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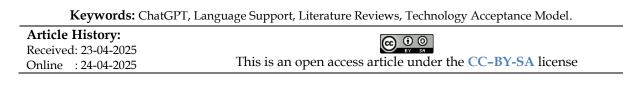
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ChatGPT in Writing Literature Reviews: Student Perceptions and Concerns

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Abstract: This study investigates the perceptions and concerns of Indonesian EFL undergraduate students regarding the use of ChatGPT for writing literature reviews, a particularly challenging task in English for this demographic. Employing a mixed-methods approach, data were collected from 151 survey participants and 7 interviewees across five study programs. The Technology Acceptance Model (TAM) serves as the theoretical framework for this study. Quantitative data were analysed using descriptive statistics, while qualitative data underwent thematic analysis. Findings indicate that students generally hold neutral views regarding the ease of use of ChatGPT, yet they consistently report finding it highly beneficial in assisting with their literature reviews. By triangulating quantitative and qualitative findings, the study reveals that ChatGPT primarily aids in idea generation and the identification and correction of grammatical errors. However, concerns were raised regarding its potential to reduce students' learning efforts, foster dependence on AI tools, and facilitate plagiarism. Despite acknowledging these limitations, students underscored the importance of verifying ChatGPT outputs. The study recommends that educators and policymakers develop guidelines to maximize the benefits of ChatGPT while ensuring academic integrity.



A. INTRODUCTION

ChatGPT, launched in November 2022, is an AI application accessible via web browser or mobile app, designed to simulate human conversation. Equipped with natural language processing (NLP) technology, ChatGPT can understand, analyse, and interpret natural human languages (Adiguzel, 2023). Its ability to generate text responses based on user inputs has significantly contributed to its widespread popularity (Sabzalieva & Valentini, 2023). Moreover, ChatGPT's user-friendly interface and immediate responses make it easily accessible, extending learning beyond traditional classrooms and offering personalised educational experiences. While most users have found the free version of ChatGPT 3.5 satisfactory for their needs, the latest paid version, ChatGPT-4.0, has recently been introduced (OpenAI, 2024). OpenAI (2024) reports that ChatGPT-4.0 showcases enhanced coherence and speed, enabling it to produce more precise and insightful responses while operating nine times faster than its predecessor, ChatGPT-3.5. However, this study investigates students' use of the free version of ChatGPT-3.5.

Students value ChatGPT for its support in various writing tasks, from generating ideas to providing language assistance and even creating entire assignments (Črček & Patekar, 2023; Ge, 2024; Harunasari, 2023; Imran & Lashari, 2023; Jarrah et al., 2023; Phuong, 2024; Rahim et al., 2023). However, concerns have arisen regarding academic integrity, including issues of plagiarism, data security, and an over-reliance on ChatGPT (Das & J.V., 2024; Lambert & Stevens, 2023; Lin et al., 2023; Sabzalieva & Valentini, 2023; Yusuf et al., 2024). These concerns have led some universities to ban ChatGPT, and certain countries to block or put restrictions

on ChatGPT, such as China, Iran, North Korea, Russia, and Italy (Browne, 2023; Shidarta & Martinelli, 2023). In contrast, Indonesia has not imposed bans or blocks on ChatGPT, allowing Indonesian students to freely utilise it for assignments, including English as a Foreign Language (EFL) writing tasks. Indonesian students, like other English as a Foreign Language (EFL) learners, have found ChatGPT highly beneficial in supporting their writing assignments. However, there is a lack of literature exploring Indonesian undergraduate students' perspectives and concerns about ChatGPT. Additionally, research in Indonesian private institutions, is notably scarce. Therefore, this study aims to address the following questions: (1) How do students perceive the usefulness of ChatGPT in writing their literature reviews?; anda (2) What concerns do students express regarding the use of ChatGPT for writing literature reviews?.

Understanding how students perceive ChatGPT can inspire educators and institutions to address students' needs by providing clear guidance and specific rules for its use, thereby mitigating concerns related to academic integrity. Given that students are already familiar with ChatGPT and other AI applications, educators and university leaders have the opportunity to support students effectively. This includes offering resources to encourage responsible use, promoting ethical considerations, and fostering critical engagement with the technology. By doing so, educators can harness the potential of ChatGPT while ensuring a safe and productive learning environment.

In their comprehensive study utilising Technology Acceptance Model (TAM) alongside mixed methods, Xu et al. (2024) explored Chinese undergraduate and postgraduate students' perceptions of ChatGPT's practicality. The findings indicated that students generally considered ChatGPT helpful in providing immediate clues, suggestions, and information, as well as facilitating guidance for writing. However, they expressed concerns regarding the reliability of ChatGPT's responses and the safety of personal data, especially the security of their personal information. Postgraduate students, in particular, highlighted additional concerns about its effectiveness in tackling complex academic challenges. Thao et al. (2023) identified similar concerns among Vietnamese students. Using the same theoretical framework, TAM, they found increased apprehension about the ethical and privacy implications of students' written work being stored by the machine, the potential for ChatGPT to limit students' creative expression, the accuracy and reliability of ChatGPT's answers, and the risk of students becoming overly dependent on technology. Despite these concerns, Vietnamese students in Thao et al.'s (2023) study reported that ChatGPT helped enhance their writing skills and increased their interest in writing in English.

