



**THE USE OF CHATGPT BETWEEN HIGH AND LOW
ACHIEVERS IN WRITING UNDERGRADUATE THESIS**

THESIS

BY

MUHAMMAD WASPUL HASYIM

22302073034



UNIVERSITAS ISLAM MALANG

POSTGRADUATE PROGRAM

ENGLISH LANGUAGE EDUCATION STUDY PROGRAM

NOVEMBER 2025

ABSTRACT

Muhammad Waspul Hasyim. 2025. *Penggunaan ChatGPT antara Mahasiswa Berprestasi Tinggi dan Rendah dalam Menulis Skripsi Sarjana*. Tesis, Program Studi Pendidikan Bahasa Inggris, Program Pascasarjana, Universitas Islam Malang. Pembimbing I: Dr. Alfian Zuhairi, M.Pd, Pembimbing II: Dr. Muhammad Yunus, M.Pd.

Kata Kunci: ChatGPT, skripsi sarjana, mahasiswa berprestasi tinggi, mahasiswa berprestasi rendah, penulisan akademik.

Penelitian ini bertujuan untuk mengeksplorasi penggunaan ChatGPT di kalangan mahasiswa sarjana Universitas Islam Malang dengan membedakan pengalaman mahasiswa berprestasi tinggi yang memiliki Indeks Prestasi Kumulatif (IPK) 3,50 ke atas dan mahasiswa berprestasi rendah dengan IPK di bawah 3,50 dalam proses penulisan skripsi. Tujuan penelitian ini adalah untuk mendeskripsikan bagaimana masing-masing kelompok memanfaatkan ChatGPT pada berbagai tahap penyusunan skripsi serta mengidentifikasi persamaan dan perbedaan dalam motivasi, strategi, dan praktik mereka.

Untuk mencapai tujuan tersebut, penelitian ini menggunakan desain kualitatif dengan wawancara semi-terstruktur terhadap enam responden, terdiri dari empat mahasiswa laki-laki dan dua mahasiswa perempuan. Data dikumpulkan melalui wawancara semi-terstruktur dan dianalisis menggunakan analisis tematik untuk menangkap pengalaman nyata baik mahasiswa berprestasi tinggi maupun rendah. Pendekatan metodologis ini memungkinkan peneliti memperoleh pemahaman yang lebih mendalam tentang bagaimana tingkat prestasi memengaruhi adopsi dan penerapan ChatGPT dalam penulisan skripsi.

Temuan penelitian menunjukkan bahwa mahasiswa berprestasi tinggi menggunakan ChatGPT secara selektif dan kritis, terutama untuk tinjauan pustaka, parafrasa, dan perbaikan bahasa, dengan frekuensi rata-rata dua hingga tiga kali per minggu. Sebaliknya, mahasiswa berprestasi rendah menunjukkan ketergantungan yang lebih luas namun kurang kritis, menggunakan ChatGPT pada berbagai bab skripsi termasuk pendahuluan, tinjauan pustaka, metodologi, dan pembahasan, dengan frekuensi rata-rata lima hingga enam kali per minggu. Kedua kelompok memiliki kesamaan dalam memanfaatkan ChatGPT untuk tugas-tugas terkait literatur, tetapi berbeda dalam tingkat evaluasi kritis dan validasi terhadap keluaran AI. Mahasiswa berprestasi tinggi secara konsisten melakukan pengecekan silang dan penyempurnaan terhadap konten yang dihasilkan, sementara mahasiswa berprestasi rendah cenderung mengadopsinya dengan sedikit modifikasi.

Sebagai kesimpulan, penelitian ini menyoroti bahwa tingkat prestasi secara signifikan membentuk keterlibatan mahasiswa dengan ChatGPT dalam penulisan skripsi. Mahasiswa berprestasi tinggi mengintegrasikan alat ini sebagai pendukung untuk meningkatkan orisinalitas dan menjaga integritas akademik, sedangkan mahasiswa berprestasi rendah berisiko mengalami ketergantungan dan



berkurangnya praktik ilmiah mandiri. Temuan ini menegaskan pentingnya pengembangan program literasi digital yang terarah serta pedoman etis untuk memastikan penggunaan AI yang bertanggung jawab dan adil di pendidikan tinggi.



ABSTRACT

Muhammad Waspul Hasyim. 2025. *The Use Of ChatGPT Between High And Low Achievers In Writing Undergraduate Thesis*. Thesis, English Education Department, Postgraduate Program, Universitas Islam Malang, Advisor I: Dr. Alfian Zuhairi, M.Pd, Advisor II: Dr. Muhammad Yunus, M.Pd

Keywords: ChatGPT, undergraduate thesis, high achievers, low achievers, academic writing.

This study aims to explore the use of ChatGPT among undergraduate students at Universitas Islam Malang by distinguishing the experiences of high-achieving students with a Grade Point Average (GPA) of 3.50 or higher and low-achieving students with a GPA below 3.50 in the process of thesis writing. The objective of this research is to describe how each group utilizes ChatGPT across different stages of thesis composition and to identify the similarities and differences in their motivations, strategies, and practices.

To achieve these objectives, the research employed a qualitative design using semi-structured interviews with six respondents, consisting of four male and two female students. Data were collected through semi-structured interviews and analyzed using thematic analysis to capture the lived experiences of both high and low achievers. This methodological approach allowed the researcher to gain a nuanced understanding of how achievement levels influence the adoption and application of ChatGPT in thesis writing.

The findings reveal that high-achieving students used ChatGPT selectively and critically, mainly for literature review, paraphrasing, and language refinement, with an average frequency of two to three times per week. In contrast, low-achieving students demonstrated broader but less critical reliance, using ChatGPT across multiple thesis chapters including the introduction, literature review, methodology, and discussion, with an average frequency of five to six times per week. Both groups shared a similarity in employing ChatGPT for literature-related tasks, but they differed in their level of critical evaluation and validation of AI outputs. High-achievers consistently cross-checked and refined the generated content, while low-achievers tended to adopt it with minimal modification.

In conclusion, this study highlights that achievement level significantly shapes students' engagement with ChatGPT in thesis writing. High-achievers integrate the tool as a supportive aid to enhance originality and maintain academic integrity, whereas low-achievers risk dependency and reduced independent scholarly practices. These insights underscore the importance of developing targeted digital literacy programs and ethical guidelines to ensure responsible and equitable use of AI tools in higher education.

CHAPTER I INTRODUCTION

This chapter provides a comprehensive overview of the research on the adoption of Artificial Intelligence (AI) tools in academic writing, with a specific focus on ChatGPT and its impact on undergraduate theses. It begins by outlining the technological advancements that have reshaped the educational landscape, leading to the emergence of generative AI. The chapter then delves into the specific context of Indonesia and Universitas Islam Malang (UNISMA), highlighting the research gap concerning the nuanced ways and motivations behind students' use of ChatGPT in their thesis writing. This introduction sets the stage for a detailed examination of the research problems, objectives, and the significance of the study, while also defining the key terms to ensure clarity and consistency throughout the paper.

1.1 Background of the Study

The digital age has undeniably revolutionized various aspects of human life, and education stands as one of the most significantly impacted sectors (Kalolo, 2019). From traditional classrooms to virtual learning environments, technology has consistently reshaped pedagogical approaches, learning resources, and even the very nature of academic inquiry. This pervasive integration of technological advancements has ushered in an era where digital literacy is paramount, and the ability to leverage technological tools effectively is increasingly becoming a critical skill for students and educators alike (Makarova & Makarova, 2018). As technology

continues to advance, it progressively redefines the academic landscape and broadens the scope of educational possibilities (Omodan, 2024).

