



## Navigating AI in Academia: Undergraduate Experiences with ChatGPT and the Redefinition of Academic Writing

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### Abstract

**Background and Aim:** The integration of generative AI tools like ChatGPT into academic writing has generated both enthusiasm and ethical concern in higher education. While ChatGPT supports idea development, content organization, and revision, its use also raises issues related to plagiarism, authorship, and cognitive overreliance. Although prior research has examined the technical features and ethical risks of generative AI, few studies have explored students' lived experiences. This study investigates how undergraduate students navigate the benefits and challenges of using ChatGPT in academic writing.

**Materials and Methods:** A qualitative, theory-driven approach was adopted, drawing on the Technology Acceptance Model (TAM), academic integrity principles, and cognitive offloading theory. Fourteen undergraduate students engaged in thesis writing at a public state college in Region IX, Philippines, participated in semi-structured interviews and focus group discussions. Data were analyzed using Braun and Clarke's thematic analysis. Trustworthiness was ensured through member checking, audit trails, and peer debriefing.

**Results:** Thematic analysis revealed six key themes: (1) *Academic Empowerment*, highlighting ChatGPT's role in enhancing productivity and confidence; (2) *Ease and Accessibility*, due to its intuitive interface and language flexibility; (3) *Ethical Boundary Negotiation*, with students adopting self-regulation strategies to avoid plagiarism; (4) *Cognitive Trade-offs*, reflecting concerns about reduced critical thinking and overdependence; (5) *Peer and Policy Influence*, shaped by unclear institutional guidelines and social norms; and (6) *Technical Limitations*, including vague responses, inconsistencies, and restrictions in the free version.

**Conclusion:** Students perceive ChatGPT as a valuable tool in academic writing but express concern about ethical risks, cognitive dependence, and institutional ambiguity. The findings highlight the need for clear institutional guidelines, integration of AI literacy into the curriculum, and promotion of reflective, responsible use of generative AI in higher education.

**Keywords:** ChatGPT, Academic writing, Undergraduate students, Academic integrity, AI literacy, Cognitive offloading, Thematic analysis

### Introduction

The integration of generative artificial intelligence (AI) tools like ChatGPT in academic writing has attracted significant scholarly and educational attention. ChatGPT, developed to assist with natural language generation, is increasingly employed by students to facilitate various stages of writing, including idea generation, topic exploration, proofreading, and editing (Liu, 2023; Mahapatra, 2024; Al-Sofi, 2024). Previous studies indicate that ChatGPT holds promise as a supportive tool that can enhance student engagement and improve writing proficiency. Roy and Swargiary (2024) found that ChatGPT's integration into writing tasks helped students refine their skills, while Teng (2024) emphasized its role in increasing metacognitive awareness among EFL learners by providing timely feedback. These findings resonate with pedagogical perspectives such as constructivist learning theory, which emphasizes learner engagement, feedback, and skill development in authentic contexts.

Despite such promising outcomes, concerns about academic integrity remain prevalent. Research by Al-Sofi (2024) and Alshalan and Alyousef (2024) revealed student apprehensions related to plagiarism, ethical misuse, and potential over-reliance on AI-generated content. Moreover, Yan (2023) highlighted that while ChatGPT offers affordances for second-language learners, it may also introduce challenges affecting authenticity and learning outcomes. These ethical challenges not only threaten academic standards but also demand institutional responses to redefine authorship and originality in the age of AI. Yet, much of this research tends to focus on either the technical efficacy of ChatGPT or ethical considerations in isolation, leaving the students' holistic experiential perspectives



underexplored. Without this understanding, it is difficult to develop balanced educational policies or teaching strategies that accommodate the realities of AI integration in learning environments.

To address this gap, the present study employs a thematic analysis to explore undergraduate students' lived experiences with ChatGPT as a writing companion. This approach aims to capture nuanced perceptions concerning both the advantages and ethical challenges encountered during academic writing. By identifying key themes from student narratives, this research contributes to a deeper understanding of how ChatGPT influences writing practices, engagement, and ethical decision-making in higher education contexts. This study is among the first to examine ChatGPT use through an integrated theoretical lens—combining TAM, academic integrity, and cognitive offloading—in the context of thesis-writing students from the Philippine higher education system. Insights from this study may inform the design of AI-integrated writing instruction, the development of AI literacy programs, and the refinement of academic integrity policies in digitally mediated learning environments.

## Objectives

This study aims to explore and interpret the lived experiences and perceptions of undergraduate students regarding their use of ChatGPT in academic writing. Specifically, it investigates:

1. How students perceive ChatGPT's usefulness and ease of use (TAM).
2. What ethical concerns—such as plagiarism and authorship—they encounter (Academic Integrity).
3. How ChatGPT affects cognitive processes like ideation and critical thinking (Cognitive Offloading).
4. How peer norms and institutional policies shape AI adoption (UTAUT2/Social Influence).
5. What technical and functional challenges students face, especially with free versions of ChatGPT.

