

Exploring the Use of ChatGPT on EFL Students' Writing Anxiety at Mulawarman University

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Abstract

This study aims to identify the writing anxiety levels, to explore students experiences the use of ChatGPT in supporting their writing and to examine students' perceptions of the role ChatGPT in reducing writing anxiety at Mulawarman University. This research employed a qualitative case study design involving six final-year students selected through purposive sampling. Data were collected using a questionnaire (SLWAI) and semi-structured interviews, then analyzed using thematic analysis. Thematic analysis of the interview data identified three major themes: The analysis generated three major themes: students' writing anxiety levels, students' experiences using ChatGPT in supporting writing, and ChatGPT's role in reducing writing anxiety. The findings revealed that the majority of students experienced high levels of writing anxiety (69.2%), followed by moderate (25.6%) and low anxiety (6.4%), indicating that writing in English remains a significant challenge. In terms of learning experiences, students reported using ChatGPT for brainstorming ideas, correcting grammar, enhancing vocabulary, and receiving immediate feedback on their writing. ChatGPT was perceived as an effective tool in reducing writing anxiety by lowering students' fear of making mistakes, increasing their confidence, and improving their motivation to complete writing tasks.

Keywords: Writing Anxiety, ChatGPT, EFL Students.

1. Introduction

Writing is a complex skill that plays a crucial role in academic success, requiring students to organize ideas, think critically, and apply appropriate grammar and vocabulary (Suhartoyo et al., 2024). However, many students experience writing anxiety, defined as feelings of fear, nervousness, and lack of confidence when writing in English (Horwitz et al., 2019) (Cheng, 2004a). This anxiety can reduce motivation, hinder idea development, and lead students to avoid writing tasks.

In higher education, particularly among English Education students at Mulawarman University, writing anxiety becomes more prominent due to the demands

of producing academic texts with proper linguistic and structural standards. Factors such as limited vocabulary, grammatical difficulties, lack of ideas, and psychological pressure contribute to this issue (Wahyuni et al., 2019). Additionally, limited integration of technology in learning further intensifies students' challenges.

With the advancement of artificial intelligence (AI), tools such as ChatGPT have emerged as potential solutions to support writing. ChatGPT can provide instant feedback, suggest vocabulary, and assist in idea generation (Kasneci et al., 2023). Previous studies indicate that AI can improve students' writing performance, motivation, and confidence, as well as reduce writing anxiety (Üstünel, 2025). Previous studies have shown that the integration of AI in learning can improve students' writing performance, motivation, and confidence (Bin-hady et al., 2024). More importantly, AI tools such as ChatGPT can also influence affective factors by reducing writing anxiety and creating a supportive, non-judgmental learning environment. Through immediate and personalized feedback, students may feel less afraid of making mistakes and more confident in expressing their ideas.

Despite these findings, research that specifically examines the role of ChatGPT in addressing writing anxiety among EFL students in the Indonesian context remains limited. Most previous studies have focused on writing performance or the technical benefits of AI, while fewer studies explore its impact on psychological aspects such as anxiety, confidence, and motivation (Teng et al., 2025). In particular, there is still a lack of research investigating how ChatGPT supports final-year students in managing writing anxiety during thesis writing.

This study aims to: (1) To identify the writing anxiety levels of English Department students. (2) Explore English department students' experiences the use of ChatGPT in supporting their writing and (3) To examine students' perceptions of the role of ChatGPT in reducing writing anxiety.

2. Literature Review

2.1. Writing in EFL Context

Writing in the EFL context is a complex and essential skill that enables learners to express ideas, communicate effectively, and participate in academic and professional settings. As a productive language skill, writing involves not only the use of linguistic elements such as grammar, vocabulary, and sentence structure, but also cognitive processes including idea generation, organization, and critical thinking (Durga & Rao, 2018) (Guntur, 2008). In practice, EFL learners often encounter various challenges such as limited vocabulary, grammatical difficulties, and writing anxiety, which can hinder their ability to produce coherent and meaningful texts. Despite these challenges, writing plays a crucial role in developing learners' communicative competence, supporting other language skills, and fostering learner autonomy. Effective EFL writing is generally characterized by clarity and coherence, accuracy and appropriateness, well-organized structure, unity and development of ideas, and fluency in expression, all of which contribute to the successful delivery of messages to a specific audience and purpose (Hyland, 2003b).