Other studies, employing different theoretical approaches, arrived at similar findings. For example, Mahapatra (2024) used mixed methods grounded in theories emphasizing reliable tools for immediate writing feedback (Winstone & Carless, 2020; Barrot, 2023, cited in Mahapatra, 2024) Mahapatra's research revealed that ESL students gained significant advantages, such as improved language support and writing skills, from tools like ChatGPT. However, the study also highlighted concerns about students' overreliance on AI, potentially diminishing their creative and critical thinking abilities. Similar findings were observed in Marzuki et al.'s (2023) study on Indonesian EFL students, Shakil & Siddiq (2024) research on Pakistani ESL learners, and Cornish and Larter's (2024) in the Midwest. Nonetheless, these studies also identified benefits, including time savings (Cornish & Larter, 2024), translation into the target language (Nugroho et al., 2023), and assistance in logically progressing thoughts and arguments (Marzuki et al., 2023).

Further, Özçelik and Ekşi (2024) conducted a study in Turkey based on social constructivism principles, where learners construct knowledge through engagement with new information (Bruner, 1996, cited in Özçelik & Ekşi, 2024), and influenced by Vygotsky's

scaffolding theory, which emphasizes social interaction and collaborative learning (Vygotsky, 1908, cited in Özçelik & Ekşi, 2024). Their research found that students appreciated ChatGPT's ability to provide suggestions and corrections to their writing, enhancing their self-editing skills. However, the study also noted concerns about the tool's tendency to offer inaccurate and confusing responses. Similar issues were found in studies within the Indonesian context, such as those by Nugroho et al. (2023, 2024). These inaccuracies and confusing responses were attributed to ChatGPT's outdated database (Nugroho et al., 2024), its inability to provide recent information (Imran & Lashari, 2023), and its limited understanding of user prompts (Eunim & Youngsang, 2023). Additionally, ChatGPT's responses were often repetitive and monotonous (Nugroho et al., 2023).

Despite the variety of theories applicable to investigating students' perceptions and concerns regarding the use of ChatGPT in EFL writing, this study aims to use the TAM to examine Indonesian undergraduate students' perceptions of ChatGPT's ease of use, usefulness, and limitations. TAM was selected for its straightforward yet robust model for understanding users' preferences in adopting a technology application like ChatGPT for EFL writing assignments. TAM is credible for this purpose as it is rooted in the psychological Theory of Reasoned Action (TRA) and serves as a critical framework for understanding what motivates individuals to embrace or reject technology (Davis, 1993; Davis & Venkatesh, 1996; Granić & Marangunić, 2019). The perceived effectiveness and simplicity of the tool are critical factors in its adoption (Shaengchart, 2023).

Technology Acceptance Model (TAM), developed by Fred Davis in the mid-1980s, is a framework designed to predict and explain user adoption of technology. Under contract with IBM Canada, Ltd., Davis and Venkatesh's (1996) TAM design was used to evaluate the market potential of emerging PC-based applications, including multimedia, image processing, and pen-based computing, in order to guide investment in new product development. TAM posits that two primary factors influence users' decisions: perceived ease of use and perceived usefulness (Davis, 1993; Davis & Venkatesh, 1996). Ease of use refers to the degree to which a person believes that using the technology will be free of effort. In contrast, perceived usefulness is the extent to which a person believes that the technology will enhance their job performance. These perceptions shape the user's attitude towards using the technology, which in turn influences their intention to use it and, ultimately, their actual usage behaviour. TAM has become a fundamental model in understanding technology adoption and has been widely applied and extended in various fields to assess the acceptance of new technologies.

B. METHOD

1. Research Design

This study employs a mixed-method research design to investigate how Indonesian undergraduate students perceive and express concerns about using ChatGPT for writing literature reviews. The quantitative phase uses surveys to gauge students' views on the ease of use, usefulness, and uses of ChatGPT in their literature review tasks. First, students indicate their agreement using a five-point Likert scale, assessing the ease of use and usefulness of ChatGPT. Then, students respond to ten statements about the perceived uses of ChatGPT and six statements regarding their concerns. Each statement prompts students to indicate agreement or disagreement by checking corresponding boxes: agree or disagree. These statements are drawn from existing literature on the applications and limitations of ChatGPT in English as a Foreign Language (EFL) writing assignments.

Qualitative methods complement the quantitative approach by providing deeper insights into students' experiences and perspectives. Based on survey findings, semi-structured

interviews are conducted, allowing students to elaborate on their responses. This triangulation of data enhances the study's comprehensiveness and validity.

2. Data analysis

Quantitative data were analysed descriptively, while the qualitative data were subjected to thematic analysis. Descriptive analysis initially presented the percentage of students' agreement with ChatGPT's ease of use and usefulness. Perceptions regarding ease of use ranged from very easy to very difficult, while perceptions regarding usefulness varied from extremely useful to not at all useful. The descriptive statistics also reported the percentage of students agreeing with various statements regarding their usage and concerns about ChatGPT. Uses included generating ideas, drafting sections of essays, editing and proofreading, formatting sentences, identifying and correcting grammatical errors, translating text into English, summarizing, paraphrasing, correcting typos, and verifying structural elements. Meanwhile ChatGPT encompassed reduced personal effort in learning, plagiarism risks, overreliance on AI tools, potential inaccuracies in information, lack of originality, and threats to students' creativity and critical thinking.

Qualitative data were analysed thematically to uncover recurring themes and patterns (Braun & Clarke, 2013, 2022) in students' perceptions and concerns regarding ChatGPT. This approach allowed for a deep exploration of the nuances and complexities of how students view the use of ChatGPT in their academic writing tasks. Additionally, qualitative findings were integrated with quantitative data to enrich the overall understanding of how students interact with and perceive ChatGPT within their academic environments.