## Literature review

### Artificial Intelligence in Academic Writing

In recent years, artificial intelligence (AI) has become increasingly influential in education, particularly in academic writing. Among various AI tools, ChatGPT has gained notable attention for its conversational interface and its ability to generate coherent, well-structured text that can assist students in various writing tasks such as idea generation, drafting, and editing (Liu, 2023). The use of ChatGPT marks a new phase in the ongoing evolution of educational technology, building on earlier tools such as grammar checkers and plagiarism detectors but offering far more sophisticated generative capabilities. Unlike earlier technological interventions, ChatGPT blurs the line between assistance and authorship, prompting educators to re-examine core academic values.

Research has highlighted several benefits of using ChatGPT in writing, including enhancing student engagement, improving writing skills, and providing timely feedback (Roy & Swargiary, 2024; Teng, 2024). These benefits align with constructivist learning theories, which emphasize the importance of learner autonomy, scaffolding, and meaningful interaction in developing knowledge. AI tools like ChatGPT may serve as digital scaffolds that support novice writers, facilitate iterative drafting, and reduce writing anxiety. However, increasing reliance on AI also raises ethical concerns related to plagiarism, authorship, and academic integrity (Al-Sofi, 2024; Alshalan & Alyousef, 2024). These concerns question the authenticity of student work and challenge traditional notions of originality.

Furthermore, the integration of AI in academic writing has implications for the development of critical thinking and metacognitive skills (Pabubung, 2021). A growing debate surrounds how to balance the efficiency of AI-assisted writing with the cultivation of independent cognitive effort. To address these challenges, researchers have called for ethical guidelines, AI literacy training, and transparent AI use policies (Xiong, 2023). This signals a shift from merely regulating technology use to embedding it within pedagogical design, calling for deeper collaboration between educators, administrators, and students.



## Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), proposed by Davis (1989), is widely used to understand how individuals adopt new technologies. It emphasizes two primary constructs—Perceived Usefulness (PU) and Perceived Ease of Use (PEOU)—as predictors of user acceptance (Venkatesh, 2000; Yilmaz et al., 2023). In academic contexts, students are more likely to adopt tools like ChatGPT when they perceive them as enhancing performance and requiring minimal effort.

Recent studies confirm TAM's relevance to ChatGPT use. Liling and Aklani (2023) found that students' perceptions of usefulness and ease of use significantly influenced their willingness to adopt the tool. Abdaljaleel et al. (2023) developed the "TAME-ChatGPT" survey instrument, integrating TAM to assess student attitudes. Furthermore, Li et al. (2024) expanded TAM by incorporating Innovation Diffusion Theory (IDT) constructs—such as compatibility and complexity—highlighting broader innovation attributes in adoption patterns.

Some studies also explore individual differences, such as personality traits, that influence ChatGPT adoption (Du et al., 2024). However, TAM has limitations. It primarily focuses on functional and behavioral aspects of technology use and may underrepresent ethical, cognitive, and social dimensions. As such, this study integrates TAM with theories of academic integrity and cognitive offloading to capture a fuller picture of AI adoption in academic writing.

## Academic Integrity and AI

The rise of generative AI tools like ChatGPT has ignited critical discourse on academic integrity in higher education. By producing entire essays or assignments with minimal original input, these tools raise critical concerns about authorship, plagiarism, and the authenticity of student work (Yeo, 2023; Bozkurt, 2024). Recent studies show that AI-generated content often bypasses traditional plagiarism detection systems, complicating efforts to ensure originality in academic submissions (Saqib & Zia, 2024; Perkins, 2023).

In response to these challenges, institutions have adopted varied strategies. Some have imposed outright bans on the use of generative AI for coursework, while others advocate for more integrative approaches that emphasize responsible use through transparency and proper attribution (Tam et al., 2023; Bozkurt, 2024). This divergence reflects the broader tension between innovation and academic accountability, underscoring the need for updated institutional policies.

A growing body of literature highlights the importance of institutional culture, clear guidelines, and proactive ethical education in promoting academic integrity amid AI adoption (Lancaster, 2021; Agheorghiesei & Bercu, 2022). However, many colleges and universities remain in the early stages of policy development, leaving students to navigate an ambiguous ethical terrain with little formal guidance. This uncertainty increases the likelihood of academic misconduct, whether deliberate or unintentional.

Despite these risks, generative AI tools like ChatGPT also present opportunities to enhance academic development when used ethically. Recent studies argue that AI can support key writing processes such as idea generation, content refinement, and language improvement—functions that align with principles of effective writing pedagogy (Rojas, 2024; Roy & Swargiary, 2024). The challenge, therefore, lies not in resisting AI's presence but in fostering a culture of responsible integration that upholds the core values of academic integrity. Ultimately, ensuring academic integrity in the age of AI requires not only policy enforcement but also pedagogical innovation and ethical awareness.