Furthermore, writing is not a one-step activity but a recursive process that involves planning, drafting, revising, and reflecting to improve the quality of the text.

The writing process approach views writing as a series of stages that writers move through while composing a text. (Flower & Hayes, 2008) propose a cognitive process model of writing which emphasizes that writing involves planning, translating ideas into text, and reviewing. This model highlights writing as a problem-solving and recursive activity. In EFL learning, adopting a process-based approach helps learners focus on how to write rather than solely on the final written product. Generally, the writing process in EFL learning consists of several interconnected stages: prewriting, drafting, revising, editing, and publishing.

2.2. Concept of Anxiety

Writing anxiety is a psychological condition characterized by feelings of tension, fear, and worry experienced before or during writing, often related to concerns about evaluation and performance rather than the writing activity itself (Daly & Miller, 1975). In the EFL context, this anxiety commonly arises due to linguistic limitations, fear of making errors, and lack of confidence in expressing ideas (Zheng, 2008), causing students to feel stuck, avoid tasks, or experience emotional and cognitive barriers in writing. Writing anxiety can be classified into cognitive anxiety (negative expectations), somatic anxiety (physical tension), and avoidance behavior (Cheng, 2004a). Several factors contribute to its occurrence, including psychological aspects such as low self-confidence and perfectionism, fear of negative evaluation, limited linguistic competence (Fitria, 2022), environmental conditions, and time pressure. This condition significantly impacts students' learning outcomes, leading to lower writing quality, reduced motivation, decreased self-efficacy, and poorer academic achievement (Jia, 2024). In line with self-efficacy theory, students' belief in their writing ability plays a crucial role, as higher self-efficacy enhances confidence and persistence, while lower self-efficacy reinforces anxiety and weakens performance (Bandura, 1997).

2.3. Technology in Language Learning

Technology has become an essential component in language learning, transforming not only the tools used but also the ways learners access materials, interact with content, and develop language skills. Historically, technology has been integrated into English language education since the use of language laboratories in the 1960s–1970s, followed by the emergence of communicative approaches supported by personal computers in the 1980s–1990s (Kessler & Hubbard, 2017). The development of Computer-Assisted Language Learning (CALL) further enhanced language instruction by enabling learners to improve reading, writing, vocabulary, and grammar through digital resources (Chapelle, 2001). Today, the integration of internet-based learning, multimedia, and mobile technologies (MALL) has shifted the focus from technology itself to its pedagogical applications. In the context of EFL writing, technological tools such as writing software, grammar

checkers, and AI-based platforms can support learners in planning, drafting, and revising texts, while also improving fluency, accuracy, and confidence. Therefore, technological advancements play a significant role in facilitating more effective, interactive, and learner-centered language learning environments.

2.4.ChatGPT in EFL Writing

The integration of Artificial Intelligence (AI), particularly ChatGPT, has significantly transformed EFL writing by providing interactive, adaptive, and immediate support for learners. As a large language model, ChatGPT enables students to generate ideas, draft texts, and receive instant feedback, thereby enhancing writing fluency, accuracy, and confidence. In classroom practice, it functions as a writing assistant that supports all stages of the writing process, from brainstorming to revision, while also helping learners overcome writing anxiety and writer's block through non-judgmental feedback (Li et al., 2023). Compared to traditional automated writing evaluation tools, ChatGPT offers more comprehensive feedback that promotes critical thinking, learner autonomy, and self-efficacy (Dwivedi et al., 2023). Furthermore, it supports a process-oriented approach to writing, allowing students to iteratively refine their work. However, despite these benefits, challenges such as overreliance, reduced creativity, and ethical concerns including plagiarism and academic integrity must be considered. Therefore, effective use of ChatGPT requires proper pedagogical scaffolding to ensure that it functions as a supportive learning tool rather than a substitute for students' independent writing skills.

2.5.ChatGPT as a writing support tool

ChatGPT functions as an advanced writing support tool that transforms writing from an individual activity into a collaborative process between learners and technology. Through features such as generative text, grammar correction, idea generation, and real-time feedback, ChatGPT assists students at every stage of writing, including planning, drafting, and revising. Its generative text capability provides models of well-structured academic writing, helping learners understand rhetorical organization and appropriate vocabulary use (Kasneci et al., 2023). In addition, ChatGPT offers comprehensive grammar correction that goes beyond surface-level errors by considering context and meaning. The brainstorming feature supports idea development and reduces writer's block and writing anxiety by providing immediate, non-judgmental input. Furthermore, its feedback mechanism enhances coherence, cohesion, and argumentation, encouraging deeper revision and reflective learning (Essel et al., 2024). As a result, ChatGPT acts as a digital collaborator that scaffolds learners' writing processes, promotes autonomy, and supports the development of both linguistic and cognitive aspects of writing.

