

A NARRATIVE INQUIRY INTO STUDENTS' MENTAL EXPERIENCE AFTER USING AN AI CHATBOT FOR LEARNING WRITING IN ENGLISH

Muhammad Fadhil Alfian Hermansyah¹, Sonny Elfiyanto², Durotun Nasihah³
^{1,2,3} Faculty of Teacher Training and Education, Universitas Islam Malang, Indonesia
Email¹: 22201073050@unisma.ac.id

Abstract: *This study explores EFL students' mental experiences after using an AI chatbot, particularly ChatGPT, for learning English writing. Employing a qualitative narrative inquiry approach, the study involved two fifth-semester students from the English Language Education Study Program at a private university in Malang, Indonesia, who actively used ChatGPT in academic writing. Data were collected through semi-structured interviews and analyzed using thematic analysis. The findings reveal that students experienced diverse emotional responses, including enjoyment, comfort, reduced anxiety, frustration, confusion, and emotional ambivalence. Psychologically, AI-assisted writing enhanced students' self-confidence, motivation, and engagement while simultaneously raising concerns about dependency, reduced critical thinking, and writing authenticity. To address these challenges, students adopted various strategies, such as refining prompts, critically evaluating AI-generated responses, combining AI assistance with lecturer feedback and other learning resources, and maintaining personal contribution throughout the writing process. The study suggests that AI chatbots can effectively support English writing when used as complementary learning tools rather than substitutes for students' own thinking. These findings contribute to a deeper understanding of students' emotional and psychological experiences in AI-assisted writing and highlight the importance of fostering responsible, reflective, and balanced AI use in EFL writing instruction.*

Keywords: AI chatbot, English writing, emotional experiences, psychological effects, narrative inquiry

INTRODUCTION

Artificial Intelligence (AI) has rapidly transformed educational practices by providing intelligent tools that support learning across various disciplines. In English as a Foreign Language (EFL) education, AI-powered chatbots such as ChatGPT have become increasingly popular because they provide immediate feedback, language suggestions, idea generation, and writing assistance. These capabilities allow students to receive personalized support beyond classroom instruction and encourage more independent learning. As AI technology continues to develop, its integration into English writing instruction has attracted considerable attention from researchers and educators seeking to improve students' writing performance and learning experiences.

Previous studies have consistently reported the educational benefits of AI chatbots in EFL writing. AI-assisted writing has been found to improve grammatical accuracy, vocabulary use, organization of ideas, and overall writing quality while reducing the time required to complete writing tasks (Luckyardi et al., 2024; Li et al., 2025). In addition, AI-generated feedback provides learners with immediate and non-judgmental assistance, encouraging them to revise their writing more actively and confidently. These findings suggest that AI chatbots can function as valuable learning partners that support students throughout the writing process.

Beyond writing performance, recent studies have highlighted the importance of learners' emotional and psychological experiences when interacting with AI. Research indicates that AI-

assisted writing can reduce writing anxiety, increase confidence, and enhance motivation by providing continuous feedback and learning support (Zhai, 2022; Deng & Yu, 2023). However, the use of AI also presents several challenges. Learners may experience confusion, frustration, emotional fatigue, or uncertainty when AI-generated responses are unclear, inaccurate, or inconsistent. Furthermore, excessive reliance on AI has raised concerns regarding learner autonomy, critical thinking, psychological dependency, and the authenticity of students' written work (Huang et al., 2022; Syaifulloh & Yappi, 2025).

Although previous research has contributed valuable insights into AI-assisted writing, most studies have focused primarily on writing performance, students' perceptions, or the effectiveness of AI tools using quantitative approaches. Relatively few studies have explored how students personally experience the use of AI throughout the writing process, particularly from emotional and psychological perspectives. Existing studies also tend to investigate groups of learners rather than providing an in-depth understanding of individual experiences and how these experiences develop over time while interacting with AI chatbots.

To address this gap, the present study adopts a qualitative narrative inquiry approach to explore EFL students' lived experiences when using ChatGPT for English writing. Drawing upon Clandinin and Connelly's (2000) three-dimensional narrative framework, this study examines students' experiences across temporality, sociality, and place to understand how emotional and psychological experiences evolve throughout the writing process. Rather than focusing solely on writing outcomes, this study emphasizes students' personal narratives, reflections, and interpretations while interacting with AI-assisted writing.

Specifically, this study investigates three aspects of students' experiences: (1) their emotional experiences when using an AI chatbot in English writing, (2) the psychological effects that emerge during AI-assisted writing, and (3) the strategies students employ when interacting with an AI chatbot throughout the writing process. By exploring these dimensions, this study aims to provide a deeper understanding of how AI chatbots influence students' learning experiences beyond linguistic performance. The findings are expected to contribute to the growing body of research on AI-assisted language learning and provide practical insights for educators seeking to integrate AI responsibly and effectively into EFL writing instruction.

Based on the background above, this study addresses the following research questions:

1. How do students describe their emotional experiences when using an AI chatbot in learning writing in English?
2. What psychological effects do students experience when using an AI chatbot in learning writing in English?
3. What strategies do students use when interacting with an AI chatbot during the writing process?

LITERATURE REVIEW

AI Chatbots in EFL Writing

Artificial Intelligence (AI) chatbots have become increasingly integrated into English as a Foreign Language (EFL) learning, particularly in writing instruction. AI-powered tools such as ChatGPT provide immediate feedback, generate ideas, assist with grammar correction, and support text revision, enabling students to improve their writing more efficiently. Unlike traditional feedback from teachers or peers, AI chatbots offer instant, continuous, and personalized responses that allow learners to revise their writing independently (Zhai, 2022).

Previous studies have demonstrated that AI chatbots contribute positively to writing development. Luckyardi et al. (2024) found that AI-assisted writing improved students' grammatical accuracy and reduced writing anxiety by providing immediate and non-judgmental feedback. Similarly, Li et al. (2025) reported that AI chatbots supported idea generation, maintained learner engagement, and provided scaffolding throughout the writing process. Despite these advantages, researchers have emphasized that AI should function as a learning aid rather than a substitute for students' own thinking and writing processes (Deng & Yu, 2023).

