

"دراسة دور Chat GPT في إنجاز المهام التعليمية لطلاب اللغة الإنجليزية"

أ. إيمان عبدالسلام الحاج ، هبة المعلول ، نور العلوي
جامعة صبراتة - كلية اللغات

الملخص :

قامت هذه الدراسة لاستطلاع وجهة نظر الطلاب الجامعيين الدارسين للغة الإنجليزية لصعوبات استخدام تطبيق Chat GPT. ولقد تم دراسة كيفية تفاعل الطلاب مع هذه المنصة باستخدام أساليب نوعية وكمية لذات الغرض كما أجريت ست مقابلات شبه منتظمة تم دعمها بخمس وخمسون نموذجاً لاستبيان مغلق. حيث قدمت المقابلات شبه المنتظمة رؤى إضافية عززت تلك البيانات التي تم جمعها من الاستبيانات. وعليه فإن النتائج كشفت عن وجود توافق عام بين كلا الطريقتين ما يدعو لتسليط الضوء على أن Chat GPT يقدم دعماً واسعاً في مناحٍ عدة كتصحيح القواعد واستكشاف الأفكار إلا أن المخاوف لا تزال قائمة بشأن الاستخدام المفرط له وتأثيره على التعلم المستقل. وخلص البحث بالحاجة الملحة لإرشادات بعينها لخلق توازن بين دمج Chat GPT في الأنشطة الأكاديمية للطلاب والاعتبارات الأخلاقية ومن هنا وجب تضمين هذه الإرشادات للاستخدام المسؤول مع التأكيد على أهمية دمج أدوات الذكاء الاصطناعي ضمن المهام المختلفة لتعلم اللغة الإنجليزية.

الكلمات المفتاحية: الذكاء الاصطناعي، Chat GPT، التعلم الذاتي، المهام التعليمية

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

Eman A. Elhaj

Iman.elhaj@sabu.edu.ly

Heba Almaloul

Nour Alalwi

Abstract

This research explores the perspectives of EFL undergraduate students regarding the challenges and barriers associated with the use of Chat GPT. To analyze students' engagement with this platform, a combination of qualitative and quantitative research methods was utilized. Data collection involved conducting six semi-structured interviews and administering a 55 item closed-ended questionnaire. The findings revealed a consensus between the two methods, revealing that although Chat GPT offers significant assistance in areas such as grammar correction and idea generation, there are ongoing concerns regarding its ethical implications and its influence on independent learning. It is recommended that the establishment of clear guidelines is essential for the effective integration of Chat GPT into students' academic practices while addressing ethical considerations. These guidelines should promote responsible usage and emphasize the importance of incorporating AI tools into various EFL learning activities.

Key words: Artificial Intelligence, Chat GPT, Independent learning, academic learning tasks.

Introduction

Completing academic learning tasks was challenging for many students. They had to rely on textbooks, handwritten notes, and conventional research techniques, which were often time-consuming and limited in their effectiveness. Developing critical arguments, organizing information, and refining drafts demanded significant effort and commitment. Many students faced challenges in accessing resources that could provide meaningful and personalized feedback. However, with the advent Artificial Intelligence, students now benefit from immediate academic support, simplifying the

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

process of completing their academic learning tasks. AI, an abbreviation that refers to artificial intelligence, is a technology designed to mimic human intelligence. It uses data and machine learning to execute tasks that typically require human reasoning. In academic contexts, AI tools like Chat GPT assist students with tasks such as brainstorming, content generation, and proofreading, thereby revolutionizing the approach of academic assignments. Academic learning tasks involve a range of skills such as research, writing, analysis, and synthesis. For instance, when composing essays, students utilize Chat GPT to create drafts or enhance their arguments, aiding in the effective organization of their content. In research tasks, Chat GPT provides rapid topic summaries and pertinent citations, which can be beneficial but might limit students' engagement with primary sources. In technical academic endeavors, Chat GPT offers explanations or code snippets, enabling students meet deadlines while possibly diminishing their opportunities for practical learning experiences. This dependence on AI can assist students in managing time constraints but may inadvertently lessen their engagement with the academic process. Tools like Chat GPT serve as facilitators, aiding in the completion of academic tasks while allowing students to access a variety of resources and strategies for tackling academic challenges.

As AI continues to advance, it is crucial to comprehend its influence on academic learning tasks to assess its impact on student learning outcomes. This study investigates the impact of Chat GPT on students' approaches to academic learning tasks at the College of Languages in Surman, where its use has become increasingly prevalent. In their research findings, Abdul Rapa et al. (2024) indicated "significant negative correlation between AI usage and critical thinking". They further noted that "Reliance on AI negatively affects students' analytical skills". This reliance has sparked diverse perspectives—some students regard Chat GPT as a valuable resource (Abd Rahim et al., 2023; Salwa and Tyas, 2024), while others fail to recognize the potential risks associated with reliance on AI assistance. Likewise, educators have raised concerns regarding whether Chat GPT enhances students' learning capabilities or fosters excessive reliance. This research contributes to the broader understanding of Chat GPT's role in assisting students with their academic learning tasks.