## Cognitive Offloading and Learning

Cognitive offloading refers to the process of delegating mental tasks to external aids, such as digital tools or written notes, to reduce cognitive load and free up mental resources (Risko & Gilbert, 2016). In educational contexts, this includes the use of AI tools like ChatGPT to manage lower-order writing tasks—such as grammar correction, content organization, and drafting—thereby allowing students to concentrate on higher-order cognitive activities like critical thinking and synthesis.

Recent research suggests that generative AI-assisted cognitive offloading can both support and challenge learning outcomes. On the supportive side, structured integration of AI into academic writing has been found to enhance students' analytical thinking and critical engagement, particularly when guided by reflective instructional design (Hong et al., 2025). AI tools have also been shown to help

students overcome writer's block, structure their ideas, and organize complex academic content (Grinschgl et al., 2021).

However, concerns persist regarding the long-term cognitive implications of frequent AI use. Excessive reliance on generative AI may weaken higher-order executive functions, diminish deep cognitive processing, and foster dependency on external guidance (León-Domínguez, 2024; Gerlich, 2025). Moreover, offloading may lead to reduced retention and superficial understanding, as learners may recall only the general idea or location of information rather than its full content (Skulmowski, 2023; Grinschgl & Neubauer, 2022). Skulmowski (2024) also highlights psychological effects such as the "placebo effect," in which users overestimate their abilities due to AI support, and the "ghostwriter effect," where users fail to recognize the extent of AI's contribution.

These findings emphasize the importance of metacognitive regulation. Learners must remain mindful of when and why they offload tasks to AI, ensuring that such delegation enhances rather than replaces genuine intellectual engagement. As such, educators are encouraged to foster AI literacy, promote transparency in AI use, and design learning activities that require active reflection, critical evaluation, and intentional human-AI collaboration.

### Social and Institutional Influences

Technology use is not only shaped by individual attitudes but also by social and institutional environments. Ajzen's (1991) Theory of Planned Behavior emphasizes subjective norms and perceived behavioral control, which explain how peer influence and policy clarity shape behavioral intentions. Studies have shown that students often turn to peers for guidance in the absence of institutional clarity (Xiao et al., 2023; Črček & Patekar, 2023). Faculty behavior and administrative messaging significantly influence how students perceive the legitimacy of AI use (Cotton et al., 2023; Adams et al., 2023). Environments with vague or punitive messaging may encourage covert or unethical use, whereas proactive and inclusive policies foster responsible integration.

Furthermore, academic culture plays a key role in shaping student identities. As Cotton et al. (2023) and Ngo (2023) suggest, students are more likely to act ethically when they perceive AI use as aligned with institutional norms and academic identity. Hence, institutional readiness—reflected in policy, training, and leadership—will determine whether AI becomes a pedagogical ally or a source of ethical tension.

### Technical Limitations of AI Tools

Despite its promise, ChatGPT presents functional limitations that can compromise academic rigor. Students often encounter vague or generic responses, hallucinated references, inconsistent answers, and domain limitations—especially in the free version (Khatri & Karki, 2023; Wolf et al., 2023).

These limitations necessitate strong digital literacy and critical evaluation skills. Sarfo (2023) and Balcioglu et al. (2022) emphasize that students must be trained to critically assess and revise AI outputs rather than rely on them uncritically. Human oversight, transparency, and hybrid workflows—where AI supports but does not replace student input—are essential for maintaining academic standards.

### Conceptual Framework

This study is grounded in a multi-theory framework that integrates the Technology Acceptance Model (TAM), academic integrity principles, and cognitive offloading theory to examine undergraduate students' experiences with ChatGPT in academic writing. Together, these frameworks offer a comprehensive lens for understanding the perceived usefulness, ethical tensions, and cognitive implications of using generative AI tools in academic contexts.

TAM, proposed by Davis (1989), posits that users' acceptance of technology is primarily influenced by two core constructs: perceived usefulness and perceived ease of use. In this study, these constructs illuminate how students adopt ChatGPT based on its ability to enhance writing productivity, structure ideas, and improve the quality of academic output. Its intuitive interface, accessibility, and language flexibility—often navigated through peer sharing or self-exploration—further reinforce its ease of use. These attributes align with constructivist pedagogy, where learner autonomy and tool-mediated scaffolding are essential to skill development.

However, acceptance does not guarantee ethical alignment. The integration of academic integrity principles serves to contextualize how students navigate concerns about authorship, plagiarism, and the concealment of AI use. Drawing from Bertram Gallant's (2008) framework on academic honesty, this study examines how students respond to ethical ambiguity—often created by unclear institutional policies—by modifying AI outputs, paraphrasing, or concealing their usage altogether. These behaviors highlight a critical gap between student practice and institutional guidance, reinforcing the need for clear, inclusive, and dialogic policies on AI use.