Mental Experience in AI-Assisted Writing

Mental experience in AI-assisted writing refers to the emotional and psychological responses that emerge while students interact with AI during the writing process. In this study, mental experience is conceptualized as the interaction between emotional experiences and psychological experiences that continuously shape learners' engagement with writing activities.

Emotional experience includes students' affective responses, such as enjoyment, confidence, anxiety, frustration, confusion, and emotional fatigue while using AI chatbots (Pekrun, 2006; Huang et al., 2022). Previous studies indicate that AI-generated feedback can reduce writing anxiety and increase emotional comfort by providing immediate assistance (Zhai, 2022). However, unclear or inconsistent responses may also generate negative emotions, including frustration and confusion (Deng & Yu, 2023).

Psychological experience refers to learners' internal beliefs and cognitive states, particularly self-efficacy, motivation, learner autonomy, and psychological dependency on AI (Bandura, 1997). AI-assisted writing has been shown to strengthen students' confidence and motivation by offering continuous guidance during writing tasks. Nevertheless, excessive reliance on AI may reduce independent problem-solving, weaken critical thinking, and create dependency on automated feedback (Syaifulloh & Yappi, 2025). Therefore, students need to balance AI assistance with their own judgment and decision-making throughout the writing process.

Narrative Inquiry

This study adopts narrative inquiry as its methodological foundation to understand students' lived experiences while using AI chatbots for English writing. Narrative inquiry views

experience as stories that individuals construct to interpret their past, present, and future experiences (Clandinin & Connelly, 2000). Rather than measuring learning outcomes, this approach emphasizes how participants make meaning of their personal experiences within particular social and educational contexts.

Clandinin and Connelly (2000) propose a three-dimensional narrative framework consisting of temporality, sociality, and place. Temporality examines how experiences develop over time, sociality explores personal feelings and social interactions, and place considers the contexts in which experiences occur. Through this framework, the present study investigates how students' emotional experiences, psychological development, and learning strategies evolve while interacting with ChatGPT during the writing process. By focusing on individual narratives, the study provides a deeper understanding of AI-assisted writing beyond observable learning performance.

Method

This study employed a qualitative research design using narrative inquiry to explore EFL students' mental experiences while using an AI chatbot (ChatGPT) in English writing. Narrative inquiry was selected because it enables researchers to understand students' lived experiences through the stories they construct and the meanings they assign to those experiences (Clandinin & Connelly, 2000). This study adopted Clandinin and Connelly's three-dimensional narrative framework of temporality, sociality, and place to examine how students' emotional and psychological experiences developed throughout the writing process.

The study was conducted at a private university in Malang, Indonesia. The participants were fifth-semester students of the English Language Education Study Program who had completed an Extended Essay Writing course and actively used ChatGPT to support their academic writing. Participants were selected through purposive sampling. A screening questionnaire was first distributed via Google Forms to identify students who met the research criteria, including having passed the Extended Essay Writing course with a minimum grade of A, actively using ChatGPT for writing activities, and being willing to share their emotional and psychological experiences. Based on the screening results, two participants were selected and are identified in this study as P1 and P2 to maintain confidentiality.

The primary data were collected through semi-structured interviews adapted from Teng (2024). The interview protocol consisted of seven open-ended questions designed to explore students' emotional experiences, psychological effects, and strategies when interacting with ChatGPT during the writing process. Each interview lasted approximately 30–45 minutes and was audio-recorded with participants' permission before being transcribed verbatim for analysis. Prior to the interviews, participants were informed about the purpose of the study, confidentiality, and their right to withdraw from the research at any stage.

The data were analyzed using the six phases of thematic analysis proposed by Braun and Clarke (2006): familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. The analysis focused on identifying themes related to students' emotional experiences, psychological effects, and strategies in AI-assisted writing. To ensure the trustworthiness of the findings, member checking was conducted by asking participants to review the interview transcripts and the researcher's interpretations to confirm that they accurately represented their experiences.

FINDINGS AND DISCUSSION

Emotional Experiences of Using AI Chatbots in English Writing

The first research question explored how students described their emotional experiences when using ChatGPT to support English writing. The findings revealed that students experienced dynamic emotional responses throughout the writing process. These experiences were categorized into three sub-themes: positive emotional responses, negative emotional responses, and emotional ambivalence. Rather than remaining static, participants' emotions developed as they gained more experience interacting with the AI chatbot.

Positive Emotional Responses: Feeling Relaxed, Enjoyable, and Supported

The findings showed that participants experienced positive emotional changes after integrating ChatGPT into their writing activities. Initially, writing in English was perceived as a stressful task because participants frequently struggled with grammar, vocabulary, and idea development. However, the availability of immediate assistance from ChatGPT gradually reduced these difficulties and created a more comfortable writing experience.

Participant 2 (P2) described how ChatGPT transformed the writing process from a source of anxiety into a more manageable activity:

"I find using ChatGPT incredibly helpful when writing in English. Previously, I often struggled with sentence structure or finding the right vocabulary. With ChatGPT, I find the writing process much easier and more focused. I also feel more confident because I can see better example sentences and learn from the AI's suggestions. I feel more comfortable writing because I know there are tools available to help me if I get stuck."
(P2, 11 March 2026)

The excerpt illustrates a clear emotional transition from uncertainty to comfort. The participant perceived ChatGPT as an accessible source of support that reduced the pressure associated with writing in English. Instead of feeling overwhelmed by linguistic challenges, the participant became more relaxed because assistance was readily available whenever difficulties arose.

