

# UNDERSTANDING EFL STUDENTS' DEPENDENCY ON CHATGPT IN ENGLISH LANGUAGE LEARNING: EVIDENCE FROM INDONESIAN HIGHER EDUCATION

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## Abstract

This study investigates the growing dependency of Indonesian EFL students on ChatGPT in the context of English language learning. Using a qualitative descriptive design, data were gathered from learning journals and semi-structured interviews involving nine undergraduate students across three universities. Thematic analysis revealed that students widely perceived ChatGPT as a valuable tool for enhancing writing, vocabulary, and confidence. However, its frequent use led to behavioral and emotional dependency. Factors contributing to this dependency included ease of access, low linguistic self-efficacy, academic pressure, and perceived AI authority. Notably, dependency correlated with reduced engagement in traditional learning strategies, diminished critical thinking, and limited learner autonomy. While ChatGPT offers substantial educational benefits, its overuse raises concerns about passive learning and cognitive disengagement. The findings highlight the need for pedagogical strategies that foster critical AI literacy and promote balanced use. This study contributes to the growing discourse on ethical and effective AI integration in language education.

**Key words:** Artificial Intelligence; ChatGPT; Critical Thinking; Dependency; EFL Students, Language Learning; Learner Autonomy

## A. Introduction

The integration of Artificial Intelligence (AI) in education has revolutionized the way students engage with learning materials, offering unprecedented levels of accessibility, personalization, and support (Zawacki-Richter et al., 2019). Among the emerging AI tools, ChatGPT, developed by OpenAI, has gained notable attention in English as a Foreign Language (EFL) education for its potential to provide instant language feedback, generate authentic language use examples, and facilitate

independent practice (Meyer et al., 2023; Sain et al., 2024). In particular, for EFL learners who often have limited exposure to real-world English interaction, AI tools like ChatGPT represent an accessible and flexible resource for practicing writing, speaking, and comprehension skills.

In Indonesian higher education, the adoption of digital learning technologies has accelerated, driven partly by global digitalization trends and partly by the aftermath of the COVID-19 pandemic (Awaludin et al., 2022). EFL students in Indonesia increasingly incorporate ChatGPT



into their daily academic routines to assist with coursework, language practice, and content generation. As such, understanding how these tools shape learning behaviors is becoming an urgent concern within the broader framework of digital pedagogy.

While early research has emphasized the benefits of AI-assisted tools in enhancing language acquisition and learner autonomy (AbuSahyon et al., 2023; Tahir & Tahir, 2023), there is growing apprehension that overreliance on AI could diminish critical thinking skills, hinder independent learning, and foster a dependency culture among students (Pratiwi et al., 2025). Much of the existing scholarship primarily addresses the technological affordances and pedagogical potentials of AI tools without sufficiently examining their unintended psychological and behavioral impacts, especially within the EFL learning context.

Moreover, despite Indonesia's rapid adoption of educational technology, empirical research specifically investigating AI-related dependency among Indonesian EFL students remains scarce. Given the unique educational environment, cultural expectations, and technological disparities in Indonesian higher education institutions, localized studies are essential to fully grasp the nuances of AI integration in language learning.

To fill this gap, the present study explores the experiences of Indonesian EFL students in using ChatGPT, with a particular focus on identifying patterns of dependency and its implications for their English language development. By investigating students' perceptions, usage behaviors, and

coping mechanisms, this study aims to contribute to a more nuanced understanding of the effects of AI on learner autonomy. The findings are expected to offer practical recommendations for educators and policymakers on how to balance the benefits of AI integration while promoting sustainable, independent language learning practices.

Research questions:

1. What are Indonesian EFL students' experiences in using ChatGPT for English language learning?
2. What factors contribute to the development of dependency on ChatGPT among Indonesian EFL students?
3. How does dependency on ChatGPT affect students' critical thinking, autonomous learning behaviors, and engagement with traditional learning strategies?

## Literature Review

The integration of Artificial Intelligence (AI) tools in education has transformed the landscape of language learning, offering new opportunities for personalized instruction, immediate feedback, and learner autonomy (Zawacki-Richter et al., 2019). However, while AI tools such as ChatGPT provide remarkable benefits, they also raise critical concerns regarding the potential overreliance or dependency of learners on such technologies. Understanding how dependency develops and affects language acquisition is essential to ensuring the responsible integration of AI in educational contexts.