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

Aims of the Study:

This study sought to examine the utilization of Chat GPT by EFL undergraduate students in fulfilling academic tasks and improving their learning experience. It also aimed to evaluate the benefits, challenges, and potential risks associated with Chat GPT, particularly regarding its influence on student independence and academic integrity. Finally, this study intended to offer suggestions for effectively integrating Chat GPT's support with various learning activities to responsibly improve students' academic outcomes.

Research Questions:

This study is designed to answer the following questions:

1. How do EFL undergraduate students perceive Chat GPT as an academic tool?
2. How do EFL undergraduates integrate chat GPT to do their academic tasks?

Literature Review

AI tools like Chat GPT have been increasingly used to assist students with assignments by helping them generate ideas, organize content, and provide feedback. The integration of AI tools like Chat GPT into academic tasks has revolutionized the way students approach assignments, offering both opportunities and challenges. Tools such as AWE (Automated Writing Evaluation) systems are particularly useful for managing repetitive tasks and offering immediate corrective feedback, which is especially beneficial in early-stage learning. Moreover, the Zone of Proximal Development theory that was introduced by Vygotsky (1978), was developed by the idea of using electronic aids to promote accomplishing academic learning tasks. Additionally, many studies highlight Chat GPT's potential to enhance learning experiences while raising concerns about ethical implications and over-reliance (Camacho et al., 2021; Nunes et al., 2021; Abd Rahim et al., 2023; Salwa and Tyas, 2024).

The Zone of Proximal Development Theory

According to Vygotsky (1978), the Zone of Proximal Development (ZPD), is an important concept that delineates the gap between what learners can achieve on their own and what they can achieve with the guidance of a knowledgeable partner (KP). This zone focuses on tasks that slightly exceed

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

the learner's current capabilities but are achievable with appropriate support, serving as the primary objectives of effective learning. such support is vital for students as it enables them to cultivate skills that they can ultimately apply independently.

The term "approximate" emphasizes that these skills are not merely theoretical; they are close to mastery. The represents the optimal training stage, where challenges foster maximum cognitive development. This concept was introduced by the Soviet psychologist and leftist social and constructivist Vygotsky , critiques the limitations of traditional psychometric assessments, which mainly assess existing capacities rather than the learner's potential for development. Vygotsky advocated for collaborative assessments as a means to illustrate new skills.

As it has been stated by Vygotsky (1978, p. 86), "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers". For teachers, grasping the concept of (ZPD) involves acknowledging the disparity between the student's existing knowledge and what they can achieve with appropriate support. Progress in this field depends on students being actively involved and adequately assisted. This dynamic partnership empowers students to tackle intricate problems, ultimately fostering greater understanding and expanding their potential.

Chat GPT Usage Habits

AI tools, or artificial intelligence, facilitate the rapid execution of intricate and time intensive tasks. Nevertheless, there is a concern that students may become excessively dependent on technology for tasks that might otherwise foster their personal development and learning. Chat GPT has emerged as the premier AI chatbot, celebrated for its advanced capabilities and usability. This evolution underscores its increasing significance in both educational and professional environments. Students frequently utilize Chat GPT I for purposes such as drafting essays, brainstorming, and making real-time corrections. It has been stated that "Chat GPT helps in creating outlines, especially for writing essays", thereby streamlining the writing process and saving time (Salwa & Tyas, 2024, p. 89).

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

The research conducted by Ranalli & Yamashita (2022) emphasizes the transformative impact of AI tools such as Automatic Writing Evaluation (AWE) and Chat GPT, on learners' writing approaches. Writing tasks are now supported by sophisticated feedback mechanisms, including Grammarly and ProWritingAid, which provide immediate corrective feedback. Additionally, technologies like GPT-3 facilitate the creation of organized texts, guiding users in effectively brainstorming and structuring their ideas: "The most dramatic development is the AI-enabled incorporation of auto-completion of phrases into text editors and online writing venues" (Dale, 2021, p. 3). Consequently, students increasingly rely on AI systems to address both high-level writing issues like organization and lower-level concerns such as grammatical accuracy. However, Grimes and Warschauer (2010) asserted that AWE systems provide fast, direct, and objective corrective feedback compared to human in any given mission .

