



Exploring Students' Perceptions of ChatGPT in Higher Education: A Qualitative Study of Critical Thinking, Learning Autonomy, and Academic Ethics

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Article Info	Abstract
Received: 2026-06-10 Revised: 2026-06-15 Accepted: 2026-06-30 Keywords: ChatGPT, Critical Thinking Development, Learning Autonomy, Academic Ethics DOI: 10.24256/ideas.v14i1.12065 Corresponding Author: Rani Servia Raniservia040903@gmail.com Pendidikan Bahasa Inggris, STKIP Muhammadiyah Aceh Barat Daya	<i>This study explored students' perceptions of ChatGPT in higher education, focusing on its role in critical thinking development, learning autonomy, and academic ethics. Using a qualitative descriptive case study, data were collected from 15 eighth-semester English Education students at STKIP Muhammadiyah Aceh Barat Daya through semi-structured interviews and were analyzed using Braun and Clarke's thematic analysis with the support of NVivo 12. The findings revealed three main themes. First, students perceived that ChatGPT supported critical thinking by helping them analyze information, develop arguments, and verify AI-generated responses using reliable sources. Second, ChatGPT promoted learning autonomy by providing immediate access to information, supporting skill development, and encouraging self-directed learning. Third, students recognized the importance of using ChatGPT ethically by revising AI-generated content, avoiding plagiarism, and adhering to the principles of academic integrity. Overall, the findings suggested that ChatGPT was perceived as a valuable learning support tool when used critically, independently, and responsibly. The study highlighted the need for clear institutional guidelines to promote the ethical and effective use of generative AI in higher education.</i>

1. Introduction

Language functions as a primary medium of communication that reflects social life. AI has reshaped pedagogical practices, assessment systems, and student learning behaviors in higher education, particularly through adaptive systems and generative tools. These technologies have transformed pedagogical practices in higher education by supporting more adaptive and student-centered learning environments through adaptive systems and

generative tools (Holmes et al., 2019). In terms of assessment systems, AI technologies facilitate more efficient evaluation processes, including automated feedback and AI-assisted academic assessment (Chan et al., 2023). Furthermore, the use of generative AI tools also influenced student learning behaviors by increasing access to information, supporting independent learning, and changing the way students complete academic tasks (Kasneci et al., 2023).

The implementation of AI in education has rapidly expanded through adaptive learning systems, educational chatbots, learning analytics, and automated assessment tools that support more personalized and data-driven learning processes (Kuhail et al., 2023). These developments show that AI contributes significantly to the transformation of higher education systems. AI is no longer only a technological innovation, but also an important part of modern pedagogical design that supports more efficient and flexible learning environments.

Generative AI tools, particularly ChatGPT, have become increasingly popular in higher education. Developed by OpenAI, ChatGPT uses a large language model to generate responses that are both human-like and contextually appropriate in response to user input (OpenAI, 2023; Sullivan et al., 2023). It is widely used to support learning, assist with academic tasks and provide rapid access to information (Chan et al., 2023).

However, despite its benefits, ChatGPT must not replace essential human-centered elements of education, such as critical discussion, reflective thinking, and contextual judgment. Research highlights that ChatGPT outputs may contain inaccuracies, fabricated information, or embedded biases derived from training data, which can mislead users who lack sufficient critical evaluation skills (Holzmann et al., 2025). Therefore, the educational use of ChatGPT requires strong digital literacy and a critical mindset to ensure that students actively verify information and engage thoughtfully with AI-assisted content rather than passively accepting algorithmic responses.

Beyond cognitive implications, the widespread use of ChatGPT in academia introduces complex ethical and psychological considerations. Moya et al. (2024) emphasize that the integration of generative AI tools, including ChatGPT, in higher education has significant implications for teaching, learning, and academic integrity, requiring clear institutional policies and evidence-based strategies to promote responsible use and mitigate academic misconduct. If students use these tools in secret out of fear of being accused of plagiarism, they are less likely to use them as legitimate research aids that enhance their analytical skills.

Although previous studies have examined the benefits and challenges of ChatGPT in higher education, research on students' perceptions of its influence on critical thinking remains limited. At the same institution, STKIP Muhammadiyah Aceh Barat Daya, Safitri and Adani (2024) found that students demonstrated weak critical thinking in English essay writing. Building on these findings, the present study investigates whether students perceive ChatGPT as a tool that supports critical thinking or one that may reduce independent intellectual engagement.