Among these advancements, Artificial Intelligence (AI) has emerged as a groundbreaking force, poised to fundamentally alter the landscape of academic production and consumption. AI, through its sophisticated algorithms and vast datasets, possesses the capacity to automate complex tasks, analyze information at unprecedented speeds, and even generate creative content. This paradigm shift challenges traditional notions of learning, research, and authorship, inviting a re-evaluation of educational practices in light of these powerful new tools (Singh, 2023). The academic community is now grappling with how to effectively harness AI's potential while mitigating its inherent risks, marking a pivotal moment in the ongoing evolution of scholarship.

With the rapid advancement of artificial intelligence, the development of chatbot technology has evolved significantly, culminating in sophisticated models such as ChatGPT. As a generative language model, ChatGPT simulates human-like conversation by understanding and responding to user prompts in a coherent and contextually relevant manner. Unlike traditional search engines that provide one-way information, ChatGPT enables dynamic interaction, assisting users in generating ideas, solving problems, and refining text. Since its launch in November 2022, ChatGPT has become one of the fastest-growing AI applications globally, though its adoption in Indonesia remains relatively limited compared to other leading countries. Nonetheless, it stands as one of the most popular AI tools among Indonesian users (Nashir et al., 2024).

A prominent example of this AI revolution is ChatGPT, a sophisticated Large Language Model (LLM) developed by OpenAI (De Angelis et al., 2023). Designed to understand and generate human-like text based on vast amounts of data, ChatGPT boasts remarkable capabilities. It can answer complex questions, translate languages, summarize lengthy texts, and even compose creative content, making it a versatile tool for various applications (Nazir & Wang, 2023). Specifically in the realm of writing, ChatGPT offers unparalleled assistance, from brainstorming initial ideas and structuring arguments to refining grammar and style, thereby promising to streamline the writing process for many (Chatti, 2024). As a writing tool, ChatGPT can be used to outline chapters, develop initial ideas, simplify complex sentences, or even help find relevant references.

With over 270 million people and a high internet penetration rate of 77%, Indonesia presents a significant market for AI development. Despite ranking sixth globally in the number of startups, Indonesia still lags behind in AI readiness, placing 46th out of 62 countries in the 2023 Global AI Index. Key challenges include uneven internet infrastructure and relatively slow broadband speeds, especially outside Java. To address this, the government has implemented initiatives such as the Palapa Ring fiber-optic network, launched the SATRIA-1 satellite, and planned new data centers. In response to the growing demand for tech talent projected at 9 million skilled IT workers by 2030 Indonesia has introduced national strategies for AI and digital literacy, alongside ethical guidelines for responsible AI use and substantial infrastructure investment in the 2025 state budget (Komdigi, 2024).

In the current digital era, artificial intelligence (AI) has gained significant attention, particularly among social media users and digital professionals. The emergence of advanced platforms like ChatGPT has accelerated AI adoption, offering intelligent, text-based interactions. In Indonesia, AI usage is on the rise, with an estimated 1.3 million users in 2024 and projections reaching 3.33 million by 2030. AI is also expected to contribute up to 3.67% to Indonesia's GDP by that time. Indonesia ranks 4th in Southeast Asia and 42nd globally in AI Government Readiness, reflecting increasing national interest in this technology (Garuda Wibase, 2025).

A growing number of Indonesians are integrating AI tools into daily tasks, particularly in the education sector. Surveys show that over 86% of students aged 15–21 have used AI at least once a month to complete assignments, with ChatGPT emerging as the most commonly used tool. This high rate of adoption highlights how AI is reshaping learning behaviors, offering both opportunities for enhanced learning and challenges related to academic integrity and critical thinking.

The potential impact of ChatGPT on academic writing, particularly in the context of undergraduate theses, is a subject of intense debate and considerable scrutiny (Medina et al., 2024). On one hand, prior studies suggest that as indicated in recent research on Indonesian university students, ChatGPT supporters emphasize its ability to increase efficiency, shorten drafting time, and improve writing quality by providing immediate feedback, potentially making quality writing help more accessible to students in need (Sudrajat et al., 2024; Wu, 2024). However, despite its potential, concerns about academic integrity and plagiarism,

as raised in broader discussions (Mulenga & Shilongo, 2024; Kotsis, 2024), are increasingly relevant with the rise of AI tools like ChatGPT, which can generate coherent text with ease, potentially challenging originality and critical thinking. This tension between potential utility and ethical pitfalls creates a complex landscape for academic institutions and students alike. This debate highlights that ChatGPT usage isn't a monolith; the ways students use it can vary widely. For example, one student might use it simply for grammar checking or light paraphrasing, while another might use it to automatically generate entire paragraphs or even chapters.

The academic landscape in Indonesia, including at Universitas Islam Malang (UNISMA), is not immune to these global technological shifts. "Indonesian universities have progressively adopted digital platforms for learning and administration, reflecting a broader national push towards technological integration in education (Aripradono et al., 2024). However, specific policies regarding the use of advanced AI tools like ChatGPT in academic writing, especially for high-stakes assignments like undergraduate theses, may still be in nascent stages or subject to ongoing development (Li, 2024). Anecdotal evidence suggests a growing trend of technology adoption among UNISMA students, though the specific patterns and extent of ChatGPT's use in thesis writing remain largely unexplored.

The introduction of ChatGPT into the academic sphere, therefore, presents both opportunities and challenges for students at UNISMA. While it can potentially serve as a valuable resource for research and writing, its unregulated or uncritical use could undermine the very essence of academic honesty and the development of

essential research skills. Understanding the current level and nature of its adoption is crucial for UNISMA to formulate effective guidelines, educational programs, and support systems that promote responsible and ethical AI integration within its academic community, ensuring that technological progress aligns with educational values.

Several prior studies have attempted to examine the role of ChatGPT in academic settings, particularly in the context of student writing. These works provide valuable insights into productivity, creativity, and ethical challenges, yet they also reveal important limitations when applied to the more demanding process of undergraduate thesis writing.

Previous research by Sudrajad et al. (2024) focused on how ChatGPT enhances productivity and creativity among Indonesian students in English academic writing. While this study offers valuable insights into students' general perceptions and use of ChatGPT, it primarily centers on short-form writing tasks and employs a mixed-methods approach without differentiating users based on academic achievement. The study identifies benefits such as improved structure and speed, alongside concerns about over-reliance and loss of originality. However, it does not delve into the nuanced "how" and "why" behind the use patterns among students with varying academic performance levels, nor does it explore how those differences influence their specific ethical considerations and dependency on AI from their lived experiences.

Similarly, Wu (2023) research addresses the role of ChatGPT in enhancing discursive writing for English majors, emphasizing personalized feedback and

linguistic support provided by AI tools. Although the study bridges theoretical and practical perspectives, it lacks a semi structured qualitative exploration of user experiences based on academic performance and does not consider the application of ChatGPT in the context of long-form academic projects such as undergraduate theses. Moreover, Wu's study is embedded within the specific context of English for Academic Purposes (EAP), limiting its generalizability to broader academic disciplines and diverse student populations.

The study by Mulenga and Shilongo (2024), although primarily concerned with plagiarism, highlights the growing ethical risks posed by digital tools like ChatGPT in academic environments. The research provides a semi structured qualitative discussion on the causes and consequences of plagiarism, such as lack of citation knowledge and pressure to perform, but it does not empirically investigate the specific ways AI tools like ChatGPT are utilized or perceived differently by students with varying academic abilities. Furthermore, it lacks a qualitative exploration of the underlying motivations or challenges students face that might lead to specific patterns of AI use or misuse.

This study addresses the existing gaps by introducing a focused, qualitative exploration of ChatGPT use among university students, specifically differentiating users based on their academic achievement levels (high achievers versus low achievers). By employing qualitative methods such as semi structured interviews and thematic analysis, this research aims to uncover the nuanced "how" and "why" behind students' engagement with ChatGPT for undergraduate thesis writing. Unlike previous studies, which tend to generalize student experiences or rely on

quantitative measures, this research introduces academic achievement as a key contextual factor, offering a richer, more profound understanding of AI integration in complex, high-stakes academic tasks from the students' perspectives.