3. Participants

Participants were chosen through purposive sampling from first-year students enrolled in various disciplines at an Indonesian private institution. This sampling method ensures representation across different study programmes and encompasses students' experiences with using ChatGPT for their English literature review assignments. The selected participants were recruited from first-year students who had completed their English course in their first semester and submitted their literature review assignments to their English teacher. The assignment was designed to span six weeks, with the English teacher providing weekly feedback on their progress. The assignment instructions explicitly stated that students' work would be checked for plagiarism using Turnitin and other similarity detection tools, including ChatGPT, before assessment. It was mandated that submissions should be at most 20% similarity to ensure compliance with academic integrity standards and uphold the credibility of students' work.

During recruitment, students were informed about the study's purpose and assured of the confidentiality of their data. Participation was voluntary, and all students provided informed consent before taking part. From a total population of 234 students across five different study programmes, 151 students voluntarily participated in the study. The study programmes include both IT and non-IT specialisations. For this study, the word 'class' is used to refer to the study programme for ease of reference. The 151 students were distributed as follows: 29, 31, 34, 36, and 21 students from class A to E, respectively. Meanwhile, seven students from different study programmes voluntarily participate to be interviewed.

C. RESULTS AND DISCUSSION

1. Survey Findings

a. Perceived ease of use of ChatGPT in writing literature review

Perception Class C Class A Class B Class D Class E 4 (13.8%) 4 (11.1%) Very Easy 0 (0%) 1 (2.9%) 0 (0%) Easy 3 (10.3%) 5 (16.1%) 3 (8.9%) 3 (8.3%) 4 (19%) 17 (58.7%) 25 (80.7%) 27 (79.4%) 12 (57.1%) Neutral 18 (50%) 11 (30.6%) Difficult 4 (13.8%) 1 (3.2%) 0 (0%) 4 (19%) Very Difficult 1 (3.4%) 0 (0%) 3 (8.8%) 0 (0%) 1 (4.9%)

Table 1. Students' perceptions of ChatGPT Ease of Use

The data indicates a varied spectrum of perceptions regarding ChatGPT's ease of use among students across different classes. In examining the data, several noteworthy patterns emerge, highlighting both similarities and differences among the classes. Across all classes, the most common perception category is neutral, with percentages ranging from 50% to 80.7%. This suggests that a significant portion of students found ChatGPT relatively straightforward to use. Class A and Class D have the highest percentage of students who found ChatGPT very easy to use, both with 13.8% and 11.1%, respectively, while Class B and Class E reported no students finding it very easy to use. Class E had the highest percentage of students finding ChatGPT easy to use (19%), followed by Class B (16.1%).

Class D had the highest percentage of students finding ChatGPT challenging to use (30.6%). At the same time, Class C reported no students finding it difficult, and Class A and Class E had the same percentage of students reporting difficulty (13.8% and 19%, respectively). Finally, Class C had the highest percentage of students finding ChatGPT very difficult to use (8.8%), while Classes B and D reported no students finding it very difficult. However, Classes A and E had similar low percentages (3.4% and 4.9% respectively). The data indicates a varied perception of ChatGPT's ease of use among students across different classes. While the majority of students in most classes have a neutral perception, there are notable differences in the extremes. Class B students predominantly report neutral or easy experiences, whereas Class D students show a higher percentage of difficulty.

b. Perceived usefulness of ChatGPT in writing literature review

The study inquires students to identify their level of agreement towards the effectiveness of using ChatGPT for their literature review, ranging from "extremely useful" to "not at all useful." Additionally, the study examined how students use ChatGPT during their literature review writing.

c. Students perceived usefulness of ChatGPT

The table below presents the data, encompassing the number of responses and their corresponding percentages for each perception category: Extremely Useful, Very Useful, Somewhat Useful, Not Very Useful, and Not at All Useful.

Perception	Class A	Class B	Class C	Class D	Class E
Extremely Useful	2 (6.9%)	0 (0%)	0 (0%)	1 (2.8%)	0 (0%)
Very Useful	6 (20.7%)	7 (22.6%)	4 (11.8%)	2 (5.6%)	2 (9.5%)
Somewhat Useful	10 (34.5%)	18 (58.1%)	10 (29.4%)	17 (47.2%)	10 (47.6%)
Not Very Useful	9 (31%)	5 (16.1%)	13 (38.2%)	7 (19.4%)	7 (33.4%)
Not at All Useful	2 (6.9%)	1 (3.2%)	7 (20.6%)	9 (25%)	2 (9.5%)

Table 2. Students' Perceptions of Usefulness of ChatGPT

The data showcases a diverse range of perceptions regarding ChatGPT's usefulness across classes. Responses span from extremely useful to not at all useful, indicating varying degrees of satisfaction with the platform's utility. The most common perception category across all classes is somewhat useful, with percentages ranging from 29.4% to 58.1%. This suggests that a significant portion of students perceive ChatGPT to be moderately beneficial. While moderate perceptions are prevalent, extreme perceptions (extremely useful or not at all useful) are also present in all classes. This highlights the spectrum of experiences students have with ChatGPT, with some finding it highly valuable while others deem it largely ineffective.

The perception of ChatGPT being "Extremely Useful" was relatively low across all classes. Only two students from Class A (6.9%) and one student from Class D (2.8%) reported this highest level of usefulness. No students from Class B, Class C, or Class E rated ChatGPT as "Extremely Useful. Meanwhile, a moderate number of students found ChatGPT to be "Very Useful," with the highest counts in Class B (22.6%), followed by Class A (20.7%), Class C (11.8%), Class E (9.5%), and Class D (5.6%). Class B's relatively higher count suggests a more favourable perception compared to other classes. The most common perception across all classes was that ChatGPT was "Somewhat Useful." Class B had the highest count (58.1%), followed by Class D (47.2%), Class E (47.6%), and both Class A and Class C (34.5% and 29.4%). This indicates that while students found some value in ChatGPT, it was not overwhelmingly positive. A significant number of students rated ChatGPT as "Not Very Useful," particularly in Class C (38.2%), indicating some dissatisfaction. Other notable counts were seen in Class A (31%), Class E (33.4%), Class D (19.4%), and Class B (16.1%), reflecting a mixed reception among the classes. A smaller yet noteworthy number of students found ChatGPT "Not at All Useful," with the highest counts in Class D (25%) and Class C (20.6%). Class A (6.9%), Class B (3.2%), and Class E (9.5%) had fewer students in this category.

