

AI Literacy and Reliance: The Use of ChatGPT in Academic Writing Among Filipino Major Students

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ABSTRACT

Concerns about students' dependence and writing development have been raised by the growing integration of artificial intelligence tools like ChatGPT, which has changed academic writing practices in higher education. This study looked at how often first-year Filipino major students at Central Bicol State University of Agriculture (CBSUA) used ChatGPT, how dependent they were on it, and how it related to their academic writing performance. 42 first-year Bachelor of Secondary Education students majoring in Filipino were included in the study, which used a descriptive-correlational research design. A validated 30-item survey was used to collect the data, which were then analyzed using frequency, weighted mean, and Pearson Product-Moment Correlation Coefficient at a significance level of 0.05 using Google Forms. The findings showed that students regularly used ChatGPT for academic writing and a validated 30-item survey was used to collect the data, which were then analyzed using frequency, weighted mean, and Pearson Product-Moment Correlation Coefficient at a significance level of 0.05 using Google Forms. The findings showed that students were highly dependent on ChatGPT and regularly used it for academic writing. Additionally, results showed a strong perceived correlation between students' academic writing performance and their use of ChatGPT, especially with regard to organization, grammar, and content development. The study comes to the conclusion that although ChatGPT is a helpful learning tool, over-reliance on it may affect students' writing autonomy. This underscores the necessity of integrating AI tools in academic writing instruction in a guided and ethical manner.

Keywords: ChatGPT, Academic Writing, Writing Performance, Students' Dependence,

INTRODUCTION

The rise of artificial intelligence (AI) technologies such as ChatGPT has significantly reshaped academic writing practices in higher education. These tools are increasingly used by students to generate ideas, refine grammar, and organize written outputs. While they offer convenience and support, they also raise critical questions about students' reliance on such technologies and their potential effects on writing proficiency, authorship, and academic integrity.

ChatGPT, an AI-powered language model developed by OpenAI, has become particularly popular among Filipino students seeking to enhance their performance in essay writing, research papers, and other academic tasks. Its accessibility and versatility make it a valuable learning aid; however, its excessive use may inadvertently reduce students' ability to think critically and independently. As the use of AI becomes more widespread in education, understanding its influence on students' writing behaviors and learning outcomes has become an urgent concern. The Social Cognitive Theory is grounded on Albert Bandura's Social Cognitive Theory (SCT), which posits that learning occurs within a social context through the reciprocal interaction of personal factors, behavior, and environment. In this framework, students' AI literacy and reliance on ChatGPT in academic writing are shaped by their individual attributes, environmental influences, and behavioral engagement with AI tools. Meanwhile, the Self-Efficacy Theory (Bandura, 1997) provides a psychological explanation linking students' reliance on ChatGPT to their confidence and performance in academic writing. Learners with strong self-efficacy typically use ChatGPT as a supportive aid to refine and enhance their work,

while those with low self-efficacy may depend heavily on it due to limited confidence in their own writing abilities. Thus, self-efficacy influences not only the degree of reliance on AI tools but also students' writing performance and development as independent learners. The integration of ChatGPT use in writing can be explained through the Technology Acceptance Model (TAM) and Self-Efficacy Theory. The TAM suggests that individuals' acceptance and use of new technologies depend on perceived usefulness and ease of use, while Self-Efficacy Theory highlights the role of confidence in shaping how students engage with academic challenges. And Social Cognitive Theory provides a foundation for understanding the interconnected relationship among students' personal factors, environmental context, and behavioral reliance on AI in the academic setting. Together, these frameworks provide insight into why students may rely on AI tools to assist in their writing process and how such reliance might influence performance outcomes.

Although international research has widely explored AI-assisted writing (e.g., Dwivedi et al., 2023; Kasneci et al., 2023; Lund et al., 2023), few studies have examined its educational impact within Philippine universities. Espartinez (2025) conducted a narrative inquiry on ChatGPT use among students and teachers in Philippine higher education and found emerging ethical and equity concerns related to AI integration. Similarly, Fabro et al. (2024) investigated Filipino students' perceptions and extent of AI utilization in academic writing, revealing generally positive attitudes but limited awareness of its long-term implications. Despite these developments, there remains a lack of empirical evidence on how first-year Filipino students at the Central Bicol State University of Agriculture (CBSUA) rely on ChatGPT in their academic writing. Therefore, this study aims to (1) determine the frequency of ChatGPT use among first-year Filipino students of CBSUA, (2) assess the extent of their reliance on the tool, and (3) examine the relationship between their reliance on ChatGPT and their academic writing performance.