1. AI in Language Learning: Opportunities and Benefits



AI technologies have been widely adopted in language learning for their capacity to offer tailored support, facilitate repetitive practice, and provide instant corrective feedback. Tools like Chatbots, Intelligent Tutoring Systems (ITS), and automated writing evaluators have been shown to enhance learners' engagement and motivation (Koka, 2024; Q. Wang, 2025; Yuan & Liu, 2025).

For example, ChatGPT offers real-time conversational practice, grammar correction, and writing suggestions, making it an attractive resource for EFL learners seeking immediate and low-risk practice opportunities (Meyer et al., 2023; Sain et al., 2024). In addition, studies have demonstrated that AI tools can contribute to vocabulary acquisition and writing fluency when used appropriately (Pitura, 2024; Shalevska & Kostadinovska-stojchevska, 2024; Song & Song, 2023).

However, while these benefits are significant, they often emphasize convenience and ease of use, factors that may contribute unintentionally to dependency behaviors among students.

## 2. The Concept of Dependency in Educational Technology

Dependency in education refers to a situation where learners excessively rely on external aids to perform tasks they could otherwise accomplish independently. According to Al-Khresheh (2024); Hernandez et al. (2025); Shah & Asad (2024), dependency on educational technologies can result in decreased self-efficacy, reduced critical thinking skills, and diminished learner autonomy.

Technology dependency is typically characterized by:

- a. A high frequency of use without critical evaluation,
- b. Reduced initiative to seek alternative resources,
- c. Emotional discomfort or insecurity when access to technology is unavailable (Tarhini et al., 2014).

In language learning, dependency may manifest as an inability to write essays, correct grammar, or construct arguments without the assistance of AI tools.

## 3. AI Dependency in Language Learning Contexts

While many studies highlight the effectiveness of AI in supporting language acquisition, few have directly addressed the phenomenon of AI dependency. Meyer et al. (2023); Sain et al. (2024) caution that students may develop a passive learning habit, whereby they accept AI-generated responses without critical analysis or reflection. This can stifle creativity and reduce the development of important cognitive and linguistic competencies.

Similarly, researches by Wang & Han (2022) on the use of automated feedback systems suggests that while students benefit from immediate corrections, those who overly rely on automated suggestions may demonstrate lower long-term retention and application of language rules compared to students who engage in self-editing.

Moreover, in their meta-analysis, Melisa et al. (2025); Shafei & Ahmed (2025) stated that although AI-assisted learning generally had positive outcomes,



overdependence was linked to lower levels of problem-solving abilities and deeper learning strategies.

#### 4. Factors Contributing to AI Dependency Among EFL Learners

Several factors may contribute to the emergence of dependency among EFL learners using AI technologies:

Factor	Explanation
Ease of Access	AI tools are readily available, leading to habitual use (Fitria, 2022).
Perceived Effectiveness	Students may believe AI provides better or more accurate answers than they could generate themselves (Ni & Cheung, 2023).
Lack of Confidence	EFL learners with low self-efficacy may rely more on external tools rather than practicing independently (Li & Alharbi, 2025).
Educational Culture	In contexts where achieving correct answers is emphasized over critical process, students may prefer quick solutions (Al-khresheh, 2024).

#### 5. Consequences of Dependency on AI for Language Learning

The consequences of unchecked AI dependency can be profound:

- Reduced Critical Thinking:** Students may accept AI outputs without questioning their accuracy or appropriateness (Sain et al., 2024).
- Impaired Self-Regulated Learning:** Learners may become less capable of planning, monitoring, and evaluating their own learning processes (Arslantosun, 2021).
- Limited Language Creativity:** Dependency on AI-generated text may constrain students' ability to produce original linguistic expressions.
- Ethical Concerns:** Academic dishonesty may increase if students submit AI-generated content as their own without proper attribution (Mohammadkarimi, 2023).

Thus, while AI tools can serve as valuable learning aids, they must be integrated carefully to foster, rather than hinder, learner independence.

#### 6. Managing and Mitigating Dependency

Scholars have suggested several strategies for mitigating AI dependency among learners:

- Critical AI Literacy:** Teaching students how to critically engage with AI outputs rather than accepting them uncritically (Baer & Baer, 2025).
- Balanced Use Policies:** Encouraging students to use AI as a supplementary tool, not as a primary problem-solver (Meyer et al., 2023).
- Focus on Process-Based Learning:** Shifting educational emphasis from product-oriented to process-oriented approaches (El Ouidani & Madaoui, 2024).