The novelty of this research lies in its exclusive qualitative focus on semi structured user experiences and perceptions differentiated by academic achievement, specifically within the demanding context of undergraduate thesis writing. It also contributes methodologically by providing rich, descriptive insights that can guide institutions in formulating targeted, empathy-driven AI literacy interventions and pedagogical strategies. This study extends current discourse by not only evaluating how ChatGPT supports academic writing but also by qualitatively exploring whether achievement levels influence perceived dependency, ethical considerations, and the overall effectiveness of AI integration in higher education from the students' lived experiences.

Despite the burgeoning interest in AI's role in education, a notable research gap exists concerning the specific ways and reasons for ChatGPT adoption, particularly among Indonesian university students in the context of undergraduate thesis writing. While broader studies on AI in education are emerging, there is a distinct lack of empirical data that explores the depth and quality of ChatGPT's use across different sections of an undergraduate thesis. Furthermore, existing literature rarely differentiates this use based on students' academic performance levels, leaving a crucial void in understanding the experiential differences among students. The focus often remains on mere "adoption rates" rather than the intricate "how" and "why" behind the interaction.

As the use of ChatGPT in higher education continues to grow, several studies have examined its benefits in improving productivity and writing quality. For instance, Sudrajat et al. highlighted how ChatGPT accelerates the writing process and enhances structure in academic tasks among Indonesian students (Sudrajat et al., 2024). However, this study focused primarily on short-form assignments and did not differentiate users based on academic achievement levels.

Similarly, Wu investigated the role of ChatGPT in enhancing discursive writing among English majors, emphasizing linguistic support and personalized feedback from AI tools (Wu, 2023). Although the study offers both theoretical and practical insights, it lacks an semi structured exploration of user experiences based on academic performance and does not address the use of ChatGPT in more complex, long-form projects such as undergraduate theses.

Meanwhile, the study by Mulenga and Shilongo emphasized ethical risks such as plagiarism arising from AI use in academic environments (Mulenga & Shilongo, 2024). While providing a qualitative discussion on the causes and consequences of plagiarism, the research does not empirically investigate how ChatGPT is used or perceived differently by students with varying academic abilities.

Furthermore, no existing research explicitly distinguishes the patterns of ChatGPT use between high-achieving and low-achieving students in the context of thesis writing. This distinction is highly relevant, as it may reflect different motivations, perceptions, and levels of dependency on AI technology (Ruban & Reis, 2006; Gesser-Edelsburg et al., 2024). Without a deeper understanding of these

differences, educational institutions risk implementing policies that are either ineffective or not inclusive in guiding students through the digital era.

Therefore, this study aims to fill that gap by adopting a qualitative approach that emphasizes the lived experiences of students at Universitas Islam Malang in using ChatGPT during their thesis writing process. By differentiating between high and low achievers, this research contributes new insights into the ethical and contextual integration of AI in Indonesian higher education.

Understanding these differential patterns of adoption is paramount for several reasons. For instance, if high achievers are using it primarily for revision and enhancement while lower achievers are using it for basic content generation, it implies different needs and potential ethical considerations. Such insights can inform educators about the specific types of support and guidance needed for each group, helping to foster appropriate and ethical AI use. It also highlights potential disparities in how students from different academic backgrounds interact with cutting-edge technology, offering valuable data for equitable educational resource allocation and policy development.

Therefore, this qualitative study aims to implicitly address the core question: How and why is ChatGPT being used by undergraduate students at Universitas Islam Malang in the process of writing their theses, and are there discernible differences in the motivations, perceptions, and actual practices of its use between students classified as high achievers and those categorized as low achievers? By exploring these fundamental questions through an semi structured qualitative lens, this research seeks to provide rich, empirical evidence that can contribute

significantly to the ongoing discourse on AI integration in higher education, offering specific, localized insights for UNISMA and serving as a foundation for future, more extensive investigations into the evolving relationship between students, AI, and academic integrity. This study does not merely seek to quantify usage but to understand the lived experiences and decision-making processes that shape students' engagement with AI in academic writing.

1.2 Research Questions

The phenomenon of using ChatGPT in writing students' theses raises questions about the extent of adoption of this tool, especially among students with different levels of achievement, and its impact on the academic writing process. Therefore, the following is the formulation of the problem in this study:

1. How do high-achiever students use ChatGPT in various sections of their undergraduate thesis writing process?
2. How do low-achiever students use ChatGPT in various sections of their undergraduate thesis writing process?
3. What are the similarities and differences in the use of ChatGPT between high and low achieving students in various stages of their thesis writing?

1.3 Research Objectives

Based on the background and problem formulation, the following are the objectives of this research:

1. To describe how the high-achieving students utilize ChatGPT in various sections of their undergraduate thesis writing process.

2. To describe how low-achieving students utilize ChatGPT in various sections of their undergraduate thesis writing process.
3. To identify the similarities and differences in the use of ChatGPT between high and low achieving students in various stages of their thesis writing.

1.4 Significance of the Study

This research has significant practical implications for students and lecturers within the academic community. By revealing the patterns of ChatGPT use in thesis writing, this study provides insights that can help all parties adapt to AI technology more effectively and responsibly.

1. For Students

This research serves as a practical guide. Students can understand the real risks and benefits of using ChatGPT based on the experiences of their peers. This allows them to make smarter and more ethical decisions, such as when to use ChatGPT for initial ideas and when to rely on their own critical thinking. The findings help students avoid pitfalls like plagiarism and over-reliance while maximizing the tool's benefits for improved efficiency.

2. For Lecturers and Thesis Supervisors

This study offers a clear picture of how students are actually using ChatGPT. Lecturers and supervisors can gain a deeper understanding of the challenges students face, such as difficulty verifying information or becoming dependent on AI. These insights are crucial for designing better teaching methods, providing appropriate guidance, and developing fair policies regarding AI use

in the classroom. In this way, educators can help students use AI as a constructive tool, not as a detrimental shortcut.

3. Theoretical Significance

Beyond its practical contributions, this research also holds theoretical value. It enriches the body of knowledge on AI integration in higher education, particularly in the domain of academic writing and thesis preparation. By comparing the practices of high-achieving and low-achieving students, the study provides empirical evidence that supports theories of student agency, self-regulated learning, and critical engagement with technology. Furthermore, the findings contribute to ongoing debates in educational research about the role of AI as either a facilitator of learning or a potential source of dependency. In this way, the study advances theoretical discussions on how digital tools reshape academic practices, offering a nuanced perspective that bridges technology adoption with pedagogical and cognitive frameworks.

1.5 Scope and Limitation

This study focuses on the use of ChatGPT among undergraduate students of Universitas Islam Malang in the process of thesis writing. The scope of the research is limited to students classified as high achievers ($GPA \geq 3.50$) and low achievers ($GPA < 3.50$). The investigation emphasizes how these two groups utilize ChatGPT in different sections of their thesis, including the introduction, literature review, methodology, and discussion.

The limitation of this study lies in the number of participants and the qualitative design employed. Only six respondents were selected, consisting of four male and two female students, which may not fully represent the entire student

population. Furthermore, the data were collected through semi-structured interviews, so the findings are based on self-reported experiences and may not capture all possible variations of ChatGPT use. The results, therefore, should be interpreted within the context of these boundaries and are not intended for broad generalization beyond the studied group.

1.6 Definitions of Key Terms

To ensure a shared understanding of the core concepts within this study, the following key terms are operationally defined:

1. **ChatGPT** is an advanced AI language model developed by OpenAI that generates human-like responses based on input prompts. Built on a deep neural network using transformer architecture, it processes natural language to produce coherent and contextually relevant output. Its applications span various fields, including content creation, customer service, and language processing (Kalla et al., 2023).
2. **High Achiever Student** is operationally defined as undergraduate students at Universitas Islam Malang with a Grade Point Average (GPA) of 3.50 or higher. This classification identifies students who consistently demonstrate superior academic performance.
3. **Low Achiever Students** are operationally defined as undergraduate students at Universitas Islam Malang with a Grade Point Average (GPA) under 3.50. This classification refers to students whose academic performance is generally considered to be below average compared to their peers, potentially indicating

areas where additional support or different learning approaches might be beneficial.