Cognitive offloading theory further expands the framework by addressing how students use ChatGPT to reduce mental effort during writing. This includes overcoming writer's block, structuring complex arguments, and clarifying unfamiliar content. While many students see this as helpful scaffolding, others recognize potential trade-offs: diminished critical thinking, passive engagement, and reduced motivation to generate original ideas. This cognitive tension reveals students' metacognitive awareness and their efforts to balance efficiency with learning depth. The theory thus helps explain both the perceived benefits and the risks associated with AI-mediated writing practices.

By integrating these three perspectives, the study captures a nuanced understanding of students' experiences with ChatGPT, not merely as tool users but as learners negotiating utility, ethics, and cognition. The intersection of perceived usefulness (TAM), ethical self-regulation (academic integrity), and cognitive delegation (offloading theory) illustrates the layered complexity of AI adoption in academic writing. This integrated framework enables a richer interpretation of student behavior and informs institutional strategies for fostering reflective and responsible AI use. The dynamic interplay of these constructs is visually summarized in Figure 1.

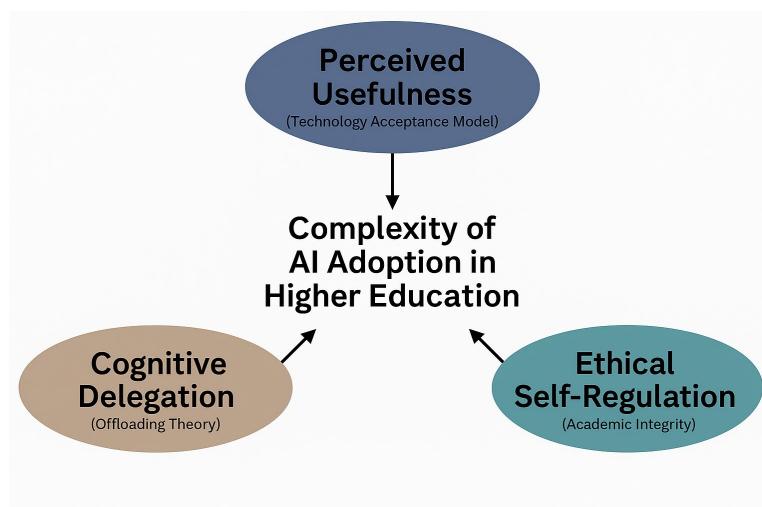


Figure 1: Interplay of Theoretical Constructs Underpinning AI Adoption in Academic Writing. This conceptual model illustrates how perceived usefulness (Technology Acceptance Model), ethical self-regulation (Academic Integrity), and cognitive delegation (Cognitive Offloading Theory) converge to shape undergraduate students' adoption and responsible use of ChatGPT in academic contexts.



## Methodology

### Research Design

This study employed a qualitative research design using thematic analysis to explore undergraduate students' experiences with ChatGPT in academic writing. A theory-driven approach framed by the Technology Acceptance Model (TAM), academic integrity principles, and cognitive offloading theory guided the formulation of the research questions, the development of the interview guide, and the coding framework. Specifically, constructs such as perceived usefulness and ease of use (TAM), ethical boundary awareness (academic integrity), and task delegation strategies (cognitive offloading) were used to operationalize areas of inquiry and interpretation. This ensured that the exploration of student experiences was not only descriptive but also analytically aligned with key theoretical domains.

### Research Environment

The study was conducted at a public higher education institution located in Region IX, Zamboanga Peninsula, Philippines. The institution offers diverse academic programs and caters to students from both rural and urban areas, providing a rich and varied context for exploring experiences with AI-supported writing tools. The academic environment of the institution reflects a transitional phase in digital adoption, where institutional policies on generative AI tools are either emerging or absent, creating a valuable setting for studying student-led adoption patterns and ethical navigation.

### Research Participants

Fourteen (14) undergraduate students engaged in thesis writing during the academic year 2024–2025 were purposively selected from various academic programs. Focusing on thesis-writing students allowed the study to explore ChatGPT usage in high-stakes, complex academic writing tasks where cognitive demands, ethical concerns, and performance pressures converge. Participants were selected based on their actual use of ChatGPT for academic writing tasks. Data saturation was achieved at the 14th participant, as no new themes or variations were emerging in the data.

### Research Instrument

A semi-structured interview guide was developed to gather in-depth insights into participants' experiences, usage patterns, perceived benefits and drawbacks, ethical considerations, and institutional influences. The guide was informed by the study's theoretical framework:

TAM informed questions related to the tool's usefulness and ease of use (e.g., "How did ChatGPT affect your writing productivity or workflow?").

Academic Integrity principles guided questions on ethical tensions (e.g., "What do you think is acceptable or unacceptable when using ChatGPT for writing?").