Educators must design learning activities that require students to reflect, critique, and build upon AI-generated suggestions rather than merely consume them.

While AI tools like ChatGPT have the potential to enhance language learning significantly, their inappropriate or excessive use can foster dependency among EFL learners. Understanding the mechanisms of dependency, its contributing factors, and its impacts is crucial for creating pedagogical strategies that maximize AI's benefits while safeguarding essential cognitive and linguistic skills. Future research must continue exploring contextual factors influencing dependency, particularly in non-Western educational settings such as Indonesian higher education, where digital transformation is rapidly evolving.

## B. Research Methodology

### 1. Research Design

This study adopts a qualitative descriptive research design, particularly using a phenomenological approach. The phenomenological method was chosen because it aims to explore and understand the lived experiences of Indonesian EFL students concerning their use of ChatGPT in English language learning, with a special focus on dependency behaviors. As (Creswell, 2013) notes, phenomenology is appropriate when the goal is to uncover participants' perceptions, experiences, and the meanings they attach to a particular phenomenon.

### 2. Research Setting and Participants

The study was conducted at three major universities in Indonesia offering

English language programs. Participants were undergraduate EFL students who have been actively using ChatGPT for learning purposes for at least six months prior to data collection.

Participant criteria:

- Undergraduate EFL students (aged 18–25),
- Regular users of ChatGPT for academic or language learning tasks,
- Willing to participate voluntarily and provide informed consent.

Purposive sampling was employed to select the participants who met the inclusion criteria and provided rich, relevant, and diverse data related to the research questions (Given, 2012). Thus, there were 9 participants for learning journals and surveys, with a subset of 6 participants selected for in-depth interview.

### 3. Data Collection Methods

Method	Explanation
Learning Journals	Participants maintained weekly journals for 4 weeks, documenting their experiences and reflections while using ChatGPT for English learning.
Semi-Structured Interviews	Follow-up interviews were conducted to explore deeper insights into dependency behaviors, emotional responses, and coping strategies.

### 4. Technique of Data Analysis





The collected qualitative data were analyzed using Thematic Analysis following (Braun & Clarke, 2006) six-phase framework:

Step	Explanation
1. Familiarization	Reading and re-reading the data to become immersed.
2. Initial Coding	Generating initial codes across the dataset.
3. Searching for Themes	Organizing codes into potential themes and sub-themes.
4. Reviewing Themes	Refining themes by checking against the data set.
5. Defining and Naming Themes	Clearly defining each theme and its scope.
6. Producing the Report	Linking findings back to the research questions and literature.

#### Coding focused on:

- Indicators of dependency,
- Emotional responses to AI usage,
- Changes in learning strategies,
- Critical reflection behaviors.

Software, NVivo, was used to assist in the data organization and coding process.

### C. Results and Discussion

#### Result

#### *Indonesian EFL Students' Experiences in Using ChatGPT for English Language Learning*

The data from both learning journals and interviews indicate that Indonesian EFL

students perceive ChatGPT as a convenient, accessible, and helpful tool in supporting their English language learning, especially for academic writing tasks. Most participants reported using ChatGPT to improve sentence structure, grammar, vocabulary, and to generate ideas for writing assignments. For example, Participant LJ05 noted in Week 2, *"ChatGPT helped me paraphrase difficult ideas into simpler academic sentences,"* while LJ02 reflected, *"When I used it to check my grammar, I was surprised how much better my writing sounded."*

This sentiment was echoed during interviews. Participant INT01 explained, *"ChatGPT is like my second brain when I write. I use it for almost every assignment."* The participants' experiences were largely positive, with many expressing that the tool boosted their confidence and reduced anxiety, particularly in high-pressure academic contexts. INT03 mentioned, *"I feel more prepared and less worried about grammar mistakes when ChatGPT helps me."*

Furthermore, most students reported frequent use, with 7 out of 9 journal participants using ChatGPT at least 3–4 times per week, often closer to assignment deadlines. They emphasized the tool's instant availability, which allowed them to learn independently, without waiting for instructor feedback.