For clarity, ChatGPT (Chat Generative Pre-trained Transformer) is an AI-powered language model developed by OpenAI that produces human-like responses to written prompts, often used for academic and creative writing assistance.

MATERIALS AND METHOD

This study used descriptive-correlational approach to provide analysis on how students' reliance on ChatGPT relates to their academic writing performance. Descriptive-correlational research design was used to describe the reliance of Filipino students on ChatGPT and determine its significant relationship to their academic writing performance. This design is suitable for the study because it allows the researchers to collect descriptive data from the students' usage on ChatGPT while examining the relationship between their academic writing performance without manipulating any of the variables. The 42 first-year students enrolled in the Bachelor of Secondary Education major in Filipino in Central Bicol State University of Agriculture - Sipocot were selected as a whole population. The use of total population sampling ($n=42$) is appropriate for the research since the group is small and manageable, allowing the participation of all the members and ensuring complete and accurate data representation. The researchers used total population sampling to determine if first-year Filipino major students still rely on ChatGPT even when writing Filipino words context. Inclusion criteria required that participants must be: (1) officially enrolled in the said program during academic year 2025-2026, and (2) using ChatGPT for academic purposes. Students who had not used ChatGPT or not enrolled during the specific academic year were excluded from the study. To collect accurate and relevant data, the researchers developed a 30-item questionnaire designed to measure the extent of reliance on ChatGPT and their academic writing performance. The questionnaire consists of three parts: Part I measures the frequency and purpose of using ChatGPT of the students in frequency scale. Part II is the extent of their reliance on ChatGPT when writing academic context, assessing how they use it for various writing tasks such as generating ideas, checking grammar, paraphrasing and summarizing information. Each item was rated using a 4-points Likert scale from 1 ("Never") to 4 ("Always"). For part III on evaluating their academic writing performance based on their own organization, grammar, and content development used 4-points Likert scale from 1 ("Strongly Agree") to 4 ("Strongly Disagree"). To ensure content validity, the questionnaire was reviewed and evaluated by the panel of three experts—two in field of education and one in research methodology. Their feedback and recommendations were taken and employed to ensure that the items were clear, relevant and aligned to the objectives of the study. A pilot testing were conducted among 10 first-year students to ensure the reliability and validity of the questionnaire, prior to its actual

administration. The internal consistency of the instrument was assessed using Cronbach's alpha, and necessary revisions were made based on the results. After the instrument's validation, the researchers sought approval from the Dean of the College of Education before administering the questionnaire. Data were collected through Google Forms, ensuring accessibility, anonymity, and confidentiality of responses. Collected data were analyzed using frequency and percentage to determine ChatGPT usage, weighted mean was used to measure the level of reliance, and the Pearson Product-Moment Correlation Coefficient (Pearson's r) to examine the significant relationship between ChatGPT reliance and academic writing performance. All statistical tests were computed at a 0.05 level of significance ($p < 0.05$). The weighted mean values were interpreted using the following 4-point scale: 3.26–4.00 = Very High Reliance, 2.51–3.25 = High Reliance, 1.76–2.50 = Low Reliance, and 1.00–1.75 = Very Low Reliance.

RESULTS

This section outlines the study's findings conducted among 42 College of Education Major in Filipino Students in CBSUA-Sipocot Campus for the academic year 2025-2026, focusing on their frequency use of ChatGPT, Extent of Reliance on ChatGPT in Academic Writing and Relationship between ChatGPT and Academic Writing.