Ethical Use of Chat GPT

Although Chat GPT offers various advantages, it also presents considerable ethical concerns. Researchers such as Sila et al. (2023) cautioned that excessive reliance on AI tools may diminish creativity and analytical skills. They emphasized that "students must balance the effectiveness of time with maintaining originality and authenticity in their work. In a similar vein, Dewi et al. (2023) stressed the necessity for educators to provide explicit guidelines. They asserted that, "teachers must establish barriers and rules about when and how students can use Chat GPT", ensuring that it serves as a supportive resource rather than a substitute, thereby promoting responsible use.

Concerns regarding academic integrity emerge with the use of Chat GPT, particularly when students depend on it to produce content without adequate supervision. It is essential to establish clear ethical guidelines and institutional support to facilitate its responsible and ethical implementation in educational environments.

A significant concern is the possibility of learners to present AI-generated content as their own work, thereby bypassing the learning process. The challenge lies in the fact that anti-plagiarism software often fails to identify original, on-demand content created by advanced language models like GPT-

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

3: "Texts generated by these systems are unique... making them undetectable by anti-plagiarism tools" (Eaton et al., 2021, p. 4).

Issues with Using Chat GPT

Students and educators have raised concerns about the tool's potential to reduce independent problem-solving skills. Excessive dependence on Chat GPT may discourage learners from engaging deeply with educational materials, developing research proficiency, and critically evaluating content—skills that are foundational to academic growth. The quality of responses can vary considerably, often deteriorating after a few paragraphs. Additionally, Chat GPT is unable to accurately cite sources or assess the credibility of materials, which complicating its application in academic assignments.

AI tools are frequently criticized for emphasizing superficial accuracy at the expenses of more profound abilities such as creativity, coherence, or originality. Grimes and Warschauer (2010, p.5) noted that: "AWE tends to value formulaic conventions and surface-level accuracy over inventiveness.". Consequently, this may lead learners to view writing as a mechanical task rather than a vital social or cognitive skill.

Furthermore, concerns have been raised regarding the dependability of feedback generated by AI. The study highlights limitations in addressing various writing genres or collaborative situations, noting that "AWE is calibrated for academic writing, primarily analyzing essays" (Godwin-Jones, 2018, p. 4). This limited scope may not adequately address the requirements of contemporary, multimedia-oriented academic environments.

Nonetheless, apprehensions persist regarding their capacity to improve long-term skills. For example, Ranalli (2021, p. 2) stated that "while individual texts may improve through AWE, there is often little evidence of sustained progress in writing skill development." AI systems are most effective when they augment rather than supplant traditional teaching methods, allowing learners to actively engage with the feedback rather than passively accepting corrections.

Chat GPT is widely acknowledged as a crucial academic tool. Many students indicate that it increases their motivation and academic performance. AI-powered tools are increasingly recognized as valuable supplements in

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

learning processes. Their utility in accelerating repetitive tasks, offering detailed feedback, and inspiring learners is well-documented. Camacho et al. (2021) discovered that such tools can alleviate frustration: "Improvements writers may see as a result can have a motivating effect" (p. 14). For example, Salwa and Tyas (2024) stated that 62% of students believed Chat GPT enhanced their learning motivation, particularly in English writing assignments. Likewise, this motivation is corroborated by Abd Rahim et al. (2023), who reported that 70% of students considered AI tools like Chat GPT helpful in improving their writing efficiency through prompt and pertinent feedback. Additionally, a study conducted by Nunes et al. (2021) revealed that 65% of learners experienced increased confidence in their academic endeavors after using AI tools to enhance grammar and vocabulary. These statistics illustrate the rising confidence among students in Chat GPT's capacity to simplify academic tasks while fostering a more interactive learning environment.

User perceptions are frequently influenced by their proficiency in language and their familiarity with AI technologies. Grimes and Warschauer (2010, p. 32) emphasized that "AWE feedback is most useful at the early stages of language learning." In contrast, advanced learners may have a different perspective, focusing on enhancement rather than the development of basic skills.

To overcome these obstacles, the involvement of knowledgeable educators is essential. Pellet and Myers (2022) suggested that teacher mediation can help students critically engage with AI systems and recognize their limitations, thereby preventing misuse: "A knowledgeable teacher can help students discover the strengths and weaknesses of digital tools" (p. 45).

Chat GPT's Impact

Chat GPT's efficiency and ease of use have significantly impacted students' academic productivity. A significant number of participants, particularly students surveyed by Salwa and Tyas (2024), noted that the tool's intuitive interface simplifies complex processes, such as essay organization, grammar correction, and material translation. Their study revealed that over 75% of these students considered Chat GPT essential for activities like idea

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

generation and refining content, showcasing its role as a valuable academic tool.

Chat GPT transcends its function as a mere technical tool; it also supports individualized learning experiences. A study conducted by Salwa and Tyas (2024) confirmed that incorporating features like voice commands and data analytics could enhance its effectiveness. Their findings underscore Chat GPT's capacity to deliver prompt feedback and tailored support, which may influence future pedagogical approaches by integrating technology into learning activities.