The educational impact of ChatGPT depends on how students engage with and regulate its use, as its effectiveness is shaped by learning strategies and self-regulation. It may serve as a cognitive support tool that enhances understanding or as a source of dependency that reduces independent thinking, depending on how it is used in academic tasks. This highlights the importance of students' perceptions and digital literacy, particularly in regional higher education contexts where guidance may vary.

Therefore, examining students' perceptions of ChatGPT use at STKIP Muhammadiyah Aceh Barat Daya is essential to understand whether it supports critical thinking or leads to intellectual dependency, and to inform how institutions can integrate AI effectively in learning.

This study aims to explore students' perceptions of ChatGPT use in relation to critical thinking, learning autonomy, and academic ethics at STKIP Muhammadiyah Aceh Barat Daya. To achieve this objective, the study addresses the following research question: 1) How do students at STKIP Muhammadiyah Aceh Barat Daya perceive the use of ChatGPT in relation to their critical thinking development, learning autonomy, and academic ethics?

2. Method

This study employed a qualitative approach using a descriptive case study design to investigate students' perceptions of artificial intelligence (AI) in the learning process. This approach was chosen because it allowed the researcher to comprehensively explore the experiences, perspectives and subjective interpretations of the participants within their natural educational context. The study focuses on students' perceptions of ChatGPT use in relation to critical thinking, learning autonomy, and academic ethics at STKIP Muhammadiyah Aceh Barat Daya.

This study involved 15 eighth-semester students from STKIP Muhammadiyah Aceh Barat Daya. The participants were chosen through purposive sampling, with criteria including active enrollment in the final semester and prior experience with digital technology and exposure to AI tools in academic learning and task completion. Eighth-semester students were chosen based on the assumption that they possess sufficient academic experience and reflective capacity to provide critical insights into the use of AI in higher education.

The data was collected through semi-structured interviews, with an interview guide comprising open-ended questions designed to encourage participants to discuss their experiences and perceptions in depth. The interview guide consisted of 20 open-ended questions covering the main topics of the study. Member checking was employed to ensure the accuracy and trustworthiness of the interview transcripts. All participants were asked to review the transcripts and confirm that they accurately reflected their responses (Creswell, 2024). Following the main data collection, the interview questions were tested through a pilot study to ensure their clarity, relevance, and effectiveness in eliciting rich and meaningful responses. The interviews focused on participants' experiences using AI in learning activities, their views on the advantages and limitations of AI, and its impact on learning processes and academic ethics.

The data were analyzed using thematic analysis following Braun and Clarke's (2006) six-phase thematic analysis framework, which includes familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. The analysis process was carried out iteratively to ensure rigor and depth of interpretation, resulting in a comprehensive understanding of students' perceptions of AI use in educational settings.

3. Result

Participants profiles

This study involved 15 undergraduate students enrolled in the English Education Department. All participants were in their eighth semester, meaning they had reached the final phase of their academic studies. Their extensive learning experiences throughout the program enabled them to provide informed insights and valuable perspectives relevant to the objectives of this research.

Data analysis process

Interview process

Data collection took place throughout June 2026 using individual interview sessions with 15 participants. Each participant was interviewed once, allowing the researcher to obtain in-depth qualitative information. The interview schedule was arranged according to each participant's availability. This setting was chosen to create a relaxed environment that encouraged participants to share their experiences and opinions more openly.

Table 1. Interview Process

Participant Names	Duration of Interview (in Minutes)	Amount of Words (in Indonesian)
Participant 1	10:36	1670
Participant 2	19:07	2755
Participant 3	16:28	2198
Participant 4	10:19	1633
Participant 5	13:00	1852
Participant 6	12:53	1741
Participant 7	12:39	1740
Participant 8	19:15	2681
Participant 9	15:47	1883
Participant 10	16:36	1994
Participant 11	13:26	2085
Participant 12	19:28	2662
Participant 13	14:21	1723
Participant 14	12:51	1533
Participant 15	11:54	1573
Total	03:38:40	30223

As shown in Table 1, all interviews were conducted face-to-face at the college. The interviews lasted between 10 and 19 minutes, with a total duration of 3 hours, 38 minutes, and 40 seconds, producing 30,223 words of Indonesian transcripts. The average interview lasted approximately 14 minutes. To ensure confidentiality, participants' real names were replaced with identification codes throughout the data collection, analysis, and reporting processes.