Cognitive Offloading Theory informed questions about thinking processes (e.g., "Do you feel ChatGPT helped or hindered your ability to think critically about your topic?"). The same guide was used for both one-on-one interviews and focus group discussions, allowing for consistency while enabling contextual elaboration.

### Data Gathering Procedure

Data collection involved a combination of face-to-face focus group discussions and in-depth individual interviews. All sessions were audio-recorded with informed consent and transcribed verbatim. Interviews were conducted in a conversational tone to encourage rich, reflective responses. Each session lasted approximately 45–60 minutes. Field notes were taken during and after each session. Ethical protocols—including voluntary participation, anonymity, and secure data handling—were strictly followed throughout the process.

### Data Analysis

Data were analyzed using Braun and Clarke's (2006) six-phase thematic analysis: (1) familiarization with data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. Coding was both inductive and theory-driven, informed by constructs from TAM, academic integrity, and cognitive offloading theory. Coding consistency was enhanced through peer debriefing and codebook refinement. Themes were further validated by checking alignment with interview excerpts and theoretical categories.



## Trustworthiness

To ensure the trustworthiness of the study, multiple strategies were employed in alignment with Lincoln and Guba's (1985) criteria. Credibility was established through prolonged engagement with participants, the use of follow-up probing questions during interviews, and member checking, wherein participants were invited to review and validate the researchers' summary interpretations of their responses. Transferability was enhanced by providing thick descriptions of participant experiences, contextual details about the research setting, and direct quotations, allowing readers to assess the applicability of the findings in comparable contexts. Dependability was ensured by maintaining a transparent audit trail that documented all phases of data collection, coding processes, and theme development. Peer debriefing and collaborative discussions with a co-researcher further supported the consistency of the analysis. Lastly, confirmability was addressed through reflexive journaling, in which the researchers recorded personal reflections and analytic decisions after each interview and during thematic refinement, helping to mitigate bias and maintain analytical neutrality throughout the research process.

## Ethical Considerations

The study received ethical clearance from the institutional research ethics board before data collection. All participants were informed of the study's purpose, the voluntary nature of their involvement, and their right to withdraw at any time without consequence. Written informed consent was obtained. Data confidentiality was ensured through anonymized transcripts using pseudonyms and secure storage of files. All procedures complied with institutional guidelines for ethical research involving human participants.

## Results

The thematic analysis revealed six interrelated themes that reflect undergraduate students' engagement with ChatGPT in academic writing. These themes collectively illustrate how students experience the benefits, ethical tensions, and limitations of using generative AI tools, often navigating a complex interplay between support, dependency, and institutional ambiguity.

### Academic Empowerment through AI

Participants reported that ChatGPT enhanced their productivity, improved the clarity and quality of their writing, and boosted their confidence, particularly in challenging phases of the thesis process. The tool was perceived as a nonjudgmental, always-available source of guidance—helpful for generating ideas, revising drafts, and interpreting quantitative results.

“ChatGPT helped improve our grammar and choice of words, especially for our thesis.”

—Participant 2

“It gave me confidence to complete tasks independently, even when groupmates were unavailable.” — Participant 11

This theme aligns with the Perceived Usefulness construct of the Technology Acceptance Model (Davis, 1989), as students adopted ChatGPT due to its clear academic utility. The theme also intersects with self-efficacy theory (Bandura, 1997), where external support tools enhance learners' belief in their ability to complete academic tasks. Pedagogically, this suggests that AI tools, when appropriately scaffolded, may reinforce students' writing agency.

### Ease and Accessibility of AI Tools

Participants consistently described ChatGPT as intuitive, easy to use, and accessible across devices and languages. Many adopted it independently, without training, and appreciated that prompts could be given in English or local dialects.

“Even in Bisaya, kasabot siya. Dili kinahanglan perfect English.” (“It even understands Bisaya. You don't need perfect English.”) — Participant 3

“I started using ChatGPT from my phone and found it easy to use even during commutes.” — Participant 6

This theme reflects the Perceived Ease of Use dimension of TAM. Students' spontaneous and informal adoption of ChatGPT also illustrates its alignment with their digital habits. This accessibility encouraged frequent, autonomous usage, suggesting that low-barrier technologies can empower

learners, especially in contexts with limited institutional support. It also highlights an emerging form of peer-driven digital literacy, where students guide one another through informal learning networks.

### **Navigating Ethical Boundaries**

While students valued ChatGPT's writing assistance, they expressed ethical concerns, particularly about plagiarism and misrepresentation. Many adopted self-regulation strategies, such as paraphrasing, editing outputs, or using the tool only for ideation. Others admitted concealing their use due to fear of judgment or disciplinary action.

“I always make sure to change the wording and add my understanding before submitting.”