In order to maximize the potential of Chat GPT, it is essential for educators and institutions to provide structured guidance that fosters independent learning and responsible usage. When implemented properly, Chat GPT can transform educational methodologies and support students in achieving their academic goals. AI technologies like Chat GPT and AWE tools are highly effective in managing repetitive tasks and providing immediate feedback. According to Nunes et al. (2021, p. 22), "Integration of AWE into instruction offers a framework for deliberate practice."

Nonetheless, perspectives differ depending on usage. Some students appreciate Chat GPT's support in simplifying intricate concepts or tasks, while others express worries regarding potential overdependence and its effects on long-term learning abilities. These differing perceptions underscore the necessity for a balanced and thoughtful integration of the technology.

Research Methodology

The research methodology has been defined as "a collective term for the structured process of conducting research. There are different methodologies used in various types of research, and the term is usually considered to include research design, data gathering, and data analysis" (Gounder, 2012, p.12). Accordingly, this study employed a mixed-methods approach that integrates a quantitative component, demonstrated via a structured questionnaire, and a qualitative component, illustrated through semi-structured interviews.

Quantitative Method:

This study employed a close-ended questionnaire structured around five key themes: Usage Patterns, Ethical Considerations, Concerns, Overall Perceptions, and Effectiveness, with each theme comprises four items. The

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

participants responded to the questionnaire using a five-point Likert scale, which included the following options: Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. The study was conducted at the Faculty of Languages in Surman, targeting undergraduate students. A total of 55 EFL students participated in the study, comprising 15 males and 40 females.

Qualitative Method:

The data was collected through individual semi-structured interviews, each lasted approximately 3–5 minutes. The interviews were conducted in English to assess the participants' experiences, perceptions, and usage patterns of Chat GPT for academic purposes. The semi-structured interviews included five key questions, focusing on aspects such as the impact of Chat GPT's on learning, its applications, reliability, and the balance between AI use and independent learning. The straightforward format of the interviews allowed the participants to express their thoughts clearly and concisely. Their responses were later categorized and analyzed based on themes relevant to the study.

This study involved six EFL undergraduate students, comprising three males and three females. The participants were at various academic levels: three were in their second semester (Participants A, B, and C), one was in the third semester (Participant D), one was in the fourth semester (Participant F), and one was in the seventh semester (Participant E).

Data Analysis

Quantitative Data

This study investigated the influence of Chat GPT on university students engaged in analytical methodologies, specifically assessing its effectiveness in enhancing the learning experience of English EFL students. This study was conducted at Surman Faculty of Languages, University of Sabratha, and focused on a random sample of 55 participants selected from the department of English. Employing a descriptive-analytical approach, the researchers integrated secondary sources, including online journals and previous studies, with primary data collected through a supervisor-reviewed questionnaire. This questionnaire, based on a five-point Likert scale, was designed to assess the students' practices and perceptions, with the goal of deriving meaningful insights regarding the educational application of Chat GPT.

The questionnaire is comprised of a single section that includes:

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

Section One: Areas of Study.

The questionnaire comprises (20) items categorized into 5 axes:

Axis One: Usage Pattern (4 items).

Axis Two: Ethical Considerations (4 items).

Axis Three: Concerns (4 items).

Axis Four: Overall Perceptions (4 items).

Axis Five: Effectiveness (4 items)

Field Study Procedures:

This section provides a comprehensive overview of the methodologies employed by the researchers during the study, which encompasses defining the study methodology, describing the study population, selecting the study sample, developing the study instrument (the questionnaire), verifying its validity and reliability, outlining the study procedures, and the statistical methods utilized to analyze the data. Below is a description of these procedures:

Validity and Reliability of the research Tool

Expert Validity:

The initial version of the questionnaire was introduced to a group of university students enrolled in the department of English at University of Sabratha. They provided their insights and feedback on the suitability of the questionnaire items by ticking the appropriate options that reflected their perspectives, the relevance of each item to its corresponding dimension, and the clarity of the language used. Based on the supervisor's feedback, the questionnaire was revised until it attained its final version.

Reliability of the Tool:

To ensure the reliability of the questionnaire, the researcher utilized the following method:

The Cronbach's Alpha Test was employed to evaluate the internal consistency of the instrument. The findings shown in table 12 demonstrate the reliability of the responses from the study sample: 62.5% for the usage pattern scale, 77.3% for the ethical considerations scale, 79.8% for the concerns scale, 62.9% for the overall perceptions scale, and 82.1% for the effectiveness scale. These results imply that the scale is reliable, indicating that the respondents interpreted its items as intended by the researcher. Therefore, it can be used

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

in this field study, as similar results would likely be obtained upon the actual application,

Table 1: Results of Cronbach Alpha Test

No.	Field	Number of Items	Cronbach's Alpha
1	Usage Pattern	4	0.625
2	Ethical Considerations	4	0.773
3	Concerns	4	0.798
4	Overall Perceptions	4	0.629
5	Effectiveness	4	0.821

The analysis of quantitative data yields the subsequent findings, which will be presented in tables as follows.