Data cleaning and preparation

All interview recordings were transcribed verbatim, preserving the participants' exact words to enhance the trustworthiness of the data (Poland, 1995). Once the transcription process was completed, each transcript was carefully examined and refined before being imported into NVivo 12 software for qualitative data analysis. This preparation included reviewing formatting, standardizing fonts and headings, and correcting typographical or spelling errors to ensure consistency across all transcript files. Organizing the transcripts in a clear and uniform manner was an important step in supporting efficient coding and the subsequent development of themes during data analysis.

Following transcription, the interview transcripts were carefully edited to improve clarity and readability while preserving the original meaning conveyed by the participants. Minor linguistic revisions, including the removal of filler words, repeated expressions, and typographical or grammatical errors, were made only when they did not alter the intended message. Such preparation helps produce consistent and well-organized qualitative data while maintaining the authenticity of participants' responses (Whitney et al., 2024). To further enhance organization, section headings and relevant timestamps were incorporated into the transcripts, enabling easier navigation and reference during the coding process. As a result, the finalized transcripts accurately reflected the interview data and were suitable for subsequent thematic analysis.

To strengthen the credibility of the findings, the researcher conducted member checking by inviting each participant to review the transcript of their interview. Participants were asked to confirm the accuracy of the recorded information, identify any transcription errors, and provide clarification or additional details when necessary. This verification process ensured that the transcripts faithfully represented participants' perspectives before the analysis began. Incorporating participant feedback also increased the trustworthiness and credibility of the qualitative data by confirming that the documented accounts reflected their intended meanings (Birt et al., 2016; Urry et al., 2024).

Overview of themes

To explore students' perceptions of ChatGPT use at STKIP Muhammadiyah Aceh Barat Daya, the interview data were systematically coded and grouped into overarching themes and related subthemes. The research analysis concentrated on three main themes, namely critical thinking development, learning autonomy and academic ethics. Organizing the findings into these thematic categories enabled the researcher to identify recurring patterns and provide a structured understanding of participants' experiences and perspectives. Figure 1 presents the main themes along with their corresponding subthemes, offering a detailed overview of students' perceptions regarding the use of ChatGPT within these three main themes.

Figure 1. Main themes and sub-themes

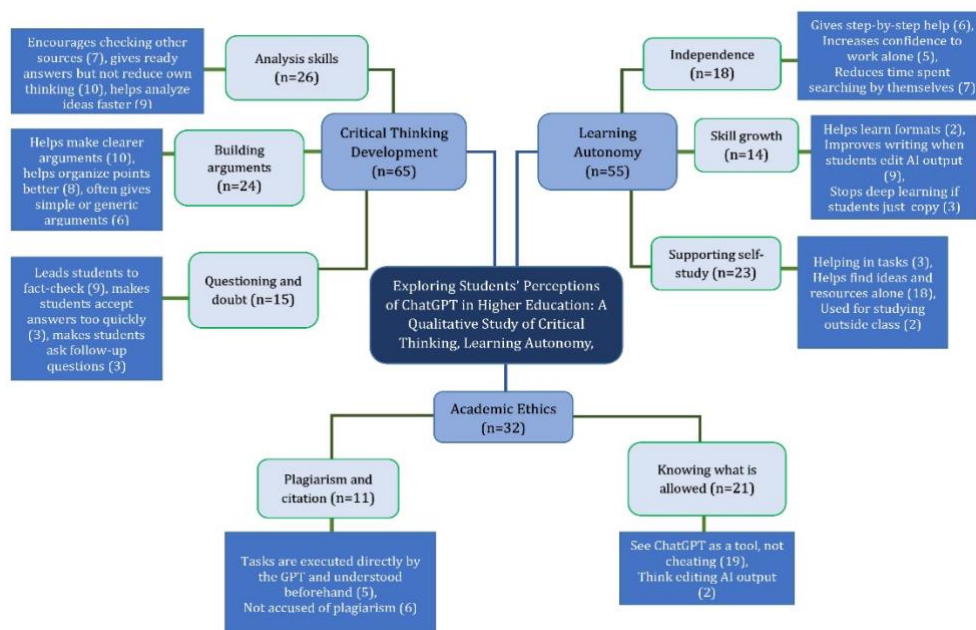


Figure 1 presents a summary of the interview findings, in which participants' responses were organized into three main themes and eight subthemes to represent their perceptions of ChatGPT use in relation to critical thinking development, learning autonomy, and academic ethics. The results of the thematic analysis indicate that participants' experiences and perspectives were reflected across all three main themes, demonstrating the relevance of ChatGPT to each of these aspects of the learning process.