3. Methods

This study employed a qualitative descriptive case study to explore EFL students'

experiences in using ChatGPT on writing anxiety. The participants were six English Education students batch 2022 selected through purposive sampling based on criteria such as thesis engagement, prior writing course completion, experience of writing anxiety, and use of ChatGPT (Rai & Thapa, 2004).

Data were collected through a preliminary questionnaire and semi-structured interviews. The questionnaire, adapted from the Second Language Writing Anxiety Inventory (SLWAI) (Cheng, 2004b), was used to identify students' anxiety levels, while interviews provided in-depth insights into their experiences.

Data were analyzed using thematic analysis following (Braun & Clarke, 2020). To ensure trustworthiness, methodological triangulation and member checking were applied. The findings were interpreted using relevant theoretical frameworks, including writing anxiety and self-efficacy (Bandura, 1997).

4. Result

The findings of the study were used to analyze the results of the study. The findings are used to answer the research questions of this study (1) What are the writing anxiety levels of English Department students? (2) How do English Department Students' experience the use of ChatGPT in supporting their writing? And (3) What are students' perception the role of ChatGPT in reducing Writing anxiety?

4.1 Students' writing anxiety Levels

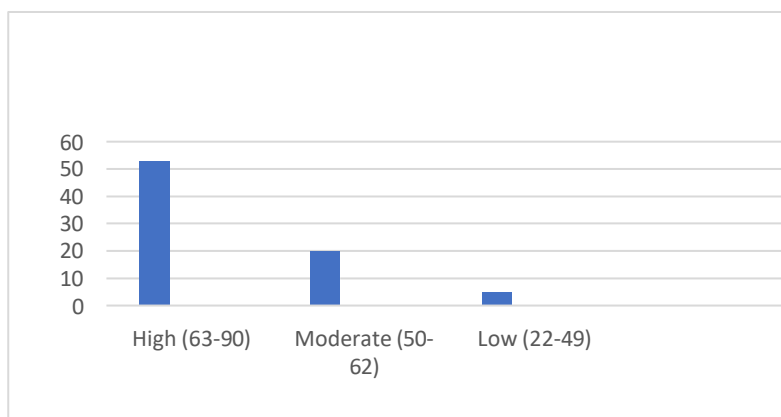


Figure 1. The levels of students' writing anxiety

The figure above shows that 69,2% of students found to experiences high levels of writing anxiety. The students' who experience moderate level of writing anxiety are 25,6% and 6,4% students who experience low level writing anxiety. Based on the result of research, high level anxiety becomes the dominant level and the most of students experience high level of writing anxiety. These findings suggest that writing in English remains a significant challenge for most students. High anxiety levels were associated with fear of making grammatical errors, limited vocabulary, low confidence, and difficulties in organizing ideas. Students with moderate anxiety were still able to complete tasks but required more effort and experienced hesitation.

In contrast, only a small proportion of students demonstrated confidence and emotional control in writing. Thus, it can be concluded that writing anxiety is a prevalent issue among EFL students, potentially affecting their academic writing performance and participation.

4.2 Students' Experiences Using ChatGPT in Supporting Writing

Interview findings reveal that ChatGPT plays a significant role as a supportive tool in students' writing processes. Two main subthemes were identified: mastery experience and social persuasion.

a. Mastery Experience

Participants described more specific ways in which ChatGPT assists them during the writing process. They explained that ChatGPT helped them generate ideas, organize sentences, improve grammar, and provide examples when they experienced difficulties in writing. Most participants admitted that they often used ChatGPT when they did not know how to start their writing or when they were unsure about vocabulary and sentence structure. This is demonstrated by the following excerpts:

"I always use every writing assignment because I need to brainstorming and improve my grammar". (P1)

Similarly, Participant 2 explained:

"Honestly, I use ChatGPT to help me think because the academic vocabulary provided in ChatGPT is more extensive than my knowledge of vocabulary." (P2)

Participant 3 also highlighted:

"ChatGPT helps me with grammar and vocabulary, and it also helps me structure my sentences to make them sound more academic and formal". (P3)

Furthermore participant 4 stated:

"Yes, I use ChatGPT to help me with some tasks and to help me understand some journals for use in my thesis". (P4)

These responses indicate that ChatGPT functions not only as a writing assistance tool but also as a learning support tool, particularly in helping students comprehend academic sources. In this context, ChatGPT provides support by simplifying, summarizing, or explaining difficult content, enabling students to grasp the main ideas more effectively.