Table 2: Usage of Patterns

	N	Mean	Std. Deviation	T	Sig. (2-tailed)
1- Using Chat GPT regularly to assist with assignments.	55	3.4545	1.18350	12.248	.000
2- Relying on Chat GPT for understanding complex concepts in studies.	55	3.9636	.94209	12.248	.000
3- Using Chat GPT often as a first resource when starting an assignment.	55	3.1091	1.28629	19.394	.000
4- Chat GPT has become a routine tool in academic workflow.	55	3.3636	1.41897	9.277	.000
5-					

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

General values	55	3.47	0.88	26.101	.000
----------------	----	------	------	--------	------

A detailed examination of Table 2 above shows that the findings obtained reveal insightful patterns regarding the usage of Chat GPT by the participants in their assignments. The mean score of 3.47 indicates a moderate level of engagement, while a standard deviation of 0.88 suggests variability in usage, with some participants frequently using Chat GPT and others using it less often. The t-value reveal statistically significant differences, highlighting varied perceptions of Chat GPT's relevance. The highest t-value particularly underscores its role as a valuable academic resource. Moreover, the significance values, all below 0.05, affirm that these differences are substantial and not merely the result of random fluctuation, indicating genuine views on Chat GPT's contribution to academic tasks.

Table 3: Ethical Considerations

	N	Mean	Std. Deviation	t	Sig. (2- tailed)
1- Disclose using Chat GPT in academic work when required.	55	3.9091	1.09329	16.342	.000
2- Using Chat GPT is ethical for academic purposes.	55	3.4182	1.13351	12.550	.000
3- Using Chat GPT does not diminish the effort put into completing assignments.	55	3.2545	1.18974	10.937	.000
4- Chat GPT usage should be considered a legitimate academic resource, similar to textbooks or libraries.	55	3.1636	1.22872	10.041	.000
General values	55	3.4	0.59	38.760	.000

Table 3 shows that the participants are inclined to disclose their use of Chat GPT (mean = 3.91) and view it as ethical for academic purposes (mean = 3.42). They believe it does not hinder their efforts (mean = 3.25), although

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

there is less consensus on regarding Chat GPT as a formal academic resource (mean = 3.16). Moderate variation in opinions is evident, with the highest t-value (16.342) emphasizing the importance of transparency in its use. All results are statistically significant, reflecting genuine considerations of its ethical and academic impact.

Table 4: Concerns

	N	Mean	Std. Deviation	t	Sig. (2- tailed)
1- Worrying that overusing Chat GPT may reduce independent problem-solving abilities .	55	4.0909	1.17493	16.354	.000
2- Feeling unsure about how much we should depend on Chat GPT for assignment.	55	3.6182	1.00905	15.568	.000
3- Using Chat GPT makes me less inclined to research using traditional resources.	55	3.5455	1.30268	11.645	.000
4- Using Chat GPT could negatively affect critical thinking skills.	55	3.9273	1.18407	15.203	.000
General values	55	3.79	0.72	35.539	.000

The findings reveal concerns regarding the influence of Chat GPT's with a mean score of 4.09 indicating worries about over-reliance and its effect on independent problem-solving. The participants are hesitant about depending

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

on the tool for assignments (mean 3.62) and show moderate unease about its use compared to traditional resources (mean 3.55). A strong belief exists that Chat GPT may negatively impact critical-thinking skills (mean 3.93). The standard deviation (1.00–1.30) shows moderate variability, with the highest variation in views on replacing traditional resources. Significant t-values, particularly for overuse (16.354), along with all significance values below 0.05 validate these concerns statistically.

Table 5: Overall Perceptions

	N	Mean	Std. Deviation	t	Sig. (2- tailed)
1- Chat GPT has positively influenced academic performance.	55	3.6909	1.12006	14.506	.000
2- Chat GPT has enhanced the ability to manage multiple academic tasks.	55	3.7455	1.17407	14.184	.000
3- Chat GPT has motivated me to approach assignments with more creativity and confidence .	55	3.5818	1.21245	12.734	.000
4- Chat GPT has the potential to transform how students learn.	55	3.6182	.99053	15.859	.000
General values	55	3.66	0.74	33.067	.000

The findings show that Chat GPT has a beneficial effect on academic performance (mean 3.69) and enhances the ability to manage multiple tasks

**"Investigating the Role of Chat GPT on Accomplishing Undergraduate
Students' Academic Learning Tasks"**

(mean 3.75). It also moderately motivates creativity and confidence in assignments (mean 3.58), and is perceived as transformative for the educational experience (mean 3.62). Variability in opinions is evident, with the highest standard deviation (1.21) regarding creativity and confidence. A significant t-value (14.506) confirms Chat GPT’s positive influence, with all significance values below 0.05, validating the results.