4. Discussion

Based on the result, this section discussed students' perceptions of the use of ChatGPT in relation to critical thinking development, learning autonomy, and academic ethics based on the findings of the thematic analysis.

1. Critical Thinking Development

The findings indicate that a total of 65 statements were identified under the theme of critical thinking development, which were generated from 9 codes and organized into 3 subthemes, namely analysis skills, building arguments, and questioning and doubt. These findings demonstrate that participants perceived ChatGPT as having both supportive and challenging roles in the development of critical thinking. While many participants acknowledged that ChatGPT facilitated idea processing and argument construction, they also emphasized the importance of maintaining independent judgment and verifying AI-generated information.

Within the analysis skills subtheme, a total of 26 statements were identified from 3 codes. Participants commonly described ChatGPT as a tool that helped them analyze ideas more efficiently, particularly by simplifying complex information and enabling them to identify key concepts in a shorter period. At the same time, several participants acknowledged that ChatGPT frequently generated ready-made answers that could reduce their own analytical effort if used without reflection. Consequently, some students reported developing the habit of consulting additional references to verify the accuracy of AI-generated responses before accepting them. When the researcher asked whether ChatGPT helps analyze ideas faster, one student expressed agreement with the following statement:

"Yes, when I'm looking for an initial explanation, I do tend to go straight to ChatGPT rather than looking it up in a book or on Google. I find it more practical and time-saving." (Participant 3, personal communication, 00:09:39)

Participant 3's statement emphasized that ChatGPT was frequently used as the first source of information because it provided immediate explanations that were perceived as more practical and time-efficient than consulting textbooks or searching through multiple websites. This finding is consistent with Chan et al. (2023), who reported that many university students preferred using generative AI because it delivers concise and instant responses, making learning activities more efficient.

These perceptions are noteworthy in light of Safitri and Adani (2024), who found that students at the same institution demonstrated weaknesses in critical thinking during English essay writing. Although that study did not examine AI use in learning, it provides important institutional context for interpreting the present findings, which suggest that students perceive ChatGPT as a tool that can support analytical thinking when its responses are evaluated critically rather than accepted without reflection. Nevertheless, participants emphasized that the convenience offered by ChatGPT did not eliminate the need for independent thinking and initial analysis. Another student expressed this view:

"I don't think so. In fact, ChatGPT actually boosts my motivation because it saves time when looking for information. However, I still make an effort to understand the material and do not rely on it entirely." (Participant 1, personal communication, 00:04:45)

Participant 1's explained that although ChatGPT made information retrieval faster and more convenient, it did not diminish the effort to understand the learning material independently. This interpretation is consistent with Darwin et al. (2023), who found that EFL students viewed generative AI as a supportive learning tool that could stimulate critical thinking when used to complement, rather than replace, independent reasoning. Similarly, Holmes et al. (2019) argue that artificial intelligence is most beneficial when it augments learners' cognitive processes instead of automating them completely. Kasneci et al. (2023) also emphasize that the educational value of ChatGPT depends on students' ability to use AI as a scaffold for learning while continuing to evaluate, interpret, and reflect on the information it provides.

The building arguments subtheme consisted of a total of 24 statements obtained from 3 codes. Participants generally perceived ChatGPT as beneficial in helping them formulate clearer arguments and organize supporting ideas more logically during academic writing. One student expressed agreement with the following statement:

"In my opinion, ChatGPT is more useful for providing an initial overview. After that, I try to develop it further using my own understanding." (Participant 3, personal communication, 00:05:49)

Participant 3's statement suggests that ChatGPT was perceived primarily as a tool for generating an initial understanding of a topic rather than as a complete source of knowledge. This finding is consistent with Holmes et al. (2019), who argue that artificial intelligence should complement rather than replace learners' cognitive processes by supporting exploration and knowledge construction. Similarly, Chan et al. (2023) found that students commonly use generative AI as a starting point for learning, while recognizing the need to further develop AI-generated ideas through independent study and reflection. This interpretation is also supported by Memarian et al. (2023), who emphasize that ChatGPT is most effective when used as a learning assistant that facilitates idea generation instead of substituting students' own reasoning and understanding.