#### *Factors Contributing to the Development of Dependency on ChatGPT among Indonesian EFL Students*

The analysis of journal entries and interviews revealed several recurring factors contributing to students' dependency on ChatGPT.



First, ease of access and speed were frequently cited. For instance, Participant LJ03 wrote in Week 3, *"It saves me time. I don't have to open books or ask friends anymore."* Similarly, INT02 said, *"Why waste time searching when ChatGPT gives me the answer instantly?"* This habitual convenience led students to increasingly substitute traditional resources with AI.

Second, low self-confidence in language ability played a significant role. Several participants expressed that they used ChatGPT because they doubted their grammar and vocabulary choices. For example, INT05 noted, *"I feel insecure about my English, so I let ChatGPT check it for me before submitting anything."* This finding aligns with journal entries from LJ07 and LJ09, who both admitted to avoiding writing tasks without AI assistance.

Third, academic performance pressure emerged as a driver. Many students indicated they used ChatGPT to ensure their work appeared "correct" or "more academic." Participant LJ04 stated, *"I just want to get it right. ChatGPT helps make my sentences more formal."*

Finally, there was a tendency to overestimate the authority of AI-generated content. INT04 remarked, *"I trust ChatGPT more than my friends sometimes. It sounds smarter."* This perception likely reinforced students' reliance on the tool, even in cases where critical reflection or revision might be needed.

### ***The Effect of Dependency on ChatGPT on Students' Critical Thinking, Autonomous***

### ***Learning Behaviors, and Engagement with Traditional Learning Strategies***

The study found that dependency on ChatGPT had notable effects on critical thinking and learning autonomy. Many students admitted that they rarely questioned or revised the responses generated by ChatGPT. For example, Participant INT06 said, *"If the answer looks good, I just use it. I don't change much."* This behavior was reflected in LJ06's Week 4 entry, which stated, *"I didn't really double-check the suggestions. They seemed okay."* This lack of critical evaluation aligns with the concern raised by [Sain et al. \(2024\)](#) that overreliance on AI tools can erode critical thinking.

Additionally, autonomous learning behaviors were diminished. Several participants who had previously used dictionaries, grammar books, or consulted peers stated they had now stopped doing so. LJ01 shared, *"Before ChatGPT, I used to write a rough draft and revise it. Now I write with ChatGPT's help from the beginning."* Similarly, INT03 reported a decline in peer collaboration: *"I used to discuss ideas with classmates. Now I just ask ChatGPT directly."*

This trend also suggested reduced engagement with traditional strategies, such as self-editing, peer feedback, and offline reading. INT05 acknowledged, *"I read fewer articles now because ChatGPT summarizes things for me."*

Lastly, a few participants expressed emotional discomfort or anxiety when ChatGPT was not available due to internet issues or platform downtime. LJ08, for instance, wrote in Week 2: *"I panicked when ChatGPT didn't work. I didn't know how to start*



*my task without it.*" This emotional dependency indicates not only behavioral reliance but also psychological dependence, which may affect students' resilience and adaptability in the long term.

### Discussion

This study set out to explore the phenomenon of EFL students' dependency on ChatGPT in Indonesian higher education, focusing on students' experiences, the underlying contributing factors, and the implications for critical thinking and autonomous learning. The findings corroborate prior research that celebrates the benefits of AI tools in facilitating language learning while simultaneously exposing the complex and potentially problematic nature of students' overreliance on such tools (Meyer et al., 2023; Sain et al., 2024),

Participants described ChatGPT as a reliable companion for academic writing tasks, particularly in refining grammar, improving vocabulary, and generating ideas—aligning with existing literature highlighting AI's role in scaffolding student learning and reducing cognitive barriers (Pitura, 2024; Song & Song, 2023). This perception supports claims that AI can function as an accessible and stress-reducing aid, especially in EFL contexts where learners often experience linguistic insecurity (Li & Alharbi, 2025),

However, this study extends current scholarship by demonstrating that such positive engagement may evolve into behavioral and emotional dependency. Over half of the participants admitted to using ChatGPT as a default resource, often bypassing traditional learning strategies. This

habitual reliance—particularly under academic pressure and driven by low confidence—mirrors the cognitive-behavioral model of technology dependency (Hernandez et al., 2025; Tarhini et al., 2014), where ease of access and perceived authority reinforce passive learning behaviors.