4. **Undergraduate Thesis** This refers to the final academic paper required for undergraduate students at Universitas Islam Malang (UNISMA) to fulfill the requirements for their Bachelor's degree. It typically involves original research or an semi structured study on a specific topic within their field of study.



CHAPTER V DISCUSSION

This chapter presents a comprehensive discussion of the research findings, linking the empirical data from student interviews with relevant theoretical frameworks and prior studies. It begins by interpreting how high-achieving students utilize ChatGPT, highlighting their strategic and critical approach. The discussion then shifts to low-achieving students, analyzing their different patterns of use, motivations, and perceived challenges. The chapter concludes by synthesizing the key similarities and differences between the two groups, providing a nuanced comparative analysis that sheds light on the factors influencing the adoption of AI in academic writing.

5.1 The Ways High-Achiever Students Utilize ChatGPT

The first research question of this study aimed to explore how high-achiever students utilize ChatGPT across different sections of their undergraduate thesis writing. Anchored in the Technology Acceptance Model (TAM) as proposed by Saif et al. (2024), the discussion examines the extent to which perceived usefulness and perceived ease of use influence the ways high-achievers integrate ChatGPT into their academic work. In addition, external factors such as stress and anxiety are considered, since these may motivate or limit technology adoption in an academic context. By linking the empirical findings with theoretical perspectives, this section provides a comprehensive picture of the nuanced strategies high-achievers adopt when using AI tools.

Findings from the interviews indicate that high-achievers adopt ChatGPT in a strategic and selective manner. Rather than relying on the tool in an uncritical fashion, they use it to complement their academic competencies. This resonates with the TAM framework, where perceived usefulness is a primary determinant of adoption: students saw ChatGPT as an effective aid to save time, refine language, and expand access to academic references. Importantly, these students displayed an ability to integrate ChatGPT into their workflow without compromising the authenticity of their academic contributions, highlighting a balanced form of technology acceptance that avoids blind reliance.

One participant (SA, GPA 3.55) described how ChatGPT supported the construction of Chapter 2 (the literature review) and Chapter 4 (data analysis), stating: *“I used it for Chapter 2 and for the data processing in Chapter 4 because it was incredibly helpful... I certainly made modifications because I didn’t use them directly.”* This illustrates not only the perceived usefulness of ChatGPT but also the critical reflexivity in its use. The quote demonstrates that high-achievers integrate AI into their writing process as an academic “assistant” rather than a “substitute,” showing awareness that outputs must be reviewed, refined, and contextualized before incorporation.

The selective nature of ChatGPT use among high-achievers also demonstrates their awareness of academic integrity and the importance of maintaining originality. Several respondents emphasized paraphrasing and modifying outputs before integration into their thesis. This reflects findings from Sudrajad et al. (2024), who argued that effective integration of AI into higher education requires critical

engagement from students rather than blind adoption. In this way, high-achievers not only benefit from the efficiencies of generative AI but also mitigate risks associated with plagiarism, demonstrating what Omodan (2024) describes as “ethical digital literacy.”

In terms of specific sections, most high-achievers reported employing ChatGPT extensively in Chapter 2, where locating, summarizing, and paraphrasing theoretical foundations and prior studies were particularly challenging. MD (GPA 3.72) noted: *“The way I use ChatGPT is that I use some material that might be difficult to find on YouTube or require extensive reading. I use ChatGPT to summarize or explain it more fully.”*

This shows that ChatGPT was used as a cognitive offloading tool, reducing the burden of synthesizing multiple sources. In this context, the tool functioned as a bridge between raw academic materials and the student’s personal interpretation, streamlining the navigation of scholarly databases.

The reliance on ChatGPT for literature review chapters resonates with prior research on academic technology use. According to Sudrajat et al. (2024) and Wu (2023), generative AI is often employed in higher education for literature search and synthesis tasks, which are labor-intensive and cognitively demanding. High-achievers seem to align with this pattern but add an additional layer of discernment, as they consistently sought original sources after obtaining AI-generated summaries. This not only validates the information but also strengthens the depth and credibility of their academic arguments.

Beyond literature review, high-achievers also explored ChatGPT for language refinement. EF (GPA 3.52) explained: *“I also asked for help paraphrasing Chapter 1 to make the language more standard.”* This aligns with the perceived ease of use factor of TAM, as the tool simplified linguistic challenges, particularly in producing formal academic prose. For students writing in English as a foreign language, the affordances of ChatGPT are especially significant, since language clarity is often a barrier to effective academic expression. This suggests that ChatGPT’s value lies not only in content generation but also in lowering linguistic barriers.

Despite its usefulness, high-achievers consistently stressed the need for critical evaluation of ChatGPT’s outputs. SA reported: *“Usually, I read the ChatGPT results directly and, if I think they’re good, I’ll look for the original reference journals.”*

This demonstrates a systematic process of validation, combining the tool’s efficiency with human oversight. Such practices reflect what Wu (2023) terms “AI-human synergy,” where generative models accelerate the academic process but human judgment ensures accuracy, ethical compliance, and contextual relevance.

Another significant theme concerns stress reduction. MH (GPA 3.49) highlighted the emotional relief provided by ChatGPT, stating: *“Since there are many cases of people committing suicide just because of their theses, I think ChatGPT can be very helpful in overcoming thesis challenges.”*

This observation broadens the discussion beyond productivity into the psychological domain. It aligns with Saif et al.’s (2024) extension of TAM, where

external factors such as stress and anxiety play a decisive role in technology adoption. In this sense, ChatGPT functioned not only as an academic support system but also as a coping mechanism, easing the mental health burden associated with thesis writing.

This finding corresponds with broader literature on technology adoption in higher education, where digital tools often double as stress management resources (Kalolo, 2019). For high-achievers, the efficiency gains of ChatGPT translated into emotional reassurance, reinforcing their ability to maintain high standards of performance without succumbing to burnout. By reducing cognitive load, ChatGPT indirectly supported resilience and motivation, which are critical for sustained academic achievement.

At the same time, high-achievers remained cautious about dependency. SB (GPA 3.48) explained: *“The challenge is more about forming thoughts, commands, and creating prompts... If you use it too often, you can become dependent, but if you only view it as a tool to help, you won’t become dependent.”*

This perspective reveals metacognitive awareness, where students not only monitor their academic outputs but also reflect on their own learning habits. It underscores an important implication: that high-achievers see the boundary between productive assistance and harmful over-reliance, and actively seek to remain on the balanced side of this spectrum.

Ethical considerations also featured prominently in the reflections of high-achievers. While they acknowledged the productivity benefits of ChatGPT, they emphasized the importance of originality and avoiding plagiarism. SA, for example,

mentioned modifying and sourcing original journals rather than copying outputs directly. Such attitudes echo the argument of Wu (2023) that ethical use of AI requires human oversight and accountability. This ethical awareness highlights the role of academic values in shaping technology use, ensuring that adoption does not compromise integrity.

The variation in utilization across thesis chapters illustrates how high-achievers adapt ChatGPT to their specific academic needs. For instance, while SA and EF leaned heavily on ChatGPT for Chapter 2, MD and MH integrated it across multiple chapters, including Chapters 1 and 4. This adaptability demonstrates a nuanced perception of usefulness, where the tool is flexibly adjusted to different stages of thesis development. Rather than adopting a one-size-fits-all approach, students calibrated their use of ChatGPT according to task complexity.