Similarly, Participant 1 (P1) perceived ChatGPT as more than a technological tool. The participant viewed it as a learning companion that reduced the feeling of writing alone:

"Well, I think ChatGPT is a tool that could be a partner for us, so I found someone to discuss it with. It's a little more confusing because I didn't write it myself, like I didn't think it up myself. So, besides being shorter, I think it's also useful, more efficient, you know. But sometimes I also feel like I'm not thinking, so it's shorter because I just ask the AI for help when I'm confused." (P1, 5 March 2026)

This finding indicates that the emotional benefits of AI extend beyond improving writing performance. For P1, ChatGPT created the feeling of having a discussion partner who was constantly available throughout the writing process. This sense of companionship reduced emotional pressure and made writing feel less intimidating. At the same time, the participant had already begun reflecting on the balance between receiving assistance and maintaining personal thinking.

Overall, both participants described AI-assisted writing as a more enjoyable, supportive, and less stressful experience. These findings support Zhai (2022), who argued that AI-assisted learning environments can reduce writing anxiety by providing immediate feedback and individualized support. Furthermore, Pekrun's (2006) Control-Value Theory explains that positive academic emotions emerge when learners perceive greater control over learning tasks and believe that they possess sufficient resources to complete them successfully. In this study, ChatGPT functioned as one of those resources, enabling participants to experience greater comfort and confidence during writing.

Negative Emotional Responses: Confusion, Dissatisfaction, and Irritation

Despite the positive experiences, participants also reported several negative emotional responses while interacting with ChatGPT. As they continued using the chatbot, they occasionally received responses that were irrelevant, inaccurate, or inconsistent with their intended meaning. These situations generated feelings of confusion, dissatisfaction, and irritation.

Participant 1 (P1) explained that unexpected AI responses often interrupted the writing process and caused frustration:

"Often, I'm like, 'What's the point?' It's annoying, because I feel like I'm not getting the answer I want. In fact, sometimes it's completely off topic. So, maybe it's more of a struggle, like, 'I didn't ask for it like this, why are you bringing it up like that?' I should have, sometimes I even did it on purpose, I blamed it. Let me test ChatGPT, validate me, or give the right answer." (P1, 5 March 2026)

The quotation demonstrates that participants did not always perceive AI as reliable. When ChatGPT produced responses that differed from their expectations, the interaction became a source of emotional discomfort rather than assistance. Instead of simplifying the writing process, inaccurate responses required additional effort to reinterpret, revise prompts, or search for alternative information.

Participant 1 also reflected on emotional challenges experienced before becoming familiar with AI-assisted writing:

"In the past, it was certainly confusing, because besides relying on what was taught in class, there were bound to be omissions. Well, before I knew that, I felt like, confused, anxious, like, can I write this or not? What did I get in class? Can I write it or not? And of course, it took a lot of time, thinking about how to write it later." (P1, 5 March 2026)

Although ChatGPT reduced many of these initial difficulties, the participant acknowledged that writing itself remained a demanding activity. AI assistance did not completely eliminate uncertainty but rather changed how the participant coped with it.

Feelings of dissatisfaction also emerged when ChatGPT generated inconsistent responses:

"Sometimes I'm just not satisfied, like, how come the answer is like that? How can it be, ask me like this, but why is it like that. The results are so different, so this AI, ChatGPT, really gets confused." (P1, 5 March 2026)

This finding suggests that AI-assisted writing is not always a smooth experience. Students still encountered situations where technological limitations influenced their emotional states and required additional cognitive effort to evaluate the chatbot's responses.

These findings are consistent with Deng and Yu (2023), who reported that although AI chatbots provide immediate feedback, inaccurate or contextually inappropriate responses may lead to frustration and dissatisfaction. Therefore, emotional experiences in AI-assisted writing are not exclusively positive but fluctuate depending on the quality and relevance of AI-generated feedback.

Emotional Ambivalence: Feeling Helped Yet Worried

The findings further revealed that participants developed emotional ambivalence after prolonged interaction with ChatGPT. While they appreciated the benefits of AI, they simultaneously expressed concerns regarding dependency, authenticity, and ownership of their writing.

Participant 1 clearly described experiencing two contrasting emotions at the same time:

"If I were in my position now, I would feel two different emotions. On the one hand, I would be very happy that there is an AI, someone who can help us with writing. But on the other hand, I am also worried about what will happen in the future. Will I become too dependent on AI? So on the one hand, I am happy, but sometimes I feel dissatisfied. So, I think there are two emotions that arise when I use ChatGPT." (P1, 5 March 2026)

This quotation illustrates that participants no longer viewed AI solely as a beneficial tool. Their experiences gradually evolved into deeper reflections concerning the long-term consequences of relying on AI during academic writing.

The participant further emphasized the importance of maintaining independent thinking despite receiving AI support:

"Of course I'm happy, because it really helps us, but I've also felt uncomfortable asking AI for help too often without trying to understand the case or problem. So, always involve your own pure thinking in your writing process... so you don't become dependent." (P1, 5 March 2026)

Beyond dependency, concerns also extended to the authenticity of students' writing. Participant 1 questioned whether AI-generated work could still represent personal achievement:

"If we're truly pure, and we leave everything to ChatGPT, then what's there to be proud of in that writing? It's not like it's our own work, so we should still use ChatGPT as a tool, not purely or entirely their own work." (P1, 5 March 2026)

These findings demonstrate that emotional experiences became increasingly reflective as participants gained experience using ChatGPT. Rather than rejecting AI, they recognized both its educational value and its potential risks. Positive feelings of enjoyment, comfort, and support gradually coexisted with concerns regarding dependency, originality, and personal responsibility.

This emotional ambivalence aligns with recent discussions on responsible AI use in education, which emphasize that AI should function as a learning partner rather than a substitute for learners' own cognitive engagement (Deng & Yu, 2023). The findings also reinforce Pekrun's (2006) view that learners may experience multiple emotions simultaneously depending on how they evaluate the benefits and challenges of a learning activity. In this study, students demonstrated emotional maturity by appreciating AI support while remaining aware of the importance of preserving independent thinking and authentic authorship throughout the writing process.