The questioning and doubt subtheme generated a total of 15 statements from 3 codes. Participants described mixed responses regarding their interaction with ChatGPT. Many reported that using the tool encouraged them to verify information independently and compare AI-generated answers with other academic sources before accepting them. One student expressed agreement with the following statement:

"Sometimes, the information provided does not fully meet my needs or lacks specificity. Consequently, I still need to verify it using books, journals, or other reliable sources." (Participant 11, personal communication, 00:03:03)

These findings are consistent with Holzmann et al. (2025), who argue that the limitations of ChatGPT create opportunities for developing evidence-based reasoning through systematic fact-checking and source verification. Furthermore, Darwin et al. (2023) suggests that students who actively question AI-generated responses demonstrate stronger critical thinking because they engage in evaluating evidence rather than accepting information at face value.

2. Learning Autonomy

The findings revealed that a total of 55 statements were identified under the theme of Learning Autonomy, which were generated from 9 codes and organized into 3 subthemes, namely independence, skill growth, and supporting self-study. Overall, participants perceived ChatGPT as a learning companion that promoted independent learning by facilitating access to information, supporting skill development, and encouraging self-directed study. Nevertheless, several participants also acknowledged that the benefits of ChatGPT depended largely on how responsibly students used the technology.

The first subtheme, independence, consisted of 18 statements derived from 3 codes. Participants generally described ChatGPT as a tool that enabled them to study more independently without relying heavily on lecturers or classmates. One participant stated:

"Yes, ChatGPT has made me more independent because I can look up explanations for the material at any time without having to constantly rely on my lecturers. Before using ChatGPT, I used to gather information from various different sources. Now, I grasp the material more quickly, although I still cross-check the information against books or journals." (Participant 1, personal communication, 00:05:44)

Another participant added:

"I feel I still need to think for myself when comparing ChatGPT's answers with material from lecturers or academic journals." (Participant 7, personal communication, 00:03:32)

These findings suggest that ChatGPT can strengthen students' independence by providing timely learning support that enables them to solve problems autonomously. Rather than replacing independent learning, the AI tool served as a readily available learning assistant that helped students' progress through challenging tasks with greater confidence. This interpretation is consistent with Zawacki-Richter et al. (2019) found that AI applications in higher education facilitate individualized learning by enabling students to regulate their own learning processes.

The second subtheme, skill growth, generated 14 statements from 3 codes. Participants explained that interacting with ChatGPT contributed to the improvement of several academic skills, particularly writing skills when they actively revised AI-generated content instead of copying it directly. This finding indicates that the development of academic skills depends not only on access to AI but also on students' willingness to engage critically with the generated content. One participant stated:

"I usually ask ChatGPT for its opinion and then rephrase the content in my own words so that my writing doesn't sound too stiff, like AI-generated text." (Participant 5, personal communication, 00:05:53)

Another participant added:

"If we were to simply transfer the Chargeability results directly into the required format, essentially just copying and pasting them, the lecturer would usually notice immediately. That is why I always refine the material first." (Participant 8, personal communication, 00:04:44)

The findings support Chan et al. (2023), who reported that students viewed generative AI as a useful tool for improving writing quality, generating ideas, and refining academic work. Likewise, Memarian et al. (2023) argue that ChatGPT can enhance students' learning skills when it is used as a collaborative learning assistant rather than as a

substitute for independent work. Furthermore, Kuhail et al. (2023) found that educational chatbots contribute to students' learning development by providing continuous guidance and personalized feedback that supports skill acquisition, although meaningful learning still requires active learner engagement.

The final subtheme, supporting self-study, comprised 23 statements collected from 3 codes, making it the most prominent subtheme within Learning Autonomy. Participants frequently reported using ChatGPT to find ideas, search for additional learning resources, complete assignments, and study outside scheduled class hours. These responses suggest that ChatGPT expanded learning opportunities by enabling students to continue exploring course materials independently whenever they encountered difficulties or wished to deepen their understanding. One participant stated:

*"I usually use it for difficult material, or, for example, to ask it for practice questions."
(Participant 2, personal communication, 00:13:53)*

These findings suggest that ChatGPT promotes self-directed learning by providing instant access to explanations, ideas, and learning resources. This aligns with Holmes et al. (2019), who state that AI supports personalized learning, and with Kasneci et al. (2023), who argue that ChatGPT can enhance learner autonomy when its responses are evaluated critically.

