academic style, which corresponds to the drafting and revising stages. Participants reported that ChatGPT helped them use more formal and scientific language. This finding is consistent with Dewi (2024), who found that ChatGPT supported students in developing their academic writing skills. The results of the study also found that ChatGPT was used to check the coherence, grammar, and clarity of their writing. These results align with Zhao et al. (2024), who reported that ChatGPT helped students improve the organization and quality of their written text. However, The Participant noted that ChatGPT sometimes produced language that was too complex or AI-like. Therefore, they revised and paraphrased the output to maintain their own academic writing style, that is, they revised AI-generated text to preserve authorial voice and natural academic style. This finding supports Kasneci et al. (2023), who emphasized the

importance of critically reviewing AI-generated content before using it in academic writing. Overall, the findings suggest that participants perceived ChatGPT as a useful tool for supporting the quality of their academic writing, although they still needed to edit the generated text to ensure clarity and originality.

The results of the study indicate that participants perceived ChatGPT as assisting them during the revision and editing stages by helping them identify grammatical errors, citation errors, inconsistencies, and problems with bibliographic formatting. This finding is consistent with Dewi (2024), who found that ChatGPT supported students in reviewing and improving the quality of their academic writing. Participants also reported that ChatGPT provided immediate feedback and helped them improve the coherence, grammar, and clarity of paragraphs. These results align with Zhao et al. (2024), who reported that ChatGPT facilitated the revision process by helping students refine and evaluate their writing more efficiently.

Furthermore, participants perceived ChatGPT as a time-saving tool that accelerated information retrieval and thesis revision. This finding supports Rababah et al. (2024), who found that graduate students used ChatGPT to increase productivity and reduce the time required for academic writing assignments. However, the participant noted that ChatGPT sometimes produced repetitive responses and that the suggestions provided needed to be verified before being incorporated into their theses.

This finding aligns with Kasneci et al. (2023), who emphasized that AI-generated content should be critically evaluated as it may contain inaccuracies or repetitive information. Overall, participants perceived ChatGPT as increasing the efficiency of their revision process and their writing productivity. One participant also described using ChatGPT to check drafts before revising them together with the supervisor, which suggests that ChatGPT was used alongside, rather than in place of, supervision; because supervisory practices were not examined in this study, this interpretation should be treated cautiously. Nevertheless, students should review and validate the generated content before using it in their academic work.

The participants' accounts of using ChatGPT to search for journals and academic references call for particular caution. ChatGPT can generate inaccurate or nonexistent references, including plausible-looking citations (often described as hallucinated citations) and incorrect bibliographic details, and Kasneci et al. (2023) emphasized that AI-generated content may contain inaccuracies. The participants' accounts are therefore best understood as using ChatGPT for literature orientation, that is, identifying possible topics, keywords, and potential sources, rather than treating it as a scholarly database. Source verification remains essential: any reference suggested by ChatGPT should be confirmed in verified academic databases or in the original publication before it is cited. Participants themselves emphasized that information generated by ChatGPT had to be validated before being incorporated into their work, and one participant reported that results still

needed to be rechecked. This suggests that participants found ChatGPT useful for literature orientation, but that reference verification remained essential.

Academic integrity also deserves discussion because this study concerns thesis writing, where authorship, attribution, disclosure, supervisor expectations, and institutional AI policies are highly relevant. Concerns about plagiarism, dependency, and academic dishonesty have been raised in the literature (Cotton et al., 2023), and AI literacy, namely the ability to critically evaluate, verify, and modify AI-generated content, has been emphasized as essential for ethical use (Aigrain, 2012; Sharples, 2023), alongside human oversight (UNESCO, 2023). The uses reported by participants can be viewed along a continuum of responsible use, from brainstorming, to explanation, to feedback, to language revision, and to content generation, with the need for verification, disclosure, and authorial control increasing along this continuum. Participants' reported practices of revising and paraphrasing ChatGPT's output to maintain their own academic voice, and of validating information before incorporating it into their theses, illustrate authorial control in practice. However, this study did not examine disclosure practices, supervisor expectations, or institutional AI policies, which remain important topics for future research.

Limitations and Future Research

This study has several limitations. First, it involved only three participants within a single case context, so the findings are not intended to be generalized to all master's students or to Indonesian graduate students more broadly. Second, the data are self-reported and were collected through relatively short interviews of 15–30 minutes. Third, the study did not analyze participants' actual thesis drafts or their ChatGPT interaction logs, did not include supervisors' perspectives, and did not objectively compare writing quality before and after ChatGPT use. The findings should therefore be interpreted as participants' perceived benefits and challenges rather than as demonstrated effects of ChatGPT. Future studies could involve more participants from various disciplines and triangulate interviews with actual thesis revisions, prompt histories or ChatGPT conversations, supervisor feedback, and writing samples, which would allow stronger conclusions about how ChatGPT influences thesis-writing practices.

5. Conclusion

This study explored three master's students' perceptions of the use of ChatGPT in their thesis writing. The findings indicate that participants perceived ChatGPT as a multi-stage academic support tool across planning, organizing, understanding, revising, and editing their theses, while recognizing the need for human verification and authorial control. Specifically, participants perceived ChatGPT as assisting them in generating research ideas, developing research topics, organizing thesis structure, understanding research theory and methodology, supporting their academic language and writing, and supporting revision activities.

Furthermore, participants perceived ChatGPT as increasing their writing efficiency. These findings suggest that, according to these participants, while ChatGPT can support thesis writing, its use must be accompanied by critical evaluation, verification of information (including AI-generated references), and responsible academic practices. Therefore, ChatGPT should be seen as a complementary learning tool that supports students' academic writing process rather than replacing their critical thinking, creativity, and scientific judgment. Future research could involve more participants from various disciplines and additional data sources to gain a broader understanding of how generative AI shapes academic writing practices in higher education.

6. References

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