Psychological Effects of AI-Assisted Writing

The second research question explored the psychological effects experienced by students when using ChatGPT to support English writing. The analysis revealed that AI-assisted writing influenced students' psychological states in three interconnected ways: (1) increased self-confidence in writing, (2) enhanced motivation and writing engagement, and (3) psychological dependency accompanied by critical awareness. Rather than functioning merely as a technological tool, ChatGPT shaped how participants perceived their writing abilities, approached writing tasks, and reflected on their dependence on AI throughout the writing process.

Increased Self-Confidence in Writing

The findings demonstrated that continuous interaction with ChatGPT gradually strengthened participants' confidence in writing English. Before using AI, participants frequently questioned their grammatical accuracy, vocabulary choice, and ability to organize ideas effectively. However, as they became familiar with the chatbot, they reported feeling more capable of expressing their ideas because AI provided immediate support whenever they encountered difficulties.

Participant 2 (P2) explained that ChatGPT helped transform feelings of uncertainty into greater confidence:

"Previously, I often felt quite nervous when I had to write in English. I often felt unsure about my grammar and sometimes struggled to express my ideas clearly. This made the writing process feel quite slow and tiring. Now, I feel more confident when I start writing. I feel like I have a tool that can help me when I'm struggling." (P2, 11 March 2026)

The quotation illustrates how AI reduced self-doubt during writing. The participant no longer perceived writing as an intimidating activity because support was always available when needed. Rather than replacing personal effort, ChatGPT served as a source of reassurance that encouraged the participant to begin writing with greater confidence.

Participant 1 (P1) similarly reported increased confidence but emphasized that such confidence originated from combining personal effort with AI assistance rather than relying solely on the chatbot:

"If you ask me if I'm confident using ChatGPT, I'm confident because I don't use ChatGPT purely. So, I still incorporate my own thoughts into my writing. So, of course, I feel confident because what I create is a combination of my own work and the help of AI." (P1, 5 March 2026)

Unlike P2, who highlighted the availability of support, P1 emphasized authorship and ownership. Confidence emerged because the participant believed that the final product still reflected personal ideas despite receiving technological assistance. This finding suggests that students' confidence was not solely determined by AI-generated responses but also by their perception that they remained actively involved in constructing their writing.

Overall, these findings indicate that ChatGPT contributes to students' writing self-confidence by reducing uncertainty, providing language support, and encouraging learners to express their ideas more freely. This finding is consistent with Bandura's (1997) concept of self-efficacy, which suggests that confidence develops when learners believe they possess the necessary resources to accomplish academic tasks successfully. In this study, AI functioned as one of those resources, enabling participants to approach writing with greater assurance while maintaining their own contribution to the writing process.

Enhanced Motivation and Writing Engagement

Besides increasing confidence, ChatGPT also influenced participants' motivation and engagement in writing. The availability of immediate feedback and writing suggestions encouraged participants to spend more time developing and revising their work. Instead of viewing writing as a difficult obligation, participants gradually perceived it as a more manageable and enjoyable learning activity.

Participant 2 (P2) explained that AI assistance motivated the participant to continue improving writing skills:

"I feel like this experience has made me more motivated to write. I feel more prepared for writing assignments because I know there's a tool that can help me learn. ChatGPT has made me even more motivated to write because I find the revision process easier. When I get suggestions from the AI, I can see how my sentences could be improved."
(P2, 11 March 2026)

The participant associated motivation with the opportunity to receive immediate feedback. Rather than waiting for teacher evaluation, revisions could be made instantly, making the learning process more interactive and encouraging continuous improvement.

Participant 1 (P1) also described ChatGPT as creating a greater sense of engagement during writing:

"If you say it's passive, insyaallah, it's not, because as a student, writing is certainly a demand. However, it's certainly driven. It's more like having a study partner, for example. Who wouldn't be enthusiastic? So, we feel like we're not doing or writing alone." (P1, 5 March 2026)

The participant viewed ChatGPT as a learning companion that reduced the feeling of isolation often associated with academic writing. This companionship encouraged greater enthusiasm and sustained participation throughout the writing process.

Taken together, these findings suggest that AI-assisted writing positively influences students' motivation by simplifying complex writing tasks and providing continuous learning support. The availability of immediate feedback enabled participants to revise their work more frequently and engage more actively in writing activities. These findings support previous studies by Deng and Yu (2023), which reported that AI-assisted writing environments enhance learner engagement by providing responsive and personalized assistance throughout the learning process.

Psychological Dependency and Critical Awareness

Although participants acknowledged numerous psychological benefits of ChatGPT, they also became increasingly aware of the potential risks associated with excessive dependence on AI. As their experience with AI-assisted writing increased, participants reflected critically on how

frequent reliance on ChatGPT might influence their thinking, learning autonomy, and writing authenticity.

Participant 1 (P1) openly expressed concerns regarding dependency:

"However, it's not uncommon to feel like if we keep writing ChatGPT, everything we do will be ChatGPT, every little bit ChatGPT, so we're afraid of being too dependent on ChatGPT. Then, sometimes we're also afraid that the writing will be purely from ChatGPT, not from our thoughts, so that's more of a fear. It'll be annoying and dependent, like that." (P1, 5 March 2026)

The quotation demonstrates that although AI facilitated writing, the participant remained aware of the possibility that excessive use could weaken independent thinking. Rather than rejecting AI altogether, the participant questioned how AI should be used responsibly in academic writing.

This awareness became even more evident when Participant 1 emphasized the importance of critically evaluating AI-generated responses:

"So, I think we should continue using ChatGPT going forward, but don't forget to contribute, or cross-check the language after we use ChatGPT. Don't just copy and paste it. So, we need to rethink what ChatGPT says and see if we think it's appropriate." (P1, 5 March 2026)

Instead of passively accepting AI output, the participant demonstrated reflective judgment by recommending verification, revision, and personal contribution before incorporating AI-generated suggestions into academic writing.