Interestingly, the findings reveal that high-achievers are not homogeneous in their strategies. While most focused on Chapters 1 and 2, MH reported using ChatGPT “*from the first chapter to the last,*” particularly for real-time feedback in discussing second language acquisition. This suggests that some high-achievers maximize ChatGPT’s potential across the thesis process, while others employ it more sparingly. Such heterogeneity indicates that personal preferences, disciplinary focus, and confidence levels also mediate ChatGPT adoption.

These variations in usage are consistent with Saif et al. (2024)’s refinement of TAM, which emphasized that perceived usefulness is context-dependent. In other words, students adopt technology differently depending on the academic demands of each task. High-achievers, therefore, demonstrate adaptive behavior by

calibrating ChatGPT's role according to the complexity and purpose of each chapter. This adaptability highlights their agency in determining when and how AI tools are best employed.

The role of social influence in adoption was also evident. MD shared: *"I was told to use ChatGPT by friends and through social media."* This highlights how peer networks shape adoption, reinforcing TAM's broader ecosystem where external variables beyond usefulness and ease encourage acceptance. High-achievers appear receptive to peer-driven encouragement but combine it with critical evaluation, ensuring that adoption is filtered through their own academic standards.

Overall, high-achievers show a pragmatic approach toward ChatGPT. They embrace its capacity to improve efficiency and language quality, but simultaneously acknowledge its limitations, errors, and ethical risks. This dual stance contrasts with concerns raised in the literature that students may rely excessively on AI tools (Wu, 2023; Sudrajat et al., 2024). Instead, high-achievers demonstrate resilience against overdependence, showing that academic maturity mediates the risks of AI adoption.

The findings also reinforce the importance of digital literacy in the era of generative AI. High-achievers' ability to critically assess, paraphrase, and triangulate ChatGPT outputs with original sources indicates higher-order digital competencies. As suggested by Makarova & Makarova (2018), Kalolo (2019), and Omodan (2024), successful integration of technology in higher education depends not only on access but also on skills in critical digital literacy. The high-achievers

in this study exemplify this competency by actively curating AI outputs to align with academic norms.

By situating these findings within the TAM framework, it becomes clear that both perceived usefulness and ease of use strongly influenced high-achievers' adoption of ChatGPT. However, their practices also extend TAM by showing that stress management, ethical awareness, and peer influence are equally significant drivers. High-achievers did not merely use ChatGPT for convenience but integrated it within broader academic strategies of maintaining performance and integrity.

In summary, high-achiever students utilize ChatGPT in their thesis writing primarily for literature review, paraphrasing, and data processing, while modifying outputs to ensure originality. Their adoption reflects TAM's principles of usefulness and ease of use, yet also highlights additional factors such as stress reduction, ethical considerations, and social influence. These findings suggest that high-achievers exemplify a balanced model of AI adoption: one that maximizes efficiency while sustaining critical engagement, originality, and academic standards.

5.2 The Ways Low-Achiever Students Utilize ChatGPT

The second research question explores the utilization of ChatGPT by low-achiever students in writing their undergraduate theses. Using the Technology Acceptance Model (TAM) as the analytical lens, this discussion examines how perceived usefulness, perceived ease of use, and external factors shape their adoption patterns. While high-achievers employed ChatGPT selectively and critically, low-achievers demonstrated distinct tendencies that illuminate different

dimensions of AI adoption in higher education. The discussion in this section not only highlights the distinctive use practices of low-achievers but also reflects broader implications for learning, ethics, and digital literacy development in academic contexts.

The findings suggest that low-achievers, compared to their high-achieving peers, tend to use ChatGPT in a more straightforward and sometimes uncritical manner. They emphasize the immediate utility of the tool for simplifying difficult sections, drafting text quickly, or bypassing complex processes that otherwise demand higher cognitive effort. This reflects a high valuation of perceived ease of use, as theorized in the original TAM framework (Saif et al., 2024), where convenience and time-saving capacities strongly encourage adoption. Such reliance suggests that the decision to adopt ChatGPT among low-achievers is often motivated by short-term relief from academic challenges rather than long-term skill development.

For instance, MFA (GPA 3.33) admitted: *“I used it in Chapter 3, which was quite difficult. If I used ChatGPT, I would immediately try to simplify it. In Chapter 3, I would write down all the suggestions directly so it would be ready.”*

This statement illustrates a tendency to rely heavily on AI-generated outputs with minimal modification, reflecting a pragmatic approach but raising concerns about originality and depth. While this strategy provides efficiency, it also limits opportunities for students to engage in deeper analytical reasoning, which is essential in thesis writing. The absence of critical filtering raises questions about

how effectively low-achievers develop essential research competencies, such as evaluating evidence or synthesizing multiple sources.

This reliance on ChatGPT without substantial revision contrasts with high-achievers, who often re-evaluated and paraphrased AI content before incorporation. Prior research (Wu, 2023) warns that such uncritical adoption can risk academic quality, as AI-generated texts may include inaccuracies, biases, or lack contextual relevance. Low-achievers appear more vulnerable to these risks, particularly when they substitute AI outputs for their own intellectual contributions. The consequences of this pattern may not only affect thesis quality but also impede the development of independent thinking skills, which are critical in higher education.

MH (GPA 3.49), another participant categorized as a low-achiever, reported using ChatGPT *“from the first chapter to the last,”* highlighting that the tool provided real-time feedback and accelerated thesis completion. While this illustrates the perceived usefulness dimension of TAM, it also suggests overdependence. Instead of treating ChatGPT as a supplementary tool, MH regarded it as an integral driver of the thesis process. This perspective is consistent with findings from Mulenga & Shilongo (2024), who found that students under high academic pressure often gravitate toward digital tools as shortcuts, sometimes at the expense of deeper understanding.

Interestingly, MH justified this reliance by linking it to the broader issue of stress in thesis writing, saying: *“Since there are many cases of people committing suicide just because of their theses, I think ChatGPT can be very helpful in overcoming thesis challenges.”*

This aligns with Saif et al. (2024), who extended TAM by noting that stress and anxiety act as external motivators in technology adoption. For low-achievers, ChatGPT is not only a cognitive aid but also a coping mechanism, offering emotional reassurance and reducing psychological burdens associated with thesis writing. This highlights how technology can simultaneously serve academic and affective functions, though such reliance can blur the line between supportive assistance and unhealthy dependency.

Another participant, SB (GPA 3.48), also illustrated the importance of ease of use in shaping adoption, stating: *“Each chapter should, of course, be based on our own thinking, with prompts or commands coming from our own thinking. But we’re asking AI to create a narrative, especially as humans with limited vocabulary.”*

Here, SB highlights how ChatGPT compensates for linguistic limitations, demonstrating the TAM dimension of perceived ease of use. However, this also underscores the risk that limited vocabulary or academic writing skills may lead students to excessively rely on ChatGPT, potentially hindering the independent acquisition of language proficiency.

However, low-achievers often underestimated the challenges of prompt engineering, as SB also admitted: *“The challenge is more about forming thoughts, commands, and creating prompts... ChatGPT doesn’t understand and can’t provide the right answers.”*

This finding suggests that while the tool is seen as user-friendly, the effectiveness of use depends on digital literacy skills, which may be weaker among

low-achievers. Research by Kalolo (2019) and Omodan (2024) emphasized that digital tools in higher education require not only access but also higher-order literacy skills to maximize their pedagogical value. Without these skills, low-achievers are more likely to encounter frustrations or produce shallow academic outputs.

From an ethical perspective, MFA voiced skepticism about overreliance, stating: *“Relying on ChatGPT won’t improve our scientific abilities.”* While acknowledging the benefits, this student recognized that uncritical dependence may hinder intellectual growth. This resonates with Sudrajad et al. (2024), who stressed the ethical responsibility of using AI in ways that promote learning rather than replace it. Although this awareness exists, the broader pattern among low-achievers indicates that the recognition of risks does not always translate into cautious behavior. In practice, they still incorporated ChatGPT outputs extensively, even when acknowledging potential drawbacks.