In addition, 1 participant also reported that they used ChatGPT to help them specifically in drafting their thesis proposals. Most participants mentioned that they often used ChatGPT to think critically in order to produce good writing. As expressed by P2:

"It's very helpful. I'm still using ChatGPT and now I understand how to use it better. I want it to generate more critical sentences. There are many AI features in it. I

usually use that feature so that the results are more perfect in my thesis proposal”.

(P1)

Similar participant 3 stated:

I use it quite often, especially when working on thesis proposals. (P3)

These findings above 8th semesters, students reported that ChatGPT was very helpful in preparing their thesis proposals. ChatGPT was used for brainstorming ideas, composing sentences, improving grammar and vocabulary, and providing examples when they had difficulty writing. Students also used it to think critically and produce more academic writing. In general, ChatGPT improved the efficiency and quality of students' academic work.

b. Social Persuasion

In the context of writing, social persuasion plays a significant role in enhancing students' confidence through constructive feedback and guidance. In this study, ChatGPT emerges as a form of social persuasion, as it provides immediate responses, corrections, and suggestions that influence how students perceive and improve their writing abilities. Participants reported that they often use ChatGPT to receive feedback on their writing, especially when preparing thesis proposals. ChatGPT helps them identify errors in grammar, tense, and sentence structure, as well as improve their vocabulary so that their writing is more formal and meets academic standards. Students explained that they often adjust the feedback from ChatGPT to suit their own writing style. This is demonstrated by the following excerpts:

“Yes, it provides good feedback, especially for writing yesterday I wrote an article, so I put the article into ChatGPT and asked for feedback. The feedback was about whether it was suitable to be published in that journal. So, it provides very useful feedback for writing”. (P5)

“I usually write the text that needs to be corrected first, then upload it to ChatGPT. there I outline it, for example, for the nth paragraph, I ask for revisions, such as what's missing, or if the vocabulary is lacking, the grammar isn't right, the tense is wrong, I usually do it like that. so I ask for corrections on what's missing so that the academic writing is even better”. (P2)

“The feedback is great, because when I write sentences that are too simple or use language that is too colloquial, ChatGPT provides a more formal and academic version that is appropriate for the context of the task I am working on”. (P4)

Based on the participants' responses, ChatGPT plays an important role as a source of academic feedback in the writing process. Most participants used ChatGPT to review their writing and identify errors related to grammar, tense, vocabulary, and sentence structure. The feedback provided by ChatGPT helped them revise their writing and make it more formal and academically appropriate, particularly when preparing thesis proposals or other academic assignments.

4.3 The Role of ChatGPT in Reducing Writing Anxiety

The findings also highlight the role of ChatGPT in reducing writing anxiety. Four subthemes emerged: (1) Writing Anxiety Before Using ChatGPT, (2) Reduced Fear of Making Mistakes, (3) Increased Confidence, and (4) Influence on Motivation.

Before using ChatGPT, students reported experiencing anxiety due to fear of making errors and limited vocabulary. One participant expressed, *"I felt afraid that my writing had grammar mistakes"* (P1), while another stated, *"I felt anxious and lacked confidence because I was afraid of making mistakes"* (P3).

After using ChatGPT, most students reported a reduced fear of making mistakes. As one participant noted, *"when I use ChatGPT, I'm no longer afraid of making mistakes"* (P1). Similarly, another explained, *"I can check and correct my writing before submitting it, so I feel less afraid"* (P3).

This reduction in anxiety contributed to increased confidence. For example, one participant stated, *"it boosts my confidence because I know my writing has been corrected"* (P1). Another added, *"I feel more confident because I have support when I face difficulties"* (P3).