—Participant 5

“We don’t tell anyone we used AI because they might judge us.” — Participant 1

This theme underscores the role of academic integrity principles in guiding student behavior. It reveals a gap between technological access and ethical literacy, where students often operate without clear institutional guidance. The theme also illustrates moral reasoning under uncertainty, a concept explored in Bertram Gallant’s (2008) work. Institutions must provide clear, proactive frameworks to support ethical AI use, not merely through policy enforcement but through education that fosters critical ethical reflection.

### **Cognitive Trade-offs**

Some participants reflected on the long-term cognitive impact of frequent AI use. While they acknowledged gains in speed and organization, several voiced concerns about diminished brainstorming, weaker critical analysis, and a tendency to rely on AI shortcuts under pressure.

“ChatGPT makes work easier, but I’m worried nga mawala na akong brainstorming skills.”

(“*ChatGPT makes work easier, but I’m worried I’ll lose my brainstorming skills.*”) — Participant 4

“Sometimes I just copy the structure and ideas without thinking deeply.” — Participant 5

This theme aligns with cognitive offloading theory (Risko & Gilbert, 2016), where external tools reduce cognitive effort. While offloading may support writing fluency, students recognized that excessive reliance could undermine deeper learning processes. This tension reflects a form of metacognitive awareness, where learners negotiate between efficiency and intellectual engagement. The theme also raises pedagogical questions about designing AI-integrated tasks that promote reflection, not just output.

### **Peer and Policy Pressures**

Students’ use of ChatGPT was strongly shaped by peer influence and their perception of instructors’ attitudes. The lack of a clear institutional policy created a gray area, leading students to follow peer norms or conceal AI use depending on the social or academic environment.

“Some teachers told us not to use it, but there’s no clear school policy. Naglibog mi kung okay ba or dili.” (Some teachers told us not to use it, but there’s no clear school policy. We were confused about whether it was allowed or not.) — Participant 2

“If there’s a policy, I’ll follow it. But now, we just rely on what our peers say is acceptable.” — Participant 6

This theme reflects the influence of subjective norms from Ajzen’s (1991) Theory of Planned Behavior and reinforces that institutional culture shapes ethical practice. Ambiguity or silence from institutions creates space for informal, and often inconsistent, norms to emerge. This theme also highlights the critical need for coherent AI policies and inclusive conversations around responsible use that involve both students and faculty.

### **Technical and Functional Challenges**

Despite overall positive attitudes, students encountered limitations with ChatGPT. These included vague or overly generic responses, hallucinated references, outdated information, and inconsistencies in output. Many reported cross-checking AI-generated content and using multiple tools to compensate.

“Sometimes the same prompt gives different answers, and it confuses me.” — Participant 6

“I-check pa nako iyang gihatag nga references kay usahay dili jud siya reliable.” (I still have to verify the references it provides because sometimes they’re not reliable.)

— Participant 5

This theme emphasizes the importance of critical digital literacy. While students demonstrated awareness of AI limitations, the theme also raises concerns about unequal access to reliable tools (e.g., paid versions with improved accuracy). AI literacy programs should address not only ethical concerns but also functional limitations and verification strategies.

Together, these six themes offer a nuanced understanding of how students experience ChatGPT not as a monolithic tool but as a dynamic agent that intersects with writing habits, ethical reasoning, institutional expectations, and cognitive processes. The findings suggest that while students are innovating their strategies for responsible use, institutional frameworks and pedagogical practices must evolve to support them meaningfully.

## Discussion

The findings of this study offer a rich and layered understanding of how undergraduate students engage with ChatGPT in academic writing. The themes reflect not only functional adoption but also a complex negotiation of ethical, cognitive, and social dimensions. This discussion draws on the study's theoretical framework—TAM, academic integrity principles, and cognitive offloading theory—while grounding interpretation in related empirical studies.

### ChatGPT as an Academic Enabler: Usefulness, Confidence, and Self-Efficacy

The theme *Academic Empowerment through AI* confirms that students perceive ChatGPT as a valuable tool for improving writing productivity, enhancing clarity, and boosting confidence. These experiences reflect the Technology Acceptance Model's proposition that perceived usefulness drives technology adoption (Davis, 1989). They also align with Bandura's self-efficacy theory (1997), suggesting that ChatGPT can enhance students' belief in their writing competence by acting as an external support mechanism.

This finding is consistent with Roy and Swargiary (2024), who noted that ChatGPT promoted fluency and lowered writing barriers, and Lester et al. (2024), who found that AI-assisted students were more confident in decision-making tasks. Similarly, Gajos and Mamykina (2022) highlighted how digital scaffolds can foster perceived capability in complex tasks. Pedagogically, this suggests that ChatGPT can be positioned not as a threat to learning but as a scaffold that fosters learner autonomy and writing agency when integrated with critical reflection.