In conclusion, the data indicates varied perceptions of ChatGPT's usefulness in writing literature reviews among students from different classes. While a significant number of students found it "Somewhat Useful," there were also notable levels of dissatisfaction, particularly in Classes C and D.

d. Students' uses of ChatGPT

The table below details the number of responses and their corresponding percentages for each usage category: Generating Ideas, Drafting Sections of the Essay, Editing and Proofreading, Formatting and Structuring, Identifying and Correcting Grammatical Errors, Translating Sentences into English, Summarizing, Paraphrasing, Correcting Typos, and Checking Signposts.

Class A	Class B	Class C	Class D	Class E					
11 (37.9%)	19 (61.3%)	9 (26.5%)	10 (27.8%)	6 (28.6%)					
3 (10.3%)	3 (9.7%)	2 (5.9%)	3 (8.3%)	2 (9.5%)					
6 (20.7%)	8 (25.8%)	3 (8.8%)	8 (22.2%)	0 (0%)					
5 (17.2%)	12 (38.7%)	6 (17.6%)	3 (8.3%)	0 (0%)					
12 (41.4%)	8 (25.8%)	10 (29.4%)	16 (44.4%)	6 (28.6%)					
6 (20.7%)	5 (16.1%)	14 (41.2%)	12 (33.3%)	7 (33%)					
2 (6.9%)	8 (25.8%)	3 (8.8%)	4 (11.1%)	2 (9.5%)					
6 (20.7%)	8 (25.8%)	4 (11.8%)	10 (27.8%)	4 (19%)					
10 (34.5%)	7 (22.6%)	19 (55.9%)	14 (38.9%)	5 (23.8%)					
1 (3.4%)	3 (9.7%)	6 (17.6%)	3 (8.3%)	1 (4.8%)					
	11 (37.9%) 3 (10.3%) 6 (20.7%) 5 (17.2%) 12 (41.4%) 6 (20.7%) 2 (6.9%) 6 (20.7%) 10 (34.5%)	11 (37.9%) 19 (61.3%) 3 (10.3%) 3 (9.7%) 6 (20.7%) 8 (25.8%) 5 (17.2%) 12 (38.7%) 12 (41.4%) 8 (25.8%) 6 (20.7%) 5 (16.1%) 2 (6.9%) 8 (25.8%) 6 (20.7%) 8 (25.8%) 10 (34.5%) 7 (22.6%)	11 (37.9%) 19 (61.3%) 9 (26.5%) 3 (10.3%) 3 (9.7%) 2 (5.9%) 6 (20.7%) 8 (25.8%) 3 (8.8%) 5 (17.2%) 12 (38.7%) 6 (17.6%) 12 (41.4%) 8 (25.8%) 10 (29.4%) 6 (20.7%) 5 (16.1%) 14 (41.2%) 2 (6.9%) 8 (25.8%) 3 (8.8%) 6 (20.7%) 8 (25.8%) 4 (11.8%) 10 (34.5%) 7 (22.6%) 19 (55.9%)	$\begin{array}{c ccccc} 11 & (37.9\%) & 19 & (61.3\%) & 9 & (26.5\%) & 10 & (27.8\%) \\ 3 & (10.3\%) & 3 & (9.7\%) & 2 & (5.9\%) & 3 & (8.3\%) \\ 6 & (20.7\%) & 8 & (25.8\%) & 3 & (8.8\%) & 8 & (22.2\%) \\ 5 & (17.2\%) & 12 & (38.7\%) & 6 & (17.6\%) & 3 & (8.3\%) \\ 12 & (41.4\%) & 8 & (25.8\%) & 10 & (29.4\%) & 16 & (44.4\%) \\ 6 & (20.7\%) & 5 & (16.1\%) & 14 & (41.2\%) & 12 & (33.3\%) \\ 2 & (6.9\%) & 8 & (25.8\%) & 3 & (8.8\%) & 4 & (11.1\%) \\ 6 & (20.7\%) & 8 & (25.8\%) & 4 & (11.8\%) & 10 & (27.8\%) \\ 10 & (34.5\%) & 7 & (22.6\%) & 19 & (55.9\%) & 14 & (38.9\%) \end{array}$					

Table 3. Students' Uses of ChatGPT

The data indicates a diverse range of uses for ChatGPT among students across different classes. Generating ideas and identifying and correcting grammatical errors are among the most common uses. Class B exhibited the highest percentage of responses (61.3%) in generating ideas, indicating a strong inclination towards idea generation compared to other classes. Conversely, Class E had the lowest percentage (28.6%) in this category. Drafting sections of the essay are less shared across all classes, with percentages ranging from 5.9% in Class C to 10.3% in Class A. Meanwhile, moderate use is seen in editing and proofreading, particularly in Class B (25.8%) and Class D (22.2%). Conversely, Class E did not report any engagement in this category. Class B stands out with a higher percentage (38.7%), indicating a significant use of ChatGPT for formatting and structuring essays. Classes A, C, and D showed moderate involvement in this aspect, while no students in Class E reported using ChatGPT for this task.