In terms of motivation, most participants reported that ChatGPT made writing easier and more manageable. As one participant explained, *"ChatGPT motivates me to complete writing tasks because it helps me"* (P1). However, one participant expressed a contrasting view, stating that *"my motivation decreased because ChatGPT already produces perfect writing"* (P5).

Overall, the findings from the questionnaire and interviews show consistent results. The questionnaire results indicate that the majority of students (69.2%) experienced a high level of writing anxiety. This finding is supported by the interview data, which reveal that many participants initially felt anxious, lacked confidence, and were afraid of making grammatical mistakes when writing in English. In addition, the interview findings show that the use of ChatGPT helped reduce this anxiety by providing assistance in grammar, vocabulary, and idea development. This indicates that although students initially experienced a high level of writing anxiety, the presence of ChatGPT played an important role in helping them manage and reduce their anxiety during the thesis writing process.

5. Discussion

This study aimed to explore students' writing anxiety levels, their experiences using ChatGPT in the writing process, and their perceptions of its role in reducing writing anxiety. The findings reveal that the majority of English Education students experienced high levels of writing anxiety (69.2%), confirming that academic writing in EFL contexts remains a challenging task. This is consistent with (Cheng, 2004b), who highlights that second language writing is often associated with fear and tension due to its linguistic and cognitive complexity. Students' anxiety in this study was mainly caused by limited vocabulary, fear of grammatical errors, and difficulties in organizing ideas, supporting previous findings that both linguistic and affective factors contribute to writing anxiety (Jafari & Rezaei, 2014)(Zhang, 2019).

The findings also demonstrate that ChatGPT plays a significant role as a scaffolding tool in supporting students' writing development. Its use for brainstorming, grammar improvement, and vocabulary enhancement indicates that students rely on ChatGPT to bridge the gap between their current language proficiency and academic writing demands. (Rasool et al., 2023), who argue that AI tools can improve writing quality and critical thinking. However, in this study, the use of ChatGPT appears to be driven more by necessity than preference, as students reported difficulties in initiating writing and using academic language, supporting (Rahma & Fithriani, 2024). Furthermore, the intensive use of ChatGPT among final-year students reflects increasing academic demands, particularly in thesis writing, where complex argumentation and adherence to academic conventions are required.

In addition, ChatGPT functions as an effective feedback provider, offering immediate and continuous responses that facilitate iterative writing. This supports (Song & Song, 2023), who found that AI-based feedback enhances writing performance. Importantly, students demonstrated critical engagement by selectively adopting feedback rather than accepting it uncritically, which aligns with (Chen, 2023) and (Salvagno et al., 2022). At the same time, students showed awareness of AI limitations, particularly regarding information reliability, indicating a developing level of digital literacy.

Regarding writing anxiety, the findings show that ChatGPT contributes to reducing students' fear of making mistakes by allowing them to check and revise their work before submission. This creates a sense of psychological safety and aligns with (Bandura's 1997) concept of self-efficacy, where confidence increases when individuals feel supported in task completion. Most participants reported increased confidence due to grammar correction and structured feedback. However, the study also identifies contrasting findings, where some students experienced decreased confidence due to comparisons with AI-generated outputs, leading to potential overreliance and reduced learner autonomy. This supports concerns raised by (Cotton et al., 2024) and (Zhai, 2023), who argue that excessive dependence on AI may hinder skill development and intrinsic motivation.

Overall, this study suggests that ChatGPT plays a multifaceted role as a writing assistant, feedback provider, and anxiety-reducing tool. However, its use also presents challenges related to dependency, motivation, and learner autonomy. Therefore, integrating AI literacy into academic writing instruction is essential to ensure that students use ChatGPT effectively, critically, and ethically.

6. Conclusion

This study identifies students' writing anxiety levels, explores students' experiences using ChatGPT in the writing process and its role in reducing writing anxiety among English Education students at Mulawarman University. The findings show that most students experience high levels of writing anxiety due to grammatical concerns, limited vocabulary, and difficulties in organizing ideas. ChatGPT serves as a helpful tool by supporting idea generation, improving language accuracy, and providing feedback, which enhances writing

quality and efficiency. It also reduces anxiety by offering immediate assistance, increasing students' confidence and willingness to write. Additionally, ChatGPT positively influences students' motivation, making writing tasks feel easier and less stressful. However, excessive reliance on ChatGPT may hinder independent writing development, indicating the need for balanced use.

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