A similar perspective was expressed by Participant 2 (P2):

"I want to use AI as a learning tool, not just for improving my writing. I try to provide more specific instructions or edit the AI's output to suit my needs." (P2, 11 March 2026)

This quotation suggests that AI was viewed as a means of learning rather than as a substitute for students' own efforts. P2 actively modified AI-generated responses to ensure that the final writing reflected personal understanding and academic needs.

Overall, these findings reveal that AI-assisted writing generated two interconnected psychological experiences. On the one hand, ChatGPT strengthened students' confidence and motivation by providing accessible guidance throughout the writing process. On the other hand, participants simultaneously developed critical awareness regarding the risks of dependency, originality, and responsible AI use. Rather than becoming passive users, both participants demonstrated self-regulation by evaluating AI-generated content, maintaining personal authorship, and using ChatGPT selectively to support—not replace—their own thinking. These findings reinforce current discussions on responsible AI integration in education, emphasizing that the

educational value of AI depends not only on technological capability but also on learners' ability to interact with it critically, ethically, and independently.

Students' Strategies in Interacting with an AI Chatbot During the Writing Process

The third research question explored the strategies students employed when interacting with ChatGPT throughout the writing process. The findings revealed that participants did not use AI passively. Instead, they gradually developed adaptive strategies to maximize the benefits of ChatGPT while minimizing its limitations. As they became more experienced users, participants learned to (1) refine prompts and clarify instructions when AI responses were inaccurate, (2) combine AI with multiple learning resources, and (3) use ChatGPT selectively for idea development and revision. These strategies demonstrate that students actively regulated their learning rather than relying entirely on AI-generated responses.

Dealing with Irrelevant or Inaccurate AI Responses through Refining Prompts and Clarifying Instructions.

One of the most common challenges experienced by participants was receiving responses that were irrelevant or did not fully address their writing needs. Rather than accepting these responses without question, participants gradually realized that the quality of AI-generated output depended largely on how clearly they formulated their prompts. Consequently, they began revising their prompts, adding more detailed explanations, and providing contextual information to obtain more accurate responses.

Participant 1 (P1) explained that refining prompts became an important strategy whenever ChatGPT generated inappropriate answers:

"Protests, of course. I see them quite often these days. Not really angry with GPT, but annoyed, like how can you answer like that? How can you deviate from what we were discussing, like that, so often. So, I rewrote the prompt. I explained it in more detail. And sometimes when I use a prompt, I usually explain my position. So, for example, when I write, I explain, I'm an English student writing." (P1, 5 March 2026)

The quotation illustrates that P1 did not perceive inaccurate AI responses as the end of the writing process. Instead, the participant modified the input by adding clearer instructions and contextual information to improve the quality of the output. This finding demonstrates that interacting with AI involves an iterative process in which students continuously adjust their prompts until they obtain responses that meet their expectations.

A similar strategy was reported by Participant 2 (P2):

"In general, I don't encounter too many difficulties when using ChatGPT. If an answer isn't quite right, I usually just need to adjust my question to make it clearer. I try to provide more specific instructions or edit the AI's results to suit my needs." (P2, 11 March 2026)

Unlike novice users who may expect AI to immediately produce perfect responses, both participants recognized that effective interaction requires clear communication. Rather than blaming the technology, they viewed prompt refinement as part of the learning process.

These findings indicate that students gradually developed prompt engineering skills through repeated interaction with ChatGPT. They understood that AI-generated responses depend on the quality of user instructions, making prompt refinement an essential strategy during AI-assisted writing. This finding is consistent with recent studies suggesting that effective AI use requires learners to formulate precise and contextually appropriate prompts to obtain meaningful responses. Consequently, successful interaction with AI depends not only on the chatbot's capabilities but also on users' ability to communicate their intentions effectively.

Overcoming Limited AI Feedback by Combining Multiple Learning Resources

As participants gained more experience using ChatGPT, they also recognized that AI-generated feedback was not always sufficient for completing academic writing tasks. Although the chatbot provided immediate suggestions, some responses lacked contextual understanding or discipline-specific guidance. Therefore, participants adopted a strategy of combining ChatGPT with other learning resources, including lecturers, classmates, books, journal articles, and online references.

Participant 1 (P1) emphasized that multiple learning resources remained necessary despite the availability of AI:

“Before ChatGPT existed, we naturally looked for other examples, writing examples. From friends, the internet, or even from friends we felt were good at writing, or perhaps even asking for examples of correct writing from lecturers. So, even now, we still need to compare with other sources.” (P1, 5 March 2026)

The participant regarded ChatGPT as an additional learning resource rather than a replacement for existing sources of knowledge. Cross-checking information with lecturers, peers, and academic references remained an important part of the writing process.

Participant 1 further distinguished the strengths of AI feedback from lecturer feedback:

“Feedback from ChatGPT is very fast and easily accessible, even anytime and anywhere. However, I find that feedback from lecturers is usually more in-depth and better because they understand the context of our learning. So, a combination of lecturer feedback and AI assistance might be the most helpful.” (P1, 5 March 2026)

Similarly, Participant 2 (P2) shared the same perspective:

“I think ChatGPT's feedback is very helpful because it's provided quickly. This allows me to immediately improve my writing without having to wait long. However, teacher

feedback is usually more detailed. I feel the combination of teacher feedback and AI assistance will greatly improve my writing skills.” (P2, 11 March 2026)

These quotations suggest that participants clearly differentiated the roles of AI and human instructors. While ChatGPT provided speed, accessibility, and immediate feedback, lecturers offered deeper explanations and contextualized guidance that AI could not fully provide.

This finding demonstrates that students adopted a balanced learning strategy by integrating technological and human resources throughout the writing process. Rather than depending exclusively on AI, participants combined various sources of feedback to strengthen their understanding and improve the quality of their writing. Such findings support previous research emphasizing that AI should complement, rather than replace, teacher guidance in language learning, as meaningful learning occurs when technological assistance is integrated with expert human feedback.