Across all classes, a substantial portion of students reported engagement in identifying and correcting grammatical errors. This is a widely reported use, especially in Class D (44.4%) and Class A (41.4%), though Class E had the lowest (28.6%). High usage of translating sentences into English is observed in Class C (41.2%) and Class D (33.3%), indicating that these students benefit significantly from this feature. Meanwhile, summarising is less common overall, with the highest percentage in Class B (25.8%). Paraphrasing is found to be of moderate use across all classes, with the highest in Class D (27.8%) and lower percentages in other classes. Correcting typos is a notably high usage in Class C (55.9%) and Class D (38.9%), indicating that many students rely on ChatGPT to correct typographical errors. Finally, checking signposts is the least common use, with the highest percentage in Class C (17.6%) and very low usage in other classes. The data reveals that students use ChatGPT for a variety of tasks, with generating ideas and identifying and correcting grammatical errors being among the most common uses. Meanwhile, tasks like drafting sections of essays and checking signposts are less frequently reported. There are notable differences in usage patterns across the classes, highlighting diverse needs and preferences.

- e. Students' concerns about using ChatGPT for writing literature reviews
 - The table below shows the number of responses and their corresponding percentages for each concern category: Reduced Personal Effort in Learning, Risk of Plagiarism, Over-reliance on AI Tools, Potential Inaccuracies in Information, Lack of Originality, and Threat to Students' Creativity and Critical Thinking.

Concern	Class A	Class B	Class C	Class D	Class E
Reduced Personal Effort in Learning	14 (48.3%)	19 (61.3%)	18 (52.9%)	18 (50%)	8 (38.1%)
Risk of Plagiarism	15 (51.7%)	16 (51.6%)	18 (52.9%)	20 (55.6%)	11 (52.4%)
Over-reliance on AI Tools	8 (27.6%)	12 (38.7%)	13 (38.2%)	14 (38.9%)	7 (33.3%)
Potential Inaccuracies in Information	7 (24.1%)	7 (22.6%)	6 (17.6%)	12 (33.3%)	3 (14.3%)
Lack of Originality	5 (17.2%)	7 (22.6%)	8 (23.5%)	11 (30.6%)	1 (4.8%)
Threat to Students' Creativity and Critical Thinking	9 (31%)	14 (45.2%)	18 (52.9%)	20 (20%)	9 (42.9%)

Table 4. Students' concerns about ChatGPT

Reduced personal effort in learning is a common concern across all classes, with the highest percentage in Class B (61.3%) and the lowest in Class E (38.1%). This suggests a prevalent worry among students regarding the potential diminishment of their active involvement in the learning process due to technological assistance. The risk of plagiarism is consistently high across all classes, with percentages around or above 50%, indicating a widespread apprehension regarding academic integrity and originality. Over-reliance on AI tools is moderately prevalent, with similar percentages across Classes B, C, and D (around 38%), suggesting that students are wary of becoming too dependent on AI tools. Concerns about inaccuracies are most prominent in Class D (33.3%), while Class E shows the most minor concern (14.3%). This underscore worries regarding the reliability of automated systems in delivering accurate and credible information. Lack of originality is a lesser concern overall but notably higher in Class D (30.6%) compared to Class E (4.8%), reflecting different levels of concern about the originality of work produced with ChatGPT. Threat to students' creativity and critical thinking is a significant concern in Class C (52.9%) and Class B (45.2%), with students fearing that reliance on ChatGPT could hamper their creativity and critical thinking skills.

The data reveals that students have several concerns about using ChatGPT, with the most common being reduced personal effort in learning and the risk of plagiarism. There is also a notable worry about over-reliance on AI tools and potential inaccuracies in information. Concerns about lack of originality and threats to creativity and critical thinking are present but to a lesser extent.

2. Interview Findings

Thematic analysis of interviews with seven students who adopted ChatGPT in their literature writing assignments revealed two key themes: enhanced awareness and critical thinking and language support.

a. Enhanced awareness and critical thinking

Students demonstrated a keen awareness of both the advantages and potential pitfalls associated with integrating ChatGPT into their literature review assignments. While they acknowledged its capacity to significantly enhance their work, concerns about inaccuracies and irrelevance in ChatGPT responses tempered their reliance. As Student A cautioned, "We can't fully trust ChatGPT," prompting many to cross-check its outputs against reliable sources. This cautious approach, noted by Student A, involved verifying accuracy because "ChatGPT doesn't always distinguish correct information." Additionally, students noted a tendency for ChatGPT to generate repetitive content, which raised concerns among those keenly aware of assignment requirements. Student C observed, "AI-generated text can be overly similar," prompting others to scrutinize outputs closely. For example, Student G mentioned, "I frequently check the results of ChatGPT to see whether they align with the requirements or expectations of the literature review task." Student B added, "I read many references on the internet to compare with the results from ChatGPT responses," and Student F said, "I will doublecheck my journal articles to ensure the responses match the content". Students also recognized the importance of crafting precise prompts to elicit relevant responses from ChatGPT. Student A detailed her method: "I provide clear instructions, a list of sources, and review the results for accuracy before incorporating personal analysis." This approach aimed to harness ChatGPT for initial insights while relying on personal interpretation for deeper analysis, a sentiment echoed by Student D.

Despite acknowledging the efficiency of ChatGPT, students expressed concerns about dependency and becoming "obsessed" (Student D) with ChatGPT. Student D admitted

112 | International Seminar on Student Research in Education, Science, and Technology

Volume 2, April 2025, pp. 104-116

to crafting specific queries and validating responses independently to prevent overreliance. Reflecting this sentiment, Student A emphasized using ChatGPT for foundational information while adding personal insights to avoid complacency. In navigating the challenges, students sought to balance ChatGPT's benefits with critical thinking and collaboration. Student E underscored the value of discussing findings with peers to enrich their analysis, saying:

"To effectively balance using ChatGPT with my critical thinking and analysis when compiling a literature review, I engage in discussions with colleagues and closely examine the instructions and requirements for writing a literature review."