Table 1. Summary of mean, standard deviation, interpretation and rank of indicators for frequency of CHATGPT use

Indicators	Mean ($\bar{x}$)	Standard Deviation (σ)	Rank	Interpretation
I use ChatGPT in checking my academic works, particularly grammar, conventions, structure, and asking for revisions.	3.00	0.88	3	Often
I use ChatGPT to help me generate ideas or topics for my academic writing tasks.	3.05	0.98	1	Always
I use ChatGPT to summarize long articles, readings, or lessons for easier understanding.	3.02	0.86	2	Always
I use ChatGPT to answer academic activities, quizzes, or assignments	3.05	0.85	1	Always
I use ChatGPT to translate or explain difficult English or Filipino words and phrases.	3.02	0.86	2	Always
I use ChatGPT to create outlines or drafts before writing my essays or research papers.	3.00	0.88	3	Often
I use ChatGPT to verify the accuracy of information or facts used in my schoolworks.	2.67	0.83	6	Often
I use ChatGPT to improve the vocabulary and sentence construction of my written outputs.	2.50	0.77	7	Often
I use ChatGPT as a study buddy when reviewing for quizzes or exams.	2.76	0.86	4	Often
I use ChatGPT to ask for explanations or clarifications on topics I find difficult to understand.	2.71	0.91	5	Often
OVERALL MEAN	2.89	0.88		Often

Mean Score Range Verbal Interpretation

3.01 – 4.00	Always
2.01 – 3.00	Often
1.01 – 2.00	Sometimes
0.99 – 1.00	Never

This table presents the students' frequency of using ChatGPT with an overall mean of 2.89 (SD = 0.88) interpreted as Often, indicating that students use ChatGPT as a guide in writing academic purposes. The highest-ranked indicator were the use of ChatGPT in generating ideas or topics for academic writing tasks (M = 3.05) and answering academic activities, quizzes, or assignments (M = 3.05), both interpreted as Always, showing that the students' use ChatGPT in their academic writing. Students also use ChatGPT in translating words and phrases (M = 3.02) and summarization of long articles and lesson (M = 3.02), also interpreted as Always. Other indicators such as checking grammar, creating outlines, study buddy, asking for explanation, and accuracy/facts verification were all rated as Often, indicating a comparative underutilization of the tool for critical verification. Although using ChatGPT provides vocabulary improvement ranked lowest (M = 2.50) it was still interpreted as Often, suggesting that students still use ChatGPT to improve their vocabulary and sentence construction. The results implies that that while the students have integrated ChatGPT into their academic writing tasks, they prioritize its use for convenience rather than foundational skill-building. It is correlated to the study of Perpetua A. et al. (2025) which emphasizes that it is important to continue implementing project-based learning strategies while also providing opportunities for students to reflect on their learning experiences. Indicating how the use of ChatGPT can be convenient in writing activities while also reflecting on their own writing skills.

Table 2. Summary of mean, standard deviation, interpretation and rank of indicators for extent of reliance

Indicator	Mean ($\bar{x}$)	Standard Deviation (σ)	Rank	Interpretation
I rely on ChatGPT to generate detailed outlines, topic sentences, and supporting details for essays.	2.52	0.80	5	Often
I often let ChatGPT produce sample paragraphs or drafts that I later edit for my final submission.	2.57	0.94	3	Often
I use ChatGPT to rephrase my sentences for better clarity, coherence, and grammar accuracy.	2.55	0.77	4	Often
I depend on ChatGPT to check and correct spelling, punctuation, and sentence structure.	2.86	0.75	1	Often
I rely on ChatGPT to provide better vocabulary or formal phrasing suitable for academic writing.	2.62	0.79	2	Often
I use ChatGPT to explain writing concepts I don't understand, such as thesis statements or translation.	2.50	0.77	6	Often
I frequency use ChatGPT's suggestions to organize my paragraphs locally and effectively.	2.45	0.81	7	Often
I depend in ChatGPT to summarize lengthy readings or reword complex information for reports.	2.55	0.77	4	Often

I consult ChatGPT more often than my classmates or teachers when I need writing guidance.	2.55	0.77	4	Often
I find it difficult to complete or start a writing task without first consulting ChatGPT.	2.52	0.77	5	Often
OVERALL MEAN	2.56	0.80		Often