Despite such reservations, low-achievers still leaned on ChatGPT more heavily than high-achievers. For instance, MH declared that he *“highly recommend[ed] using ChatGPT, but not for immediate answers, simply for assistance.”* This reflects ambivalence: while recognizing risks, low-achievers often default to recommending widespread use, partly due to the tool’s time-saving capacity. This mirrors a paradox in TAM adoption studies where perceived usefulness outweighs concerns about potential drawbacks, leading to behavior that prioritizes convenience over critical evaluation.

These findings indicate that the dimension of perceived usefulness is particularly salient for low-achievers. They often frame ChatGPT as a solution to the overwhelming demands of thesis writing, enabling them to complete tasks they might otherwise struggle with. This is consistent with Mulenga & Shilongo (2024), who found that students under higher academic pressure are more inclined to adopt technology for immediate relief rather than long-term learning benefits. Such adoption strategies reflect survival-oriented learning rather than developmental learning, where the focus shifts from building competencies to meeting minimum academic requirements.

The tendency of low-achievers to apply ChatGPT across multiple thesis chapters also suggests a lack of selectivity. Unlike high-achievers, who targeted specific sections (such as Chapter 2), low-achievers often reported using ChatGPT for “the whole process.” This blanket adoption highlights their prioritization of efficiency over critical engagement, which raises concerns about academic rigor. The risk is that theses produced under such conditions may lack depth, coherence, or originality, since the heavy use of ChatGPT may overshadow the student’s own contribution.

In TAM terms, this broad adoption reflects a heavy reliance on perceived ease of use: the less effort required, the more attractive ChatGPT becomes. However, this can inadvertently reduce opportunities for deep learning. As Saif et al (2024) argued, while ease of use encourages adoption, Sudrajad et al. (2024) and Wu (2023) caution that long-term reliance without critical reflection can hinder skill development. For low-achievers, this dynamic is particularly concerning, as their

weaker academic foundations may already place them at risk of superficial engagement with complex material.

Moreover, peer influence played a role in adoption among low-achievers. MFA acknowledged that he only learned about ChatGPT through friends. Social influence has been identified as an important extension to TAM, particularly in educational contexts (Saif et al., 2024). For low-achievers, peer recommendations appear to accelerate adoption without sufficient independent evaluation. This finding reveals the double-edged role of social influence: while it democratizes access to new tools, it can also foster uncritical adoption if students lack guidance in responsible use.

The findings also reveal that low-achievers often conflate speed with quality. MH, for example, highlighted that ChatGPT “sped up” the thesis process, while SB saw it as an aid to compensate for limited vocabulary. However, neither emphasized the necessity of validating the outputs. This supports concerns raised by Sudrajat et al. (2024) about the risks of treating AI-generated content as authoritative. When speed becomes the dominant criterion, the academic rigor and quality of argumentation can be compromised.

Another theme concerns the balance between tool and dependency. SB cautioned: *“If you use it too often, you can become dependent, but if you only view it as a tool to help, you won’t become dependent.”* This illustrates self-awareness, yet the overall pattern of responses suggests that low-achievers are at greater risk of dependency compared to high-achievers, given their heavier usage. This

dependency not only risks diminishing critical thinking but may also reinforce a passive learning culture, where students defer too much agency to AI tools.

In comparison to high-achievers, low-achievers displayed less emphasis on originality. While some, like SA, emphasized paraphrasing and cross-checking references, low-achievers often integrated ChatGPT's suggestions directly with minimal modification. This tendency echoes concerns in the literature that weaker students may resort to copying AI outputs, potentially undermining academic integrity (Mulenga & Shilongo, 2024). The risk is particularly pressing in academic contexts where originality and critical engagement are central to assessment criteria.

Nevertheless, it is important to acknowledge that low-achievers perceive ChatGPT as a democratizing tool. For students who struggle with language barriers, limited access to resources, or heightened academic stress, ChatGPT offers an avenue for participation and progress. In this sense, their adoption reflects TAM's principle of usefulness: they adopt the technology because it allows them to achieve outcomes that may otherwise be unattainable. Thus, while overreliance is problematic, the tool also empowers students who may be disadvantaged by systemic or personal challenges.

Taken together, the evidence indicates that low-achievers use ChatGPT more frequently, across more chapters, and with less critical reflection than high-achievers. Their motivations are strongly driven by perceived ease of use and immediate usefulness, as well as external factors such as stress, anxiety, and peer influence. However, this heavy reliance also exposes them to risks of dependency,

reduced originality, and weakened critical engagement. At the same time, it reveals the potential of AI tools to bridge academic inequalities by offering support to students who might otherwise struggle significantly.

In conclusion, low-achiever students utilize ChatGPT primarily as a comprehensive and time-saving solution, applying it across multiple sections of their thesis with minimal modification. While this reflects strong perceived usefulness and ease of use within TAM, it also highlights external pressures such as stress that drive adoption. Unlike high-achievers, who employ ChatGPT as a complementary tool, low-achievers often risk overreliance. These findings suggest that while ChatGPT lowers barriers to thesis completion, its pedagogical value depends heavily on students' capacity for critical engagement and ethical use.

5.3 The Similarities and Differences in the Use of ChatGPT

The third research question seeks to compare how high- and low-achieving students utilize ChatGPT in different sections of their undergraduate thesis writing. This analysis not only uncovers overlapping adoption patterns but also highlights important divergences in depth of engagement, critical reflection, and ethical considerations. Using the Technology Acceptance Model (TAM) as a guiding framework, similarities and differences are discussed in terms of perceived usefulness, perceived ease of use, and external influences.

A key similarity between high- and low-achievers is their acknowledgment of ChatGPT's usefulness in simplifying and accelerating the thesis process. Both groups recognize that the tool can generate drafts, refine sentences, and offer structural guidance. This aligns with the TAM dimension of perceived usefulness,

suggesting that ChatGPT addresses a common pain point: the complexity and stress of academic writing (Saif et al., 2024).

For example, a high-achiever (SA, GPA 3.95) reported using ChatGPT in Chapter 2 to identify key references and simplify theoretical discussions, while a low-achiever (MH, GPA 3.49) admitted using it from “the first chapter to the last.” In both cases, ChatGPT was valued as a productivity enhancer, underscoring its universal appeal across achievement levels.

Another similarity lies in the acknowledgment of ChatGPT’s limitations. Both high- and low-achievers expressed awareness that AI cannot fully replace human thinking. High-achievers emphasized the need to paraphrase and verify references, while low-achievers noted that the tool sometimes misunderstood prompts. This reflects Wu (2023) finding that students tend to treat ChatGPT as a fallible assistant rather than an unquestioned authority.

Despite these overlaps, important differences emerge in how each group engages with ChatGPT outputs. High-achievers demonstrate critical use, integrating ChatGPT content selectively and modifying it substantially. In contrast, low-achievers often rely on ChatGPT outputs with minimal revision, reflecting a pragmatic but potentially problematic approach.

For instance, MFA (low-achiever, GPA 3.33) explained: *“In Chapter 3, I would write down all the suggestions directly so it would be ready.”* By contrast, SA (high-achiever, GPA 3.95) stated: *“ChatGPT is only a tool; we still need to think critically. I used it for finding references, but I always re-checked them manually.”* This comparison highlights the divide in depth of engagement.

Within TAM, this divergence illustrates different emphases on ease of use versus usefulness. Low-achievers tend to value ease of use, seeking to reduce cognitive load and save time, while high-achievers emphasize usefulness in terms of enhancing the quality and credibility of their thesis. This resonates with Saif et al. (2024), who argued that perceived ease of use drives adoption among less skilled users, while perceived usefulness dominates among more proficient users.