Meanwhile, Student D emphasized the role of personal scrutiny in ensuring thorough understanding and originality by "meticulously rereading each journal article, identifying key sentences and ensuring thorough understanding".

Furthermore, students were wary of potential plagiarism risks associated with ChatGPT's use. While recognizing its practicality, Student F highlighted the importance of "manual paraphrasing to maintain academic integrity", a practice echoed by Student G and others. Overall, while embracing ChatGPT's efficiency, students took deliberate steps to mitigate its limitations, emphasizing critical thinking, verification, and ethical use in their academic pursuits.

b. Language support

In their pursuit of academic excellence, students have discovered ChatGPT to be an indispensable tool for various reasons. When tasked with literature review assignments, ChatGPT plays a pivotal role in facilitating resource discovery. Student D highlights its efficiency: "ChatGPT helps me locate essential references for my literature reviews." Moreover, students benefit from its ability to refine their work; as Student B notes, it assists in identifying "grammatical errors and typos," while Student C appreciates its suggestions for "more appropriate word choices." Student A underscores its role in "enhancing language structure and clarity," which is crucial for delivering high-quality literature reviews in English, a language that poses challenges despite classroom explanations.

ChatGPT is more than just a language refinement tool, it significantly streamlines the assignment process. Student D emphasizes its time-saving capabilities, stating, "ChatGPT saves me valuable time." Student F echoes this sentiment, finding it "practical and efficient" to complete literature review assignments promptly. Most importantly, all students agree that ChatGPT has been instrumental in meeting assignment deadlines, reinforcing its reliability. In summary, ChatGPT not only aids in research and language refinement but also empowers students to achieve academic milestones efficiently. Its multifaceted support underscores its role as a cornerstone of academic success in an increasingly digital learning environment.

The qualitative findings support the quantitative results regarding students' perceptions of the ease of use of ChatGPT. While the survey indicated that students' perceptions were predominantly neutral, suggesting that a substantial number of students neither found ChatGPT notably easy nor difficult to use, the interviews did not uncover any students who highly praised the ease of use or expressed significant difficulty in using it. The absence of high praise or criticism regarding ease of use in interviews indicates that students may perceive ChatGPT as a tool with a relatively straightforward interface and functionality, as found in Xu et al.'s (2024) study, thus integrating it into their academic workflow without significant usability concerns. This indicates students' acceptance of ChatGPT for their academic tasks, confirming the relevance of the Technology Acceptance Model in this investigation.

The qualitative findings corroborate the quantitative results despite the quantitative emphasis on two primary uses of ChatGPT by students: generating ideas and identifying and correcting grammatical errors. In addition to these predominant uses highlighted in the quantitative data, the qualitative analysis identified other significant roles of ChatGPT, albeit with lower levels of agreement, such as assisting students in finding appropriate words, improving language structure, and expediting the writing process. These findings corroborate those of the extant literature (Bašić et al., 2023; Ge, 2024; Harunasari, 2023; Marzuki et al., 2023; Nugroho et al., 2023, 2024). Moreover, the interviews revealed a noteworthy use of ChatGPT that was not prominently featured in the quantitative findings: aiding students in locating relevant literature and references for their literature reviews. Nevertheless, ChatGPT's use to assist students in finding references has been widely explored in previous studies in different country contexts (Črček & Patekar, 2023; Harunasari, 2023; Imran & Lashari, 2023).

The qualitative findings reinforce the quantitative data regarding students' apprehensions about using ChatGPT for their literature review assignments. Initially, the quantitative analysis revealed concerns about ChatGPT potentially reducing students' effort in learning and increasing reliance on AI tools. This sentiment was echoed in qualitative interviews, where students expressed fears of dependency on the AI tool. This findings conform those studies of Marzuki et al. (2023), Thao et al. (2023), and Silvestre et al. (2023). However, an interesting observation from the qualitative data was the students' growing awareness of this dependency issue. They began developing strategies to mitigate it, such as enhancing self-confidence to incorporate their insights into their writing and actively engaging in discussions with peers. When students voice concerns about the increasing dependence on ChatGPT, teachers must step in to protect students' engagement and critical thinking. They should encourage interaction to ensure students gain rich and dynamic learning experiences as social beings (Barrot, 2023).

Moreover, both quantitative and qualitative findings converged on students' concerns about plagiarism, an issue dominating findings in previous studies about concerns over ChatGPT use in academic settings (Das & J.V., 2024; Lambert & Stevens, 2023; Lin et al., 2023; Sabzalieva & Valentini, 2023; Yusuf et al., 2024). Students shared similar perceptions about the risk of unintentional plagiarism due to similarities between ChatGPT-generated content and existing internet sources. As a precautionary measure, students reported paraphrasing ChatGPT responses using their language, as highlighted in their interviews. This indicates that using ChatGPT has also increased students' criticality and awareness of academic integrity.

Additionally, the qualitative inquiry uncovered concerns that garnered less unanimous agreement among student participants compared to the survey findings. In the interviews, students expressed worries about ChatGPT occasionally producing inaccurate, irrelevant, or repetitive responses—a sentiment echoed in the survey where students also expressed concerns about potential inaccuracies in information, though these were not prominently emphasized. These findings are similar to those of the extant literature investigating EFL students' concerns over the use of ChatGPT in different non-native English-speaking countries (Eunim & Youngsang, 2023; Imran & Lashari, 2023; Nugroho et al., 2023, 2024; Özçelik & Ekşi, 2024).