Preventing Overdependence on AI through Selective Use for Idea Development and Revision

The final strategy identified in this study concerned participants’ selective use of ChatGPT throughout the writing process. As participants became more experienced users, they no longer relied on AI to generate complete pieces of writing. Instead, they deliberately limited its use to brainstorming ideas, revising drafts, identifying grammatical errors, and improving sentence organization while ensuring that the core content remained their own.

Participant 1 (P1) explained this strategy:

“So far, I’ve personally used AI to develop ideas. Maybe in the future, I’ll keep asking ChatGPT to develop ideas, and maybe even write it myself. I mean, try to trust my own writing, and then use ChatGPT as a tool to check, revise, and improve my writing.”
(P1, 5 March 2026)

This quotation indicates that AI functioned primarily as a supporting tool rather than as the main author of the participant’s work. P1 intentionally maintained ownership of the writing process while utilizing AI to strengthen the quality of the final product.

Participant 1 also highlighted the role of AI during revision:

“Using ChatGPT is faster, so we know where we’re going wrong, for example, if revisions are needed later, so we can provide alternatives more quickly. We’ll show you where the error is, and then what needs to be fixed in our writing. We’ll also ask you to point out the error.” (P1, 5 March 2026)

Similarly, Participant 2 (P2) described how ChatGPT encouraged continuous revision and writing improvement:

“ChatGPT makes me more motivated to write because I find the revision process easier. When I get suggestions from the AI, I can see how my sentences could be

improved. This makes me more interested in continuing to improve my writing." (P2, 11 March 2026)

The participants' experiences demonstrate that ChatGPT was used strategically during specific stages of writing rather than throughout the entire process. Brainstorming, revision, grammar checking, and language improvement became the primary functions of AI, whereas idea ownership and final decision-making remained under the students' control.

Overall, these findings indicate that participants developed self-regulated strategies for integrating AI into academic writing. Instead of relying entirely on ChatGPT, they refined prompts, combined AI with multiple learning resources, and used the chatbot selectively for idea development and revision. These strategies illustrate that effective AI-assisted writing depends not only on the availability of technology but also on students' critical judgment in determining when and how AI should be used. The findings therefore reinforce the view that AI serves most effectively as a learning partner that supports students' writing development while preserving learner autonomy, critical thinking, and academic integrity.

Discussion

The findings of this study demonstrate that the integration of ChatGPT into English writing influences students not only cognitively but also emotionally and psychologically. Furthermore, students gradually developed adaptive strategies that enabled them to maximize the benefits of AI while minimizing its limitations. These findings indicate that AI-assisted writing is not merely a technological innovation but also a learning experience that shapes students' emotions, confidence, motivation, and self-regulated learning.

Regarding emotional experiences, the findings revealed that students experienced positive emotional responses, including feeling more relaxed, comfortable, and supported during the writing process. The availability of immediate assistance from ChatGPT reduced participants' anxiety when dealing with grammar, vocabulary, and idea development, allowing them to approach writing tasks with greater confidence. These findings support Pekrun's (2006) Control-Value Theory, which proposes that positive academic emotions emerge when learners perceive greater control over learning tasks and believe they possess adequate resources to accomplish them successfully. In this study, ChatGPT functioned as an accessible learning resource that reduced emotional pressure and facilitated students' writing process. Similarly, Zhai (2022) reported that AI-assisted learning environments help reduce writing anxiety by providing immediate and personalized feedback, enabling learners to engage more positively in writing activities.

However, the findings also revealed that participants experienced negative emotions, including confusion, dissatisfaction, and frustration when ChatGPT generated inaccurate or irrelevant responses. Although the chatbot provided rapid assistance, its responses did not always meet students' expectations, requiring them to reinterpret information or revise their prompts. These findings indicate that students' emotional experiences when using AI are dynamic rather

than consistently positive. This result is consistent with Deng and Yu (2023), who argued that while generative AI can improve writing performance, inaccurate or contextually inappropriate responses may interrupt students' cognitive processes and generate negative emotional reactions. Therefore, effective AI-assisted writing requires students to critically evaluate AI-generated responses rather than accepting them without reflection.

Another important finding is the emergence of emotional ambivalence. Participants simultaneously appreciated ChatGPT as a helpful learning tool while expressing concerns regarding dependency and the authenticity of AI-assisted writing. Instead of relying entirely on AI, participants emphasized the importance of maintaining their own ideas and critical thinking throughout the writing process. This finding suggests that students gradually developed reflective awareness of responsible AI use. Deng and Yu (2023) similarly emphasized that the educational benefits of generative AI depend on learners' ability to balance technological assistance with independent thinking and responsible academic practices.

The findings also demonstrate that ChatGPT positively influenced students' psychological experiences by increasing their self-confidence and motivation. Participants reported feeling more confident because ChatGPT reduced uncertainty during writing and provided examples that helped them express their ideas more effectively. This finding is in line with Bandura's (1997) theory of self-efficacy, which explains that learners' confidence increases when they believe they possess sufficient resources and capabilities to accomplish academic tasks successfully. Rather than replacing students' abilities, ChatGPT served as an additional learning resource that strengthened their confidence while maintaining personal ownership of their writing.

Similarly, participants described increased motivation and engagement throughout the writing process. The availability of immediate feedback encouraged them to revise their writing more frequently and become more actively involved in completing writing tasks. These findings support Deng and Yu (2023), who found that AI-assisted writing environments enhance students' motivation by providing timely feedback and facilitating continuous revision. Consequently, ChatGPT not only supported students technically but also encouraged greater participation and persistence throughout the writing process.