Differences also manifest in the stages of thesis writing where ChatGPT is applied. High-achievers predominantly used it in Chapter 2 (literature review) and Chapter 3 (methodology) for structuring ideas and finding references. Low-achievers, however, reported using it across almost all chapters, including the introduction and conclusion. This breadth of use suggests lower selectivity and a stronger reliance on AI support.

This pattern reflects the findings of Gesser-Edelsburg et al. (2024), who noted that weaker students are more likely to adopt technology broadly as a compensatory strategy. By contrast, stronger students adopt technology strategically, targeting specific tasks where its value is maximized.

Another area of similarity lies in students' recognition of the role of prompts. Both groups acknowledged that the quality of ChatGPT's responses depended on how prompts were crafted. SB (low-achiever) emphasized the challenge of "forming thoughts, commands, and creating prompts," while DPA (high-achiever) described experimenting with different prompts to refine answers. This aligns with Wu (2023), who highlighted prompt literacy as a crucial factor in effective AI use.

Nevertheless, differences in prompt strategies are evident. High-achievers tended to refine and iterate their prompts, testing variations to elicit better results. Low-achievers, on the other hand, expressed frustration when initial prompts failed and often settled for suboptimal outputs. This reflects a gap in digital literacy that exacerbates achievement differences.

The role of external factors also diverges between the two groups. Low-achievers often justified their reliance on ChatGPT by referencing stress, limited vocabulary, or academic pressure. For instance, MH linked ChatGPT adoption to avoiding mental health crises among students. High-achievers, however, framed their use as part of a broader strategy for efficiency and quality improvement rather than coping.

This aligns with Saif et al. (2024), who argued that anxiety and stress can act as external variables that shape technology adoption in TAM. For low-achievers, ChatGPT functions not only as an academic tool but also as an emotional buffer against thesis-related stress.

Peer influence also plays a stronger role for low-achievers. MFA learned about ChatGPT only after friends recommended it, while high-achievers often reported self-initiated exploration of AI tools. According to Sudrajat et al. (2024), social influence is a key determinant of adoption, particularly among less confident users. This further explains why low-achievers show broader but less critical usage patterns.

Another difference concerns ethical reflections. High-achievers explicitly voiced concerns about plagiarism and the dangers of overreliance, often framing

ChatGPT as a support system rather than a substitute for intellectual labor. Low-achievers occasionally echoed this sentiment, but their behaviors (copying outputs directly) suggest weaker commitment to academic integrity.

Interestingly, both groups expressed ambivalence about dependency. SB (low-achiever) warned against “using it too often” to avoid reliance, while SA (high-achiever) argued that “ChatGPT cannot think critically, so we must.” Yet in practice, high-achievers demonstrated independence, while low-achievers were more prone to dependency. This reflects a gap between awareness and behavior.

Differences are also observed in how each group handles verification of references. High-achievers consistently cross-checked references provided by ChatGPT, often discarding fabricated citations. Low-achievers, however, were less rigorous in this process, sometimes assuming the AI outputs were accurate. This distinction is crucial, as Mulenga & Shilongo (2024) highlight the risk of fabricated academic sources in AI-generated content.

Another similarity is that both groups perceived ChatGPT as democratizing access to academic writing support. Students with limited English proficiency or weaker academic backgrounds saw the tool as leveling the playing field. This perception aligns with the TAM construct of perceived usefulness: technology adoption occurs when users see tangible benefits in achieving their goals.

However, the democratizing effect is double-edged. For high-achievers, ChatGPT expands opportunities for refining complex arguments. For low-achievers, it risks becoming a crutch that bypasses essential learning processes. This

echoes Sudrajad et al. (2024), who warned that the same technology can empower or disempower depending on the user's approach.

In terms of overall frequency, low-achievers reported using ChatGPT more frequently and extensively across the thesis process. High-achievers restricted their use to targeted tasks. This reflects different adoption styles: compensatory versus complementary. The compensatory style aims to substitute for weaknesses, while the complementary style seeks to augment strengths.

In TAM language, low-achievers are driven by ease of use and external stressors, leading to extensive but shallow adoption. High-achievers are motivated by usefulness and efficiency, leading to selective but deeper adoption. These patterns reinforce the model's explanatory power in educational contexts.

Both groups show a pragmatic attitude. They care less about theoretical issues of AI and more about its practical benefits. For them, whether ChatGPT helps complete the thesis more effectively is the key factor, highlighting the dominance of perceived usefulness in adoption decisions.

Yet the implications for pedagogy differ sharply. For high-achievers, ChatGPT enhances existing skills, promotes deeper engagement with academic content, and encourages efficient knowledge synthesis. For low-achievers, however, it risks reinforcing passivity and dependency, potentially widening the achievement gap rather than closing it. These contrasting outcomes hold important lessons for students, educators, and policy makers.

For students, the challenge lies in cultivating critical and ethical engagement with AI using ChatGPT as a cognitive partner rather than a shortcut. Educators, on

the other hand, need to design scaffolding strategies that integrate AI into learning without diminishing students' independent thinking skills. Structured guidance, reflective assignments, and transparent supervision can help balance innovation with academic integrity. At the institutional and policy level, clear frameworks and guidelines on responsible AI adoption are essential to ensure that technology empowers rather than replaces genuine learning. This calls for collaboration between educators and policy makers to align pedagogical practices with ethical and educational standards in the era of generative AI.

Overall, the comparison shows both convergence and divergence. Similarities include recognition of usefulness, awareness of limitations, and concern about dependency. Differences include depth of engagement, selectivity of use, handling of references, prompt strategies, and underlying motivations. These contrasts highlight the importance of tailoring guidance on AI use to different student profiles.

In conclusion, the comparison between high- and low-achievers reveals that while ChatGPT is universally perceived as useful and user-friendly, the ways it is integrated into thesis writing diverge significantly. High-achievers employ ChatGPT as a complementary tool, using it critically and selectively, whereas low-achievers adopt it as a compensatory mechanism, using it broadly and sometimes uncritically. These findings underscore the dual role of ChatGPT as both an enabler and a potential crutch, depending on the user's achievement level and approach.

5.4 Implications to Pedagogy

The findings of this study offer several pedagogical implications that are crucial for educators, curriculum designers, and academic institutions in navigating

the integration of AI tools like ChatGPT into higher education. The differentiated patterns of ChatGPT use between high-achieving and low-achieving students underscore the need for adaptive and inclusive teaching strategies.

Firstly, the strategic use of ChatGPT by high-achieving students for idea development, language refinement, and structural feedback suggests that AI can serve as a valuable cognitive partner when guided by strong metacognitive skills. Educators should therefore consider incorporating AI literacy into the curriculum, emphasizing critical thinking, ethical use, and reflective practices. This can empower students to use AI tools not as shortcuts, but as scaffolds for deeper learning.

Secondly, the reliance of low-achieving students on ChatGPT for content generation and translation indicates a potential gap in foundational academic skills. This highlights the importance of targeted pedagogical interventions, such as writing workshops, guided thesis mentoring, and AI-assisted learning modules that promote gradual skill development. Rather than discouraging AI use, educators should provide structured opportunities for students to learn how to engage with AI responsibly and effectively. Moreover, the ethical concerns raised by both groups particularly regarding plagiarism and over-reliance call for the integration of digital ethics into academic instruction. Institutions should develop clear guidelines and assessment rubrics that address AI use, ensuring that students understand the boundaries between assistance and academic dishonesty.

Finally, the study suggests that achievement level influences not only how students use AI, but also how they perceive its role in their academic journey.

Pedagogical approaches must therefore be empathetic and context-sensitive, recognizing that students come with diverse needs, motivations, and levels of digital readiness. By fostering an environment of ethical innovation and inclusive support, educators can help students harness AI tools like ChatGPT to enhance—not replace their academic integrity and intellectual growth.