However, students seem to be aware of the issues. They are starting to put in personal efforts to closely scrutinize ChatGPT outputs against assignment requirements and cross-

reference with their understanding gleaned from academic journals and online resources. This also indicates students are experiencing development in critical thinking as if ChatGPT becomes a scaffold to students' learning of writing an English literature review. The findings indicate that although students express concerns about the limitations of ChatGPT, they find its benefits to be greater. Consequently, they continue to use the application to assist with their literature reviews. This behaviour confirms the Technology Acceptance Model, which suggests that students are willing to adopt a technology when they perceive significant benefits.

D. CONCLUSIONS AND SUGGESTIONS

This study has provided valuable insights into how students engage with and perceive ChatGPT within academic settings. Quantitative analysis indicated that a significant majority of students found ChatGPT user-friendly and beneficial for various aspects of their literature review process, answering the first research question on students' perceptions of ChatGPT's usefulness in writing literature reviews. However, concerns were raised, particularly regarding potential reductions in personal learning efforts, risks of plagiarism, and dependence on AI tools, addressing the second research question on students' concerns about using ChatGPT for literature reviews. Qualitative data analysed thematically offered deeper insights by uncovering recurring themes and complexities in students' perspectives. Themes from the qualitative data, such as enhanced awareness and critical thinking and language support, significantly represent the students' perceptions of ChatGPT's effectiveness and limitations and enrich our understanding beyond statistical findings.

The study highlights that students are aware of the potential negative impacts of overrelying on ChatGPT. Nonetheless, driven by a strong sense of integrity, they aim to limit their use of the tool, hence enhancing criticality. By engaging in critical thinking, students analyse ChatGPT's responses and produce their writing that reflects their unique perspectives. This awareness should prompt educators to provide clear guidelines on how to effectively incorporate ChatGPT into learning and assignments, ensuring authenticity and originality in students' work. By doing so, teachers can enhance students' critical thinking skills while allowing them to benefit from AI assistance.

It is crucial to recognize the study's limitations, including its focus on specific Indonesian private institutions and potential biases in participants' self-reported perceptions and experiences. Moreover, the small sample size necessitates caution when generalizing findings to all Indonesian undergraduate students. This study contributes to the growing body of literature on AI in education by providing nuanced insights into students' perspectives on ChatGPT. By addressing both the benefits and challenges associated with its use, this research aims to inform educators, policymakers, and stakeholders on effective strategies for integrating AI technologies responsibly into educational environments.

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REFERENCES

- Adiguzel, T. (2023). Revolutionizing Education with AI : Exploring the Transformative Potential of ChatGPT. *Contemporary Educational Technology*, *15*(3), 1–13.
- Barrot, J. S. (2023). Using ChatGPT for second language writing: Pitfalls and potentials. *Assessing Writing*, 57, 1–6. https://doi.org/10.1016/j.asw.2023.100745
- Bašić, Ž., Banovac, A., Kružić, I., & Jerković, I. (2023). ChatGPT-3.5 as Writing Assistance in Students ' Essays. *Humanities and Social Sciences Communications*, 10(750), 1–5. https://doi.org/10.1057/s41599-023-02269-7
- Braun, V., & Clarke, V. (2013). Successful qualitative research: A practical guide for beginners. SAGE Publications Ltd.
- Braun, V., & Clarke, V. (2022). Thematic analysis: A practical guide. SAGE Publications Ltd.
- Browne, B. (2023). *Italy became the first western country to ban ChatGPT. Here's what other countries are doing*. CNBC. https://www.cnbc.com/2023/04/04/italy-has-banned-chatgpt-heres-what-othercountries-are-doing.html
- Cornish, D., & Larter, Z. (2024). "I Don't Have to Write an Essay Ever Again!": University Student Reflections on ChatGPT in the Classroom. *Journal of Education Technology Systems*, 52(3), 325–334. https://doi.org/10.1177/00472395231219267
- Črček, N., & Patekar, J. (2023). Writing with AI: University Students ' Use of ChatGPT. *Journal of Language and Education*, 9(4), 128–138.
- Das, S. R., & J.V., M. (2024). Perceptions of Higher Education Students towards ChatGPT Usage. *International Journal of Technology in Education*, 7(1), 86–106.
- Davis, F. D. (1993). User Acceptance of Information Technology: System Characteristics, User Perceptions and Behavioral Impacts. *International Journal of Man-Machine Studies*, *38*, 475–487.
- Davis, F. D., & Venkatesh, V. (1996). A Critical Assessment of Potential Measurement Biases in the Technology Acceptance Model: Three Experiments. *International Journal of Human-Computer Science*, 45, 19–45.
- Eunim, B., & Youngsang, C. (2023). Examining Korean EFL College Students ' Experiences and Perceptions of Using ChatGPT as a Writing Revision Tool. *Journal of English Teaching through Movies* and Media, 24(4), 15–27.
- Ge, T. (2024). Assessing the Acceptance and Utilization of ChatGPT by Chinese University Students in English Writing Education. *International Journal of Learning and Teaching*, 10(1), 166–170. https://doi.org/10.18178/ijlt.
- Granić, A., & Marangunić, N. (2019). Technology acceptance model in educational context: A systematic literature review. *British Journal of Educational Technology*, 50(5), 2572–2593. https://doi.org/10.1111/bjet.12864
- Harunasari, S. Y. (2023). Examining the Effectiveness of AI-integrated Approach in EFL Writing: A Case of ChatGPT. *International Journal of Progressive Sciences and Technologies (IJPSAT)*, 39(2), 357–368. https://doi.org/10.52155/ijpsat.v39.2.5516
- Imran, A. A., & Lashari, A. A. (2023). Exploring the World of Artificial Intelligence: The Perception of the University Students about ChatGPT for Academic Purpose. *Global Social Sciences Review (GSSR)*, 8(1), 375–384. https://doi.org/10.31703/gssr.2023(VIII-I).34
- Jarrah, A. M., Wardat, Y., & Fidaigo, P. (2023). Using ChatGPT in Academic Writing is (not) a Form of Plagiarism : What does the Literature Say? *Online Journal of Communication and Media Technologies*, 13(4).
- Lambert, J., & Stevens, M. (2023). ChatGPT and Generative AI Technology: A Mixed Bag of Concerns and New Opportunities. *Computers in the Schools*, 0(0), 1–25. https://doi.org/10.1080/07380569.2023.2256710
- Lin, S., Chung, F.-L., Chung, H.-H., & Lan, K. Y. (2023). Concerns About Using ChatGPT in Education. *ICITL*, 37–49. https://doi.org/10.1007/978-3-031-40113-8
- Mahapatra, S. (2024). Impact of ChatGPT on ESL Students ' Academic Writing Skills : a Mixed Methods Intervention Study. *Smart Learning Environments*, 11(9), 1–18. https://doi.org/10.1186/s40561-024-