3. Academic Ethics

The findings revealed that a total of 32 statements were identified under the theme of Academic Ethics, which were generated from 4 codes and organized into two subthemes, namely knowing what is allowed and plagiarism and citation. Overall, participants demonstrated an awareness that although ChatGPT offers valuable academic support, its use should be accompanied by ethical responsibility. They generally perceived ChatGPT as a learning aid rather than a substitute for their own academic work and emphasized the importance of responsible use to maintain academic integrity.

The first subtheme, knowing what is allowed, generated 21 statements from 2 codes, making it the most prominent aspect of academic ethics identified in this study. Participants generally viewed ChatGPT as an educational tool rather than a means of academic dishonesty, provided that it was used appropriately. One participant stated:

*"Regarding the campus environment, I understand that AI can be used as a tool; however, the final output must remain one's own work and comply with applicable academic regulations."
(Participant 2, personal communication, 00:17:22)*

Another participant added:

"In my opinion, using ChatGPT to help understand the material or gain an initial overview is ethical; however, if an entire assignment is generated by ChatGPT and simply copied without being understood or modified, I consider that a form of cheating, as the result does not truly stem from one's own effort." (Participant 3, personal communication, 00:13:43)

Several participants highlighted the importance of reviewing, modifying, and improving AI-generated responses before submitting academic work, demonstrating an understanding that students remain responsible for the final content they produce. This interpretation is consistent with Cotton et al. (2023), who argue that generative AI should not automatically be regarded as cheating because ethical implications depend on whether students use AI to support learning or to bypass the learning process. Furthermore, Fishman (2016) emphasizes that academic integrity is grounded in honesty, responsibility,

fairness, trust, and respect, principles that are reflected in participants' recognition that AI-generated outputs should be critically reviewed rather than submitted without modification.

The second subtheme, plagiarism and citation, consisted of 11 statements derived from 2 codes. Several participants believed that submitting AI-generated work without personal comprehension contradicted the purpose of learning and could result in accusations of academic misconduct. At the same time, they emphasized the importance of acknowledging sources appropriately and ensuring that assignments reflected their own understanding instead of simply reproducing AI-generated information. One participant stated:

*"I do not condone the practice of plagiarism that involves directly copying ChatGPT answers without modification or an understanding of the content; that is a passive approach."
(Participant 1, personal communication, 00:09:27)*

These findings suggest that participants were aware of the relationship between responsible AI use and academic integrity. They recognized that plagiarism is not caused by ChatGPT itself but by students' decisions to submit AI-generated content without critical engagement or proper attribution. This interpretation aligns with Moya et al. (2024), who found that the emergence of generative AI requires higher education institutions to establish clear policies regarding responsible AI use while reinforcing academic integrity principles.

This finding is consistent with Tlili et al. (2023), who argue that the educational value of ChatGPT depends on responsible use supported by ethical awareness and institutional guidance. Similarly, Lo (2023) highlights that higher education institutions should establish clear policies regarding AI-assisted writing, citation practices, and plagiarism prevention to ensure that generative AI enhances learning rather than replacing students' intellectual efforts.

5. Conclusion

This study examined students' perceptions of ChatGPT in higher education in relation to critical thinking, learning autonomy and academic ethics. The findings indicated that students generally perceived ChatGPT as a valuable learning support tool when it is used to facilitate idea development, promote independent learning, and support responsible academic practices rather than replace their own intellectual effort. Participants emphasized the importance of critically evaluating AI-generated responses, refining generated content using their own understanding, and maintaining academic integrity through responsible use.

These findings complement previous evidence from STKIP Muhammadiyah Aceh Barat Daya reported by Safitri and Adani (2024), who identified weaknesses in students' critical thinking during academic writing. While their study documented students' critical thinking performance, the present study provides additional insight into how students perceive ChatGPT as a potential support for critical thinking when it is used reflectively rather than as a substitute for independent reasoning. Therefore, higher education institutions should provide clear guidance on the responsible use of generative AI to maximize its educational benefits while maintaining academic integrity.

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