REFERENCES

- Akhtarshenas, A., Dini, A. and Ayoobi, N., 2025. ChatGPT or A Silent Everywhere Helper: A Survey of Large Language Models. *arXiv preprint arXiv:2503.17403*.
- Alshami, A., Elsayed, M., Ali, E., Eltoukhy, A.E. and Zayed, T., 2023. Harnessing the power of ChatGPT for automating systematic review process: methodology, case study, limitations, and future directions. *Systems*, 11(7), p.351.
- Aripadono, H.W., Nursyamsi, I., Wahab, A. and Sultan, Z., 2024. Educational Technology for Digital Transformation of Higher Education Institutions into Entrepreneurial Universities. *Policy & Governance Review*, 8(3), pp.303-322.
- Azaria, A., Azoulay, R. and Reches, S., 2024. ChatGPT is a remarkable tool—for experts. *Data Intelligence*, 6(1), pp.240-296.
- Baskara, F.R., Puri, A.D. and Wardhani, A.R., 2023. ChatGPT and the Pedagogical Challenge: Unveiling the impact on early-Career academics in Higher Education. *Indonesian Journal on Learning and Advanced Education (IJOLAE)*, 5(3), pp.311-322.
- Bettayeb, A. M., Abu Talib, M., Sobhe Altayasinah, A. Z., & Dakalbab, F. (2024). Exploring the impact of ChatGPT: conversational AI in education. *Frontiers in Education*, 9, 1379796. <https://doi.org/10.3389/feduc.2024.1379796>
- Chatti, K., 2024. Investigating the Efficiency of Using ChatGPT to Generate Ideas for Writing on Enhancing the EFL Learners Writing Creativity The Case of Master one English students at University Mohammed Khider of Biskra.
- De Angelis, L., Baglivo, F., Arzilli, G., Privitera, G.P., Ferragina, P., Tozzi, A.E. and Rizzo, C., 2023. ChatGPT and the rise of large language models: the new AI-driven infodemic threat in public health. *Frontiers in public health*, 11, p.1166120.
- Development Team SPMI, (2018). Determination of Higher Education Standards (DIKTI Standards) by Universities, (Online), ([https://lpm.usk.ac.id/storage/2024/07/Penetapan-Standar-Pendidikan-Tinggi-Standar-DIKTI-Kemenristekdikti-2018.pdf#:~:text=Pasal%2025%20ayat%201:%20Mahasiswa%20program%20diploma,sama%20dengan%202%2C00%20\(dua%20koma%20nol%20nol, 7 June 2025\)](https://lpm.usk.ac.id/storage/2024/07/Penetapan-Standar-Pendidikan-Tinggi-Standar-DIKTI-Kemenristekdikti-2018.pdf#:~:text=Pasal%2025%20ayat%201:%20Mahasiswa%20program%20diploma,sama%20dengan%202%2C00%20(dua%20koma%20nol%20nol,7+June+2025)))

- Donkoh, S., & Mensah, J. (2023). Application of triangulation in qualitative research. *Journal of Applied Biotechnology and Bioengineering*, 10(1), 6-9.
- Garuda Website. (2025). *Latest update on AI users in Indonesia*. <https://www.garuda.website/blog/data-pengguna-ai-indonesia/>
- Gesser-Edelsburg, A., Hijazi, R., Eliyahu, E. and Tal, A., 2024. Bridging the Divide: An Empirical Investigation of Artificial Intelligence and Generative Artificial Intelligence Integration Across Genders, Disciplines and Academic Roles. *European Journal of Open, Distance & E-Learning*, 26(1).
- Hignett, S., & McDermott, H. (2015). Qualitative methodology. *Evaluation of human work*, 119-138.
- Kalla, D., Smith, N., Samaah, F. and Kuraku, S., 2023. Study and analysis of chat GPT and its impact on different fields of study. *International journal of innovative science and research technology*, 8(3).
- Kalolo, J.F., 2019. Digital revolution and its impact on education systems in developing countries. *Education and Information Technologies*, 24, pp.345-358.
- Komdigi. (2024). *Survey: Indonesia ranks 4th among the most AI-enthusiastic countries*. <https://miitel.com/id/survei-indonesia-peringkat-4-negara-paling-antusias-dengan-ai/>
- Kotsis, K.T., 2024. Artificial Intelligence Creates Plagiarism or Academic Research?. *European Journal of Arts, Humanities and Social Sciences*, 1(6), pp.169-179.
- Li, Z., 2024. *Generative AI in Higher Education Academic Assignments: Policy Implications from a Systematic Review of Student and Teacher Perceptions* (Doctoral dissertation, Massachusetts Institute of Technology).
- Makarova, E.A. and Makarova, E.L., 2018. Blending pedagogy and digital technology to transform educational environment. *International Journal of Cognitive Research in Science, Engineering and Education:(IJCRSEE)*, 6(2), pp.57-66.
- Medina, W.A.A., Velásquez, C.H.F., Zegarra, S.D.R.O., Romero, G.P.M., Andía, A.Q., Bellido, I.E.A., Huaraca, C.R.P., Trejo, F.H.A. and Bravo, N.A., 2024. Using ChatGPT in University Academic Writing: A Bibliometric Review Study on the Implications for Writing Reports, Papers, Essays, and Theses. *International Journal of Learning, Teaching and Educational Research*, 23(12), pp.360-381.
- Mulenga, R. and Shilongo, H., 2024. Academic integrity in higher education: Understanding and addressing plagiarism. *Acta Pedagogica Asiana*, 3(1), pp.30-43.

- Nashir, M. H., Wirakusumah, T. K., & Erlandia, D. R. (2024). The relationship between ChatGPT usage and student needs fulfillment. *Philosophy: Publication of Communication Science, Design, Arts and Culture*, 1(1), 129-139.
- Nazir, A. and Wang, Z., 2023. A comprehensive survey of ChatGPT: advancements, applications, prospects, and challenges. *Meta-radiology*, 1(2), p.100022.
- Omodan, B.I., 2024. Redefining university infrastructure for the 21st century: An interplay between physical assets and digital evolution. *Journal of Infrastructure, Policy and Development*, 8(4), p.3468.
- Rane, N., 2023. ChatGPT and similar generative artificial intelligence (AI) for smart industry: role, challenges and opportunities for industry 4.0, industry 5.0 and society 5.0. *Challenges and Opportunities for Industry*, 4.
- Ruban, L. and Reis, S.M., 2006. Patterns of self-regulatory strategy use among low-achieving and high-achieving university students. *Roeper Review*, 28(3), pp.148-156.
- Saif, N., Khan, S.U., Shaheen, I., ALotaibi, F.A., Alnfiai, M.M. and Arif, M., 2024. Chat-GPT; validating Technology Acceptance Model (TAM) in education sector via ubiquitous learning mechanism. *Computers in Human Behavior*, 154, p.108097.
- Shakeel, A., 2024. *The Role of ChatGPT in Academic Writing: An Exploratory Study* (Master's thesis, Oslo Metropolitan University).
- Singh, R.J., 2023. Transforming higher education: The power of artificial intelligence. *International Journal of Multidisciplinary Research in Arts, Science and Technology*, 1(3), pp.13-18.
- Sison, A.J.G., Daza, M.T., Gozalo-Brizuela, R. and Garrido-Merchán, E.C., 2024. ChatGPT: More than a “weapon of mass deception” ethical challenges and responses from the human-centered artificial intelligence (HCAI) perspective. *International Journal of Human-Computer Interaction*, 40(17), pp.4853-4872.
- Sudrajad, W., Fikri, M.H. and Putra, R.P.B., 2024. Help Me Chatgpt! What Ways Does Chatgpt Influence Students'productivity And Creativity In English Academic Writing?. *Educatum: Scientific Journal of Education*, 2(2), pp.48-57.
- Wu, Y., 2024. Study on the impact of utilizing ChatGPT and other AI tools for feedback in EAP writing classrooms on the discursive writing performance of English major students. *Transactions on Social Science, Education and Humanities Research*, 4, pp.143-150.