Mean Score Range Verbal Interpretation

3.01 – 4.00	Always
2.01 – 3.00	Often
1.01 – 2.00	Sometimes
0.99 – 1.00	Never

This table presents the extent of reliance of students on ChatGPT in writing their academic writing tasks. The overall mean of 2.56 (SD = 0.80) indicates that students often rely on ChatGPT when writing academic tasks. All indicators constantly yield an Often interpretation. Students' most frequent use is for checking and correcting sentence structure (M = 2.86), highlighting the primary function of ChatGPT as an editing tool. The dependence extends to the use for vocabulary improvement and formal phrasing (M = 2.62). However, other indicators such as letting ChatGPT producing sample paragraphs, rephrasing sentences, depending to summarize lengthy readings, consulting more than classmates or teachers, finding difficulty to start writing without ChatGPT, relying to generate detailed outlines, and explaining difficult concepts are concerning implications. It suggests that ChatGPT is not merely an aid but is becoming a primary, non-human academic partner. The least reported reliance is the frequent use of ChatGPT's suggestions in organizing paragraphs accordingly (M = 2.45). The findings shows that there is an increased risk or academic dependence, where the student's independent ability to perform the writing tasks is being supplanted by ChatGPT's assistance.

Table 3. Summary of mean, standard deviation, interpretation and rank of indicators for perceived relationship (likely impact or belief) between using ChatGPT and academic writing

Indicators	Mean ($\bar{x}$)	Standard Deviation (σ)	Rank	Interpretation
Using ChatGPT significantly improves the content, clarity, and organization of my written outputs.	3.02	0.86	1	Strongly Agree
My writing grades have improved after I started using ChatGPT for drafting and revising papers.	2.95	0.90	3	Agree
ChatGPT helps me finish academic writing tasks faster by providing ideas and structured guidance.	2.98	0.91	2	Agree
Using ChatGPT enhances my understanding of essay structure, including introductions and conclusions.	2.90	0.86	4	Agree
Using ChatGPT improved my vocabulary, sentence variety, and phrasing in formal writing tasks.	2.95	0.90	3	Agree
I feel more confident and motivated to write when I use ChatGPT as an assistant.	2.98	0.91	2	Agree
I tend to rely heavily on ChatGPT to meet higher academic writing standards or achieve better scores.	2.76	0.86	7	Agree

Because of frequent ChatGPT use, I sometimes struggle to write independently without it's assistance.	2.69	0.80	8	Agree
ChatGPT encourages me to revise my writing and learn from its feedback to improve my skills.	2.81	0.84	6	Agree
My overall writing performance and academic results are strongly influenced by how often I use ChatGPT.	2.83	0.84	5	Agree
OVERALL MEAN	2.89	0.88		Agree

Mean Score Range Verbal Interpretation

3.01 – 4.00	Strongly Agree
2.01 – 3.00	Agree
1.01 – 2.00	Disagree
0.99 – 1.00	Strongly Disagree

This table presents the perceived relationship and impact of ChatGPT in the student's academic writing, with an overall mean of 2.89 (SD = 0.88), interpreted as Agree, revealing a strong belief of ChatGPT's influence on their academic writing performance. Students' highest agreement is with the indicator states that using ChatGPT improve the content, clarity, and organization of their written outputs (M = 3.02). This is followed by the second ranked indicators; ChatGPT helps them finish academic writing tasks faster (M = 2.98) and higher confidence and motivation to write (M = 2.98). The indicators which states that students writings grades have improved (M = 2.95) along with their vocabulary, sentence variety and phrasing in formal written tasks (M = 2.95) also believe that perceived benefits. However, other indicators such as enhancing understanding of essay structure, overall writing performance were influenced by using ChatGPT, encourage the revision of writing, and reliance to meet higher academic writing standards, outweighed the positive sentiment regarding performance improvement and efficiency. The least agreement is with the struggle to write independently without the assistance of ChatGPT (M = 2.69). The findings suggest that students view ChatGPT as an effective and essential assistant that enhances their written outputs and meet academic writing standards.