The observed decrease in critical thinking is particularly concerning. Participants frequently accepted ChatGPT outputs without revision or question, reinforcing Sain et al.'s (2024) warning that uncritical reliance on AI may inhibit cognitive development. This concern aligns with Sain et al.'s (2024) argument that uncritical use of AI tools may lead to diminished critical thinking, as students begin to accept AI outputs passively rather than engaging with them reflectively. When learners delegate cognitive tasks to AI tools, they may reduce their engagement with independent learning strategies—an issue also highlighted by Sain et al. (2024), who cautioned that overdependence on AI can undermine students' autonomy and cognitive effort.

Autonomous learning behaviors were also notably impacted. Many students reported a sharp decline in using dictionaries, peer discussion, or iterative drafting—practices that Sain et al. (2024) caution may be displaced when learners overly depend on AI tools for language production.. This supports Arslantosun's (2021) framework that suggests overreliance on external tools can erode self-regulated learning skills such as planning, monitoring, and self-assessment. Emotional dependency further intensified these issues, as some participants expressed anxiety when unable to access ChatGPT—indicating not





just practical reliance, but psychological dependency.

These findings call into question the optimistic assumption that AI tools inherently promote learner independence. While AI may reduce learning barriers, this study reveals it can simultaneously displace the very behaviors that underlie deep, self-directed learning. The Indonesian educational context—where high-stakes assessment often drives a focus on correct output over reflective process—may amplify this effect (Al-khresheh, 2024). Thus, ChatGPT's integration into EFL learning must be critically managed to avoid fostering a culture of academic complacency or superficial achievement.

Educators must address these challenges by embedding Critical AI Literacy (Baer & Baer, 2025) into language curricula, encouraging students to evaluate, revise, and critique AI-generated outputs. Pedagogical shifts toward process-based learning (El Ouidani & Madaoui, 2024) and balanced AI usage policies (Meyer et al., 2023) may mitigate dependency by reinforcing reflective engagement and cognitive accountability.

In summary, this study adds a crucial localized perspective to the global discourse on AI in education. It shows that dependency is not a singular behavior, but a layered phenomenon shaped by emotional, cultural, and pedagogical dynamics—warranting careful attention from educators, institutions, and researchers alike.

#### D. Conclusion

This study investigated the nature of Indonesian EFL students' dependency on ChatGPT in the context of English language

learning, focusing on their lived experiences, contributing factors, and the impact of such dependency on their critical thinking and autonomous learning. The findings reveal that while students generally viewed ChatGPT as an effective and convenient tool—particularly for academic writing and grammar support—its frequent use has led to varying degrees of behavioral and emotional dependency. Many students used the tool as a primary problem-solver, relying on it for idea generation, sentence construction, and grammar correction. This reliance was often driven by factors such as low confidence in their English proficiency, pressure to perform academically, the ease of AI access, and a growing belief in the authority and accuracy of ChatGPT's outputs.

The results also showed that this dependency has negatively impacted students' engagement with traditional learning resources, diminished their use of self-regulated learning strategies, and weakened their critical thinking skills. Students frequently accepted AI-generated content without thorough evaluation or modification, and often bypassed collaborative or independent learning practices that would otherwise support deeper cognitive processing. These findings raise important concerns about the pedagogical consequences of unchecked AI integration in language learning environments, particularly in developing higher education systems where AI literacy is still emerging.

From a pedagogical standpoint, these results suggest the urgent need for educators to foster AI literacy among learners—



equipping them not only with the technical skills to use tools like ChatGPT but also with the critical awareness to question, evaluate, and learn from its outputs. Teachers must guide students to view AI as a support system rather than a substitute for human effort and creativity. Institutions should also take an active role in crafting policies that promote responsible AI usage, offer training in ethical digital practices, and encourage assessments that value the learning process over the final product.

Finally, this study has theoretical implications for understanding technology dependency in educational settings. It reinforces that AI dependency is not merely behavioral but also cognitive and emotional. As AI tools become more integrated into academic life, future research must explore strategies to mitigate dependency while preserving the benefits of these technologies. Studies could examine intervention models, assess AI's impact across other language skills, or compare dependency trends across different cultural and institutional contexts. Ultimately, while ChatGPT offers meaningful opportunities for EFL students, it is essential to balance technological convenience with the enduring goals of independent, reflective, and critical language learning.

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