Despite these psychological benefits, participants also demonstrated awareness of the potential risks associated with excessive dependence on AI. Rather than accepting AI-generated responses without evaluation, they emphasized the importance of reviewing, revising, and verifying ChatGPT's suggestions before incorporating them into their writing. This finding indicates that students developed critical awareness alongside increased confidence and motivation. Therefore, AI-assisted writing should not be understood as replacing students' cognitive processes but rather as supporting them through responsible and reflective use.

Finally, the findings revealed that students developed several adaptive strategies while interacting with ChatGPT. Participants refined prompts to obtain more accurate responses, combined AI-generated feedback with lecturers' comments and other learning resources, and used

ChatGPT selectively for brainstorming, revision, and language improvement. These strategies demonstrate that participants acted as active learners who regulated their own learning process instead of depending entirely on AI-generated content. By combining technological support with personal judgment and human feedback, students maintained ownership of their writing while maximizing the educational benefits of AI.

Overall, this study suggests that the successful integration of ChatGPT in English writing depends not only on the capabilities of the technology but also on students' ability to use it critically, strategically, and responsibly. AI can effectively support writing development by reducing anxiety, strengthening self-confidence, increasing motivation, and facilitating revision. However, these benefits can only be fully achieved when students continue to evaluate AI-generated responses, maintain independent thinking, and position AI as a complementary learning tool rather than a substitute for their own knowledge and writing abilities.

Conclusion

This study explored EFL students' emotional experiences, psychological effects, and strategies when interacting with ChatGPT during the English writing process. The findings revealed that AI-assisted writing generated diverse emotional responses, including positive emotions, negative emotions, and emotional ambivalence. ChatGPT also enhanced students' self-confidence and motivation by providing immediate support throughout the writing process, while simultaneously encouraging critical awareness of the potential risks of overreliance on AI.

Furthermore, students developed adaptive strategies to use ChatGPT effectively, including refining prompts, combining AI-generated feedback with other learning resources, and using AI selectively for idea development and revision. These findings suggest that ChatGPT is most effective when used as a complementary learning tool rather than a substitute for students' own thinking and writing. Therefore, English language educators should encourage students to use AI critically, responsibly, and strategically to support writing development while maintaining learner autonomy and academic integrity.

ACKNOWLEDGEMENT

The author would like to express sincere gratitude to Mr. Eko Sonny Elfiyanto and Mrs. Durotun Nasihah for their guidance, support, and encouragement throughout the completion of this study.

REFERENCES

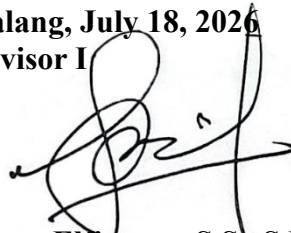
- Annamalai, N., Eltahir, M. E., Zyoud, S. H., Soundrarajan, D., Zakarneh, B., & Al Salhi, N. R. (2023). Exploring English language learning via chatbot: A case study from a self-determination theory perspective. *Computers and Education: Artificial Intelligence*, 5. <https://doi.org/10.1016/j.caeai.2023.100148>
- Apriani, E., Cardoso, L., Obaid, A. J., Muthmainnah, M., Wijayanti, E., Esmianti, F., & Supardan, D. (2024). Impact of AI-powered chatbots on EFL students' writing skills,

- self-efficacy, and self-regulation: A mixed-methods study. *Global Educational Research Review*, 1(2), 57–72. <https://doi.org/10.71380/GERR-08-2024-8>
- Arifin, Z. (2022). Investigating academic writing in EFL contexts: Students' voices on complexities and coping strategies. *Vision: Journal for Language and Foreign Language Learning*, 11(1), 69–83.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman
- Bibi, Z., & Atta, A. (2024). The role of ChatGPT as AI English writing assistant: a study of student's perceptions, experiences, and satisfaction. *Annals of Human and Social Sciences*, 5(1), 433–443. [https://doi.org/10.35484/ahss.2024\(5-1\)39](https://doi.org/10.35484/ahss.2024(5-1)39)
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Chan, K. M. (2025). Emotions and meanings in AI-assisted learning: A narrative exploration of students' digital experiences. *Journal of Educational Technology & Society*, 28(1), 45–59. <https://doi.org/10.1177/07356331241311022>
- Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review. *IEEE Access*, 8, 75264–75278. <https://doi.org/10.1109/ACCESS.2020.2988510>
- Civelek, M., & Hocaoglu, T. (2025). Students' narratives of AI-supported writing: A Turkish university case study. *Language Learning in Higher Education*, 15(2), 201–218. <https://doi.org/10.1515/cercles-2025-0015>
- Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. Jossey-Bass.
- Deng, X., & Yu, Z. (2023a). A meta-analysis and systematic review of the effect of chatbot technology use in foreign language learning. *Sustainability*, 15(24). <https://doi.org/10.3390/su152416624>
- Deng, X., & Yu, Z. (2023b). A meta-analysis of AI-based feedback in language learning. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1156124>
- Heriyawati, D. F., & Romadhon, M. G. E. (2025). Can AI be trusted for my thesis? The voices of Indonesian higher education levels about ChatGPT in automated writing evaluation (AWE). *Computer-Assisted Language Learning Electronic Journal (CALL-EJ)*, 26(1), 58–75. <https://doi.org/10.54855/callej.252614>
- Huang, Y., Zhang, L., & Chen, X. (2022). Digital fatigue and cognitive overload in online learning environments. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.852341>
- Kim, J., Yu, S., Detrick, R., & Li, N. (2025). Exploring students' perspectives on generative AI-assisted academic writing. *Education and Information Technologies*, 30, 1265–1300. <https://doi.org/10.1007/s10639-024-12878-7>
- Kurniasih, Suhartoyo, E., & Fransiskus, F. (2024). Examining the effectiveness of teaching strategies for alleviating EFL students' writing anxiety: A mixed-method study. *JEELS*, 11(1), 1-21. <https://doi.org/10.30762/jeels.v11i1.1464>
- Kurniasih, Suhartoyo, E., Widodo, G. S., & Irham. (2023). Writing anxiety and students' writing performance. In Proceedings of the International Conference. *Atlantis Press*. https://doi.org/10.2991/978-2-38476-120-3_3
- Labadze, L., Grigolia, M., & Machaidze, L. (2023). Role of AI chatbots in education: Systematic literature review. *International Journal of Educational Technology in Higher Education*, 20(1), 56. <https://doi.org/10.1186/s41239-023-00426-0>