### Ease of Use, Peer Support, and Informal AI Literacy

The theme *Ease and Accessibility of AI Tools* supports TAM's Perceived Ease of Use construct, as students adopted ChatGPT with little to no guidance. This reflects findings by Chen et al. (2024) and Ivanova et al. (2024), who observed that ChatGPT's intuitive interface encourages unstructured, self-directed use. Chiu et al. (2023) similarly found that students perceived AI as a safer and more responsive alternative to human feedback, especially in early-stage writing.

The study also highlights the role of peer-driven digital literacy—students often introduced and taught one another how to use AI tools. This finding echoes Sharma et al. (2019) and Sapci & Sapci (2020), who discussed the rise of informal learning networks in digital contexts. Institutionally, this suggests a missed opportunity: students are already building AI fluency informally, which could be enhanced through structured co-learning models between students and faculty.

### Ethical Self-Regulation Amid Institutional Ambiguity

The theme *Navigating Ethical Boundaries* reveals that students are aware of plagiarism and authorship concerns but often receive little formal guidance. They self-regulate through paraphrasing, avoiding verbatim copying, or omitting mention of AI use. These findings support Bertram Gallant's (2008) conceptualization of academic integrity as a developmental and context-sensitive practice. Similar concerns were documented by Foltýnek et al. (2023) and Wolf et al. (2023), who found that students often use AI covertly due to fear of academic penalties or moral ambiguity. Studies by Pun (2021) and Marar & Hamza (2020) also emphasize that inconsistent or vague institutional messaging increases the likelihood of ethical uncertainty. Cotton (2023) recommends proactive, inclusive policy design—framing ethics not solely in terms of misconduct but as an evolving practice that requires shared understanding.

## Cognitive Delegation: Balancing Support and Skill Development

While students valued ChatGPT's help in overcoming writer's block and organizing content, many expressed concerns about overdependence, echoing cognitive offloading theory (Risko & Gilbert, 2016). This theory describes how relying on external tools can reduce mental effort, sometimes at the expense of deeper learning. Recent empirical research highlights this tension between cognitive support and risk. Grinschgl et al. (2021) caution that habitual reliance on digital aids can diminish internal reasoning and problem-solving. Similarly, León-Domínguez (2024) and Gerlich (2025) report that overuse of AI may impair higher-order executive functions, reducing deep processing and fostering dependency. These studies underscore critical risks. While AI may streamline immediate writing tasks, it can hinder long-term cognitive development and induce illusions of understanding (Skulmowski, 2023; Skulmowski, 2024).

These concerns reinforce the importance of metacognitive instruction surrounding AI use. Instruction should emphasize not only how to use AI effectively, but also when and why to do so. Reflective assignments, such as journaling or critique of AI use, can promote metacognitive engagement and reduce passive reliance.

## Peer and Policy Pressures: The Institutional Vacuum

The theme *Peer and Policy Pressures* illustrates that institutional silence leaves students to navigate AI adoption through peer norms. This dynamic aligns with Ajzen's (1991) Theory of Planned Behavior, in which subjective norms shape behavior when formal authority is unclear. This phenomenon was observed by Xiao et al. (2023) and Črček and Patekar (2023), who found that institutional ambiguity around AI tools resulted in informal rulemaking among student networks. Ngo (2023) and Cotton (2023) argue that such gaps can lead to confusion or covert use, even among students willing to comply with rules.

The findings advocate for inclusive policy development, where students are co-creators of AI usage norms. Participatory dialogue—rather than top-down rules—may foster clearer boundaries and strengthen students' ethical reasoning.

## Technical and Functional Challenges: From Trust to Verification

Despite overall positive experiences, students were critical of ChatGPT's limitations. In the theme *Technical and Functional Challenges*, they cited vague responses, hallucinated references, and inconsistencies, particularly in the free version. These concerns are echoed in studies by Khatri and Karki (2023) and Wolf et al. (2023), who found similar limitations across use cases in academic writing. However, the students in this study demonstrated digital agency by cross-checking outputs, using supplementary tools, and editing responses. These behaviors align with Sarfo (2023) and Balcioğlu et al. (2022), who describe a "blended intelligence" approach, where students act as critical evaluators of machine-generated content. Such AI literacy should be formalized in curricula, not assumed to emerge organically.

## Interplay of Themes: A Holistic Lens

Crucially, these themes do not stand in isolation. Ease of use and accessibility contribute to empowerment but also increase the risk of cognitive overreliance. Peer influence and policy ambiguity shape ethical strategies, while technical challenges compel students to exercise digital judgment and verification.

This interplay supports the integrated conceptual framework proposed in this study (see Figure 1), where Perceived Usefulness (TAM), Ethical Self-Regulation (academic integrity), and Cognitive Delegation (offloading theory) intersect to shape the student experience. The complexity of AI adoption in academic writing lies in the ongoing negotiation between these domains, not in any single factor.