Table 6: Effectiveness

	N	Mean	Std. Deviation	T	Sig. (2- tailed)
1- Chat GPT improves the overall quality of assignments.	55	3.8182	.98302	17.489	.000
2- Chat GPT provides clear and concise explanations for complex topics.	55	3.7455	.98542	16.899	.000
3- Chat GPT helps in identify mistakes in assignments.	55	4.0182	.87116	21.437	.000
4- Chat GPT offers solutions or ideas that would not have considered on your own.	55	4.0364	1.01769	18.483	.000
General values	55	3.91	0.64	40.953	.000

Analyzing the data obtained shows that Chat GPT is effective in improving the quality of assignments (mean = 3.82), providing clear explanations (mean = 3.75), identifying errors (mean = 4.02), and offering solutions (mean = 4.04). The standard deviations ranged from 0.64 to 1.02, reflecting varied opinions, with a stronger agreement on general values. The t-values indicate

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

statistically significant differences, particularly in the area of error identification ($t = 21.437$). All significance values were below 0.05, confirming that the results are statistically significant and demonstrating the tool's effectiveness.

The Main Findings of Quantitative Data:

1. The participants engaged with Chat GPT at a moderate frequency, demonstrating varied levels of interaction.
2. Chat GPT proved effective in improving the quality of assignments by providing clear explanations, identifying errors, and suggesting solutions.
- 3- Most participants considered Chat GPT ethical for academic purposes, but were less inclined to treat it as a formal academic resource.
3. There were significant concerns about over-reliance on Chat GPT and its potential impact on critical thinking skills.
4. Chat GPT had a positive impact on academic performance and task management.
5. Chat GPT moderately motivate creativity and boost confidence in assignments.
6. All findings were statistically significant, confirming the reliability and validity of the results.

The Qualitative Data Analysis:

Analyzing the qualitative data uncovers significant insights regarding the way in which EFL learners utilize Chat GPT for academic purposes. The participants, representing various semesters, exhibited a range of uses, perceptions, and experiences with the tool, often reflecting both its benefits and its limitations.

Chat GPT is widely used by students for specific academic tasks, such as reviewing grammar review, idea generation, and obtaining trustworthy information. Participant A highlighted their reliance on Chat GPT for checking grammar after completing their assignments, stating, "*I check out my grammar from Chat GPT after I do my homework*". Similarly, Participant F acknowledged its usefulness for practicing spoken English and brainstorming, saying, "*I use it for practicing my British accent and*

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

brainstorming ideas for writing assignments". Conversely, participant B, broadened its application to include the search for multimedia resources, such as videos and links, stating, *"I look for something like links, pictures, videos, anything regarding a topic."* Additionally, participant C described Chat GPT as invaluable for organizing their thoughts, saying, *"I use it to regularize my ideas, to know what I write, what I do"*. This perspective was echoed by Participant E, who emphasized the time-saving benefits when conducting research, stating, *"It's easier to find information directly in Chat GPT rather than searching on Google"*.

The participants expressed awareness of the potential ethical implications of relying on Chat GPT. Several participants emphasized the importance of moderation in its application. For instance, participant A made a concerted effort to limit their dependency on the tool, remarking, *"I don't want to exchange my mind with Chat GPT negatively"*. Similarly, Participant B cautioned against excessive use, stating, *"I recommend not using Chat GPT too often because it might crush your independence"*. This concern was echoed by Participant E, who explained their approach of using the tool sparingly, particularly under time constraints, saying, *"I don't use it except if I'm in a rush"*. While acknowledging the benefits of Chat GPT, the participants were aware that an over-reliance on it could undermine their independence and critical thinking abilities.

A recurring issue in the responses was the accuracy and reliability of Chat GPT's output. Participant F underscored the importance of verifying responses, stating that *"Not all the information that Chat GPT gives is right; we need to review"*. By the same token, participant D pointed out how Chat GPT often provides more focused results compared to Google, saying, *"It gives me the distinct thought directly"*, while also acknowledging the excessive irrelevant results encountered with conventional search engines. More to the point, participant 'C' reserved Chat GPT for intricate inquiries, opting for personal resources for simpler tasks: *"I go there to collect difficult information"*. These insights illustrate a cautious, yet practical approach by the participants in managing Chat GPT's limitations.