- Li, Y., Zhou, X., Wang, Y., & Zhang, L. (2025). Design language learning with artificial intelligence (AI) chatbots based on activity theory: A systematic review. *Smart Learning Environments*, 12(3), 1–20.
- Lin, Y., & Chen, J. (2024). How AI-integrated educational applications affect academic emotions: A quasi-experimental study. *BMC Psychology*, 12(1), 1–12.
- Luckyardi, S., Wibowo, A., Riyadi, M., & Heriyanto, H. (2024). Chatbots as digital language tutors: Revolutionizing education through AI. *Indonesian Journal of Science and Technology*, 9(1), 81–94.
- Mahmudah, S., & Muhammadong, M. (2024). Innovative religious science education: Incorporating virtual reality to teach complex theological concepts. *Journal of Social Science Utilizing Technology*, 2(3), 400–414.
- Malik, A. R., Pratiwi, Y., Andajani, K., Numertayasa, I. W., Suharti, S., Darwis, A., & Marzuki, M. (2023). Exploring artificial intelligence in academic essay: Higher education student's perspective. *International Journal of Educational Research Open*, 5. <https://doi.org/10.1016/j.ijedro.2023.100296>
- Masula, S., Rahman, R., & Yappi, S. (2025). AI chatbots as academic companions: Psychological pros and cons in Indonesian EFL contexts. *Asian EFL Journal*, 27(3), 1–23.
- Muchasan, H., & Rohmawan, D. (2024). Technology and emotional engagement in language learning. *Educational Media Research Journal*, 11(4), 389–410.
- Mun, C. (2024). EFL learners' writing feedback and their use of AI-assisted tools. *STEM Journal*, 25(2), 26–45.
- Pekrun, R. (2006). The control-value theory of achievement emotions. *Educational Psychology Review*, 18, 315–341. <https://doi.org/10.1007/s10648-006-9029-9>
- Pekrun, R., & Linnenbrink-Garcia, L. (2014). *International handbook of emotions in education*. Routledge.
- Pitukwong, K., & Saraiwang, S. (2024). Exploring the effectiveness of digital writing tools on Thai EFL students' writing. *Contemporary Educational Technology*, 16(3). <https://doi.org/10.30935/cedtech/14808>
- Rahman, M. M., Chung, C. C., Shanana, A., Sim Chu Hua, S. A., & Thiviyashree, E. (2025). Utilization of generative artificial intelligence technologies as learning tools among university students: A cross-sectional study. *International Journal of Online and Biomedical Engineering*, 21(7), 4–14. <https://doi.org/10.3991/ijoe.v21i07.54227>
- Shu, K. N., Sahade, S., & Mufaridho, L. M. W. (2025). The AI-dependent learning phenomenon: Exploring students' dependence on AI in completing college academic task. *International Journal of Education, Vocational and Social Science*, 5(1), 80–90. <https://doi.org/10.2139/ssrn.5046200>
- Syaifulloh, A., & Yappi, S. (2025). Ethical and emotional implications of AI chatbots in English classrooms. *TESOL International Journal*, 30(1), 110–127.
- Teimouri, Y., Goetze, J., & Plonsky, L. (2019). Second language anxiety and achievement: A meta-analysis. *Studies in Second Language Acquisition*, 41(2), 363–387. <https://doi.org/10.1017/S0272263118000311>
- Teng, M. F. (2024). “ChatGPT is the companion, not enemies”: EFL learners' perceptions and experiences in using ChatGPT for feedback in writing. *Computers and Education: Artificial Intelligence*, 7. <https://doi.org/10.1016/j.caeai.2024.100270>

- Ubaidillah, M. F., Andriyanti, E., & Triastuti, A. (2024). Understanding identity construction of Indonesian EFL teacher educators from a three-dimensional narrative. *LLT Journal: A Journal on Language and Language Teaching*, 27(2), 844–865. <https://doi.org/10.24071/llt.v27i2.8944>
- Umamah, A., & Hidayanti, I. (2021). Writing strategy and factors contributing to EFL university students' preference. *ELT-Echo*, 3(1). <https://doi.org/10.24235/eltecho.v3i1.2486>
- Vistorte, A. O. R., Deroncele-Acosta, A., Ayala, J. L. M., Barrasa, A., López-Granero, C., & Martí-González, M. (2024). Integrating artificial intelligence to assess emotions in learning environments: A systematic literature review. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1387089>
- Wahyuni, S., Heriyawati, D. F., Ubaidillah, M. F., & Prabjandee, D. (2025). Exploring the emotional geographies of EFL students' participation in group assignments: A narrative inquiry. *Journal of Research on English and Language Learning (J-REaLL)*, 6(2), 267–283. <https://doi.org/10.33474/j-reall.v6i2.23833>
- Waziana, W., Andewi, W., Hastomo, T., & Hasbi, M. (2024). Students' perceptions about the impact of AI chatbots on their vocabulary and grammar in EFL writing. *Register Journal*, 17(2), 352–382. <https://doi.org/10.18326/register.v17i2.352-382>
- Wei, L. (2023). Narrative inquiry: A research method in the education field. *World Journal of Education*, 13(6), 35–43. <https://doi.org/10.5430/wje.v13n6p35>
- Zhai, X. (2022). ChatGPT user experience: Implications for education. *Frontiers in Education*, 7. <https://doi.org/10.3389/feduc.2022.1018317>

Malang, July 18, 2026
Advisor I



Sonny Elfiyanto, S.S., S.Pd., M.Pd., Ph.D
NPP. 212801198032101