116 | International Seminar on Student Research in Education, Science, and Technology

Volume 2, April 2025, pp. 104-116

00295-9

- Marzuki, Widiati, U., Rusdin, D., Indrawati, I., & Indrawati, D. (2023). The Impact of AI Writing Tools on the Content and Organization of Students 'Writing: EFL Teachers' Perspective. *Cogent Education*, 10(2), 1–17. https://doi.org/10.1080/2331186X.2023.2236469
- Nugroho, A., Andriyanti, E., Widodo, P., & Mutiaraningrum, I. (2024). Students' Appraisals post-ChatGPT Use: Students' Narrative after Using ChatGPT for Writing. *Innovations in Education and Teaching International*, 1–13. https://doi.org/10.1080/14703297.2024.2319184
- Nugroho, A., Putro, N. H. P., & Syamsi, K. (2023). The Potentials of ChatGPT for Language Learning: Unpacking its Benefits and Limitations. *Register Journal*, 16(02), 224–247. https://doi.org/10.18326/rgt.v16i2.224-247
- OpenAI. (2024). *Chat with GPT-40*. OpenAI. https://chatbotapp.ai/landinggpt4o?utm_source=GoogleAds&utm_medium=cpc&utm_campaign=%7Bcampaign%7D&utm_id =21124457886&utm_term=163298305114&utm_content=702307790819&gad_source=1&gclid=Cjw KCAjwjqWzBhAqEiwAQmtgT88fOTx8s001-rvm8PF-

3AlDRhmmE_4bAUaGej9ILYYZUKelG6_xYxoCfF8QAvD_BwE)

- Özçelik, N. P., & Ekşi, G. Y. (2024). Cultivating writing skills : the role of ChatGPT as a learning assistant – a case study. *Smart Learning Environments*, 11(10), 1–18. https://doi.org/10.1186/s40561-024-00296-8
- Phuong, H. P. X. (2024). Using ChatGPT in English Language Learning: A Study on I.T. Students' Attitudes, Habits, and Perceptions. *International Journal of TESOL & Education*, 4(1), 55–68.
- Rahim, E. M. A., Rahim, M. E. A., Razawi, N. A., & Mohamed, N. A. (2023). Students' Perception on the Use of ChatGPT as a Language Learning Tool. *Idealogy Journal*, *8*(2), 70–78.
- Sabzalieva, E., & Valentini, A. (2023). *ChatGPT and Artificial Intelligence in Higher Education: Quick Start Guide*. UNESCO.
- Shaengchart, Y. (2023). A Conceptual Review of TAM and ChatGPT Usage Intentions Among Higher Education Students. *Advance Knowledge for Executives (AKE)*, 2(3), 1–7.
- Shakil, E., & Siddiq, D. S. (2024). ESL Teachers' Perceptions about ChatGPT as a Threat to Analytical Writing Abilities of ESL Learners at Graduate Level. *Pakistan Languageas and Humanities Review*, 8(1), 115–128
- Shidarta, & Martinelli, I. (2023). Should Indonesia Block ChatGPT ? ICOBAR, 1-5.
- Silvestre, A. S. S., Amaral, E. L. de M., Holanda, M. E., & Canedo, E. D. (2023). Students ' Perception about ChatGPT' s Impact on their Academic Education. *Congresso Brasileiro de Informatica Na Educacao*, 1260–1270
- Thao, L. T., Hieu, H. H., & Thuy, P. T. (2023). Exploring the Impacts of ChatGPT in EFL Writing: Student Perceptions of Opportunities and Challenges in Vietnamese Higher Education. *Kognisi: Jurnal Ilmu Keguruan*, 1(2), 107–124.
- Xu, X., Su, Y., Zhang, Y., Wu, Y., & Xu, X. (2024). Understanding Learners' Perceptions of ChatGPT: A Thematic Analysis of Peer Interviews among Undergraduates and Postgraduates in China. *Heliyon*, *10*, 1–13.
- Yusuf, A., Pervin, N., & González, M. R. (2024). Generative AI and the future of higher education : a threat to academic integrity or reformation? Evidence from multicultural perspectives. *International Journal of Educational Technology in Higher Education*, 21(21), 1–29. https://doi.org/10.1186/s41239-024-00453-6