Despite some challenges, the participants reported generally favorable experiences with Chat GPT, acknowledging its effectiveness in assisting their

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

academic tasks. Participant F viewed it as a supplementary tool, describing it as “a starting point”, before engaging in further research. Participant A found it beneficial for enhancing language skills and reducing errors, stating, *“I use it to train my speaking skills and correct grammatical mistakes”*. Participant D valued its capacity to alleviate workload pressure by organizing schedules and sourcing relevant materials: *“I use it to save time... it makes a schedule for me”*. Overall, the participants appreciated Chat GPT’s efficiency in simplifying tasks and streamlining their workflow.

The strategies employed by the participants to ensure productive interactions with Chat GPT demonstrate an understanding of how to maximize its utility. Participant B highlighted the importance of providing detailed prompts, stating that, *“I provide details in my question to get the answer I want”*. Participant F emphasized the value of rephrasing ambiguous prompts to elicit better responses, explaining, *“I try to ask simple questions and repeat them for clarity”*. Likewise, Participant E suggested restructuring inquiries with specific details to refine responses and address their academic requirements effectively. These strategies illustrate the students’ ability to utilize the tool judiciously while addressing its limitations.

In conclusion, the findings obtained present a sophisticated view of Chat GPT’s function among EFL learners. Although the tool is widely regarded as a valuable aid for academic tasks, students remain mindful of its limitations and ethical implications. The participants demonstrated a balanced approach, using Chat GPT to improve efficiency and learning without compromising their autonomy or critical thinking abilities. This balance reflects a growing understanding of how to integrate AI tools effectively into educational practices.

The Main Findings of Qualitative Data:

1. Students use Chat GPT for tasks like grammar correction, idea generation, writing assistance, and speaking efficiency.
2. Chat GPT helps improve productivity, simplifies research, and enhances task efficiency.
3. Concerns about accuracy and reliability of information provided by Chat GPT.

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

4. Over-reliance on Chat GPT may affect students' independent problem-solving skills.
5. Students emphasized the importance of combining Chat GPT with independent learning and traditional research methods.
6. Most students see Chat GPT as a helpful starting point but not a replacement for deeper engagement with learning materials.

The findings obtained from both quantitative and qualitative data showed that Chat GPT significantly aids EFL students in academic learning tasks. The quantitative findings revealed that a majority of students use Chat GPT at a moderate frequency and perceive it as find it beneficial for improving the quality of their assignments, managing tasks, and increasing their confidence. These results are strongly supported by the qualitative findings, where students articulated their use of Chat GPT for grammar correction, writing support, and generating ideas. These findings align with the observations made by Salwa and Tyas (2024), in which they reported that 62% of students felt that Chat GPT enhanced their motivation to learn, especially in writing tasks. Additionally, Nunes et al. (2021) found that AI tools can improve student engagement and productivity, particularly when used for feedback and task efficiency (Abd Rahim et al., 2023; Salwa and Tyas, 2024). However, both methods in this study also revealed concerns regarding excessive dependence on such tools and their potential effects on independent thinking. In summary, the integrated findings suggest that while Chat GPT serves as a valuable academic resource, it is essential to it judiciously and in conjunction with traditional learning methods to foster the development of students' proficiency level.

Discussion and Conclusion

Discussion

The research findings are closely aligned with the themes identified in the literature review and data analysis, underscoring Usage Patterns, Ethical Considerations, Concerns, Overall Perceptions, and Effectiveness as key areas of focus. Both quantitative and qualitative data revealed a moderate level of Chat GPT usage among participants, coupled with a general

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

understanding of its potential advantages and drawbacks. The research participants exhibited a nuanced perspective, acknowledging its beneficial influence on academic performance while voicing apprehension regarding over-reliance and its implications for problem-solving skills. Additionally, students' readiness to share their use of Chat GPT indicates a dedication to upholding academic integrity, as highlighted in prior research.

The analysis of usage patterns revealed that both quantitative and qualitative assessments indicate the participants utilize Chat GPT as an auxiliary resource for a range of academic tasks, including writing, grammar correction, and brainstorming. This finding is consistent with the existing literature, which highlights the effectiveness of tools like AWE systems in delivering immediate corrective feedback and enhancing task efficiency (Grimes & Warschauer, 2010). For instance, Participant 'A' noted that they primarily use Chat GPT primarily for grammar verification, stating, *"I check out my grammar from Chat GPT after I do my homework"*, while the quantitative data confirmed moderate usage patterns among the cohort. The convenience of using Chat GPT for idea generation, noted by Participant 'C': *"one of the most important applications in our generation"*, aligns with research that underscores AI's contribution to fostering creativity and simplifying tasks (Nunes et al., 2021). Nevertheless, both datasets indicate that the participants consciously limit their reliance on this tool to preserve their independent learning capabilities, aligning with the literature's caution regarding excessive dependence on AI (Ranalli, 2021).