DISCUSSION

Mean of 2.89 (SD = 0.88) for the frequency of ChatGPT use indicates a high level of engagement. This suggests that while ChatGPT is not utilized on a constant or daily basis by all students, it has become a widely adopted tool in academic writing. Students commonly use ChatGPT for idea generation, grammatical refinement, summarization, and guidance in paragraph organization. These practices reflect their recognition of ChatGPT as a supportive academic tool that facilitates the writing process and enhances output quality. Furthermore, the extent of reliance on ChatGPT in academic writing obtained an overall mean of 2.56 (SD = 0.80), also interpreted as high reliance. This indicates that although students depend on ChatGPT for writing assistance, they retain authorship and critical control over their work. Students demonstrate responsible usage by verifying AI-generated content, revising outputs for contextual accuracy, and ensuring alignment with their personal insights. Such practices reflect an emerging level of digital responsibility and ethical awareness in AI use.

In terms of academic writing performance, the results yielded an overall mean of 2.89 (SD = 0.88), interpreted as high. This finding suggests that students perceive ChatGPT as beneficial in improving coherence, grammatical accuracy, and vocabulary use in academic writing.

The study “AI Literacy and Reliance: The Use of ChatGPT in Academic Writing among Filipino Major Students” can be meaningfully related to the internship study by highlighting their shared focus on technology use, competency development, and preparedness of future educators. Both studies emphasize the growing role of

technology in academic and professional practice. While the internship study explores pre-service teachers' competencies in content delivery, pedagogy, and technology integration, the AI literacy study provides insight into how Filipino major students engage with ChatGPT as a digital tool for academic writing. The use of AI reflects students' emerging technological skills, similar to how interns value technology for teaching, yet both studies identify limitations caused by insufficient training and guidance. It is also correlated to the study of Perpetua, A. et al. (2015), which highlighted the importance of technological access, study habits, and learner engagement in blended learning environments. Its findings support the idea that students' effective use of digital tools such as ChatGPT depends on guided learning, self-regulation, and responsible technology use. This indicates that AI tools can enhance academic writing when integrated as supportive learning resources rather than substitutes for independent thinking.

However, the results also imply that AI support alone does not ensure high-quality output unless complemented by students' analytical thinking and creativity. Thus, ChatGPT functions as a tool that enhances, rather than

replaces, human academic effort. The correlation analysis revealed a strong and positive relationship among the frequency of ChatGPT use, extent of reliance, and academic writing performance, with Cronbach's Alpha ranging from 0.824 to 0.875, all good at $p < 0.05$. This indicates that increased and responsible use of ChatGPT is associated with improved academic writing performance. These findings emphasize the importance of AI literacy as a critical competency in contemporary education, enabling students to maximize the benefits of AI tools while maintaining academic integrity.

CONCLUSION AND RECOMMENDATION

Conclusion

This study concludes the reliance of first year Filipino major of Central Bicol State University of Agriculture – Sipocot on ChatGPT in academic writing and its relationship to their perceived writing performance. The findings reveal that the students often used ChatGPT that commonly utilized as the supplementary aid for academic writings rather than a substitute for independent writing. Students mostly engaged ChatGPT for assistance in their idea generation, grammar checking and indicating a practical and task-oriented use of AI in the writing processes. Furthermore, the results showed a moderate perceived relationship between ChatGPT use and academic writing performance. This implies that students recognize the potential of ChatGPT to support on academic clarity, coherence and confidence in writing. They didn't consider it as the sole determinant for writing quality. These findings aligned with the principles of Social Cognitive Theory, Self-Efficacy Theory and the Technology Acceptance Model, emphasizing that students AI use influence by their confidence, perceived usefulness of the technology and their learning environment.

Recommendation

Based on the findings of the study, it is recommended that Students are encouraged to continue exploring ChatGPT as an academic aid while maintaining critical engagement by carefully evaluating and verifying AI-generated content. Educators should integrate AI literacy into their lessons to guide students in the ethical and effective use of ChatGPT in academic writing. In addition, schools and universities are urged to develop clear policies and guidelines that define acceptable AI usage in academic work to uphold academic integrity. Curriculum developers may also consider embedding AI literacy within language and writing curricula to better prepare students for the evolving academic landscape. Finally, future researchers may further examine the impact of ChatGPT by comparing the writing performance of AI-reliant and non-AI-reliant students or by investigating the long-term effects of AI-assisted writing.

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