## Knowledge Contribution

This study contributes to a more comprehensive understanding of generative AI use in academic writing by integrating TAM, academic integrity, and cognitive offloading theory into a unified framework. It reveals that student adoption of ChatGPT is not just driven by functionality but shaped by ethical awareness and cognitive strategy. Situated in an underrepresented educational context in the Philippines, the study highlights how students navigate AI tools with agency despite institutional ambiguity.

Pedagogically, the findings support integrating AI literacy and reflective practices into writing instruction. Ethically, they underscore the urgency of co-creating inclusive policies that clarify responsible AI use. Practically, the research informs faculty development and student support strategies, offering a model for responsible innovation in transitional academic environments.

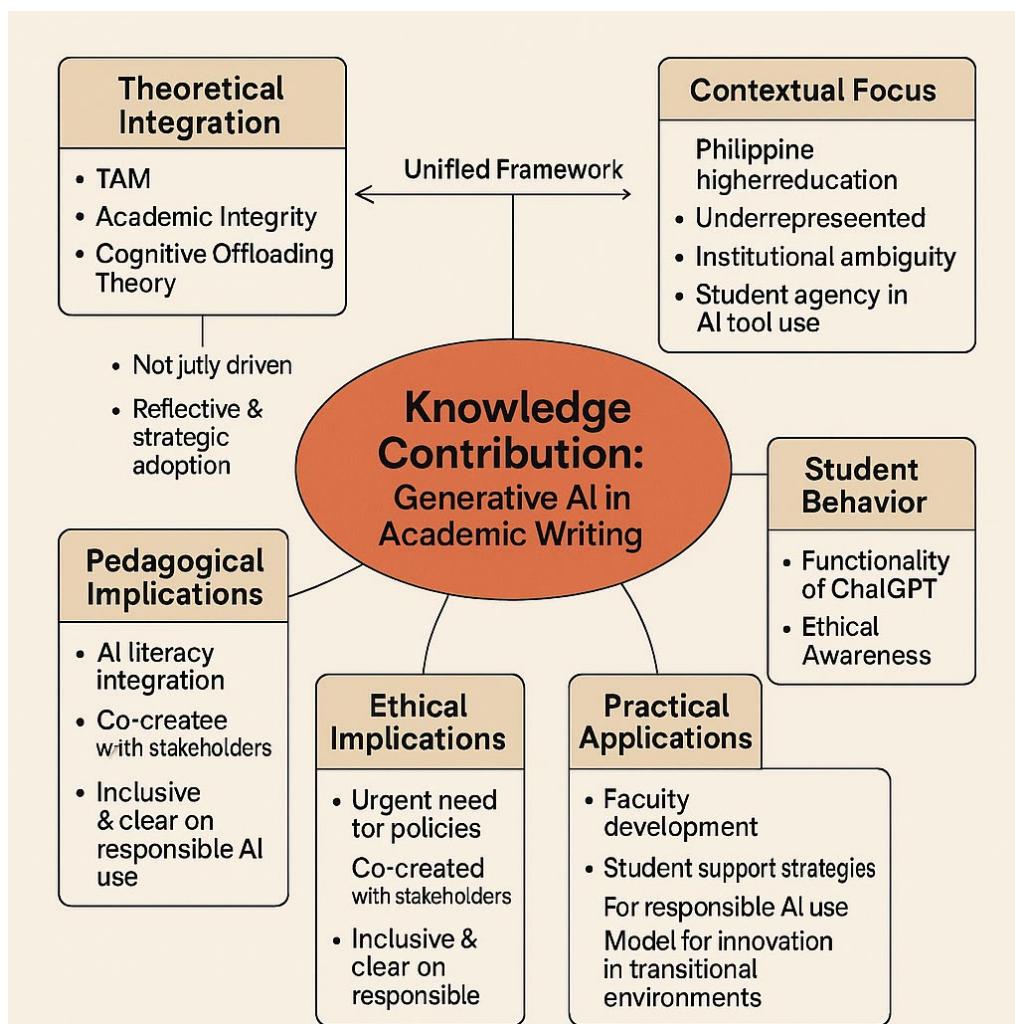


Figure 2 Knowledge Contribution

## Conclusion

This study reveals that students are neither passive adopters nor reckless users of ChatGPT. Instead, they navigate a complex terrain of academic writing, balancing the benefits of AI with concerns about integrity and cognitive development. The integrated framework shows how usefulness, ethical regulation, and cognitive trade-offs dynamically interact in shaping AI engagement. This study contributes a grounded, student-centered perspective to the discourse on AI in education.

## Recommendations

Grounded in the findings of this study, several targeted recommendations are proposed to support the responsible, ethical, and pedagogically sound use of ChatGPT in academic writing. Recommendations include embedding AI literacy in writing courses with emphasis on prompting, evaluation, and ethical editing; developing participatory policies involving both students and faculty; training educators to guide reflective and responsible AI use; and conducting longitudinal research to track AI's long-term impact on learning and cognition. These reinforce the need for proactive, student-centered strategies in managing the transformative role of AI in education.

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