Regarding the ethical considerations, the findings gained indicate that Chat GPT is increasingly recognized as a valuable academic resource, yet they also raise concerns regarding its ethical ramifications and the preservation of intellectual independence. The research participants noted the necessity of moderation and highlighted the risks of excessive reliance on Chat GPT, which may compromise originality and critical thinking. This apprehension is echoed in studies conducted by Sila et al. (2023) and Dewi et al. (2023). Many participants disclosed their use of Chat GPT and demonstrated awareness of academic integrity, but also emphasized the need for responsible use, particularly under time constraints. These perspectives are in line with the concerns expressed by Eaton et al. (2021) regarding the challenges posed

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

by undetectable AI-generated content, as well as the insights of Pellett and Myers (2022) concerning the crucial role of educators in guiding students towards ethical and judicious use. Taken together, these findings highlight the necessity for organizational policies and informed intermediation to ensure that Chat GPT is used as a support tool rather than a substitute for independent intellectual endeavor.

On the other hand, the research findings regarding the concerns indicate a balanced and thoughtful approach to using Chat GPT. The participants expressed confidence in the tool, valuing its capacity to provide clear and straightforward outcomes, particularly when addressing more intricate tasks. At the same time, they voiced concerns about its accuracy and reliability, emphasizing the importance of verifying its outputs, as noted by Participant F. Although Chat GPT has the potential to enhance productivity, the participants acknowledged that it could promote a more surface-level approach to learning and may undermine independent thought, a concern also highlighted by Grimes and Warschauer (2010). The qualitative findings showed that while some participants openly disclosed their use of Chat GPT, others were less forthcoming, suggesting a need to raise awareness about academic integrity. These insights resonate with Godwin-Jones' (2018) assertion that AI tools may not fully meet the diverse and dynamic demands of contemporary academic work. Overall, the findings emphasize the importance of using Chat GPT judiciously and responsibly to complement, rather than supplant, a deeper engagement with learning materials.

The findings related to the overall perspectives indicate that the participants maintain a balanced view regarding the utilization of Chat GPT, recognizing its advantages while being mindful of its challenges. The mean score for overall perceptions was 3.69, indicating a moderate to high level of acceptance of the tool. The qualitative findings support this trend, as participant 'D' described Chat GPT as a resource that simplifies tasks and alleviates stress, stating: *"I use it to save time... it creates a schedule for me"*. However, the research participants also exhibited an awareness of the necessity to preserve their academic independence, demonstrating a mature approach to interacting with the technology. This emphasizes the importance of balancing the advantages of technology with the need for independent

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

thinking. This implies that the participants recognize the potential risks of over-reliance on AI and are dedicated to using it in a balanced and responsible manner.

The quantitative findings connected to effectiveness show that the participants have a strong belief in Chat GPT ability to enhance their academic performance, evidenced by a mean score of 4.04, which underscores the tool's perceived efficacy. In their responses during the interviews, participant 'F', for example described Chat GPT as "a starting point" for conducting research and completing assignments, reinforcing its supportive role rather than serving as a complete replacement. Additionally, participant A's remarks about utilizing the tool to improve language skills, stating: *"I use it to train my speaking skills and correct grammatical mistakes"*, are consistent with studies that highlight the contribution of AI to language learning and productivity enhancement (Nunes et al., 2021). This alignment between quantitative and qualitative findings suggest that students regard Chat GPT as an effective resource to complement their academic efforts, thereby enhancing both efficiency and learning outcomes.

To sum up, the findings obtained corroborate previous studies, showing a moderate utilization of Chat GPT, accompanied by recognition of its academic advantages, yet raising concerns regarding dependency and problem-solving capability. The research participants' willingness reflects a commitment to academic integrity and responsible usage.

Conclusion

This research investigated the integration of AI technologies, such as Chat GPT, into academic learning, focusing on its usage patterns, ethical considerations, concerns, perceptions, and effectiveness among EFL students. The research findings revealed that although Chat GPT serves as a valuable tool for enhancing tasks such as writing, grammar correction, and brainstorming, students remain cautious about over-reliance and its impact on independent learning. Both qualitative and quantitative analyses underscored its potential to facilitate assignments and improve academic performance, consistent with the literature that emphasizes the advantages of automated writing assessment and immediate feedback. However, concerns about accuracy, authenticity, and the risk of reduced problem-solving skills were

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

also significant. Students demonstrated a balanced approach, utilizing Chat GPT to complement rather than supplant traditional learning strategies, while acknowledging the importance of ethical practices and academic integrity. In conclusion, this research emphasizes the necessity for judicious integration of AI tools in education, supported by clear guidelines to maximize their advantages while fostering students' critical thinking and independence.

Recommendations

1. **Encourage Responsible Use:** Educators should provide guidelines that encourage students to use Chat GPT as a support tool rather than a replacement for learning, emphasizing its role in enhancing independent thinking and skill development.
2. **Focus on Feedback Training:** Students need to be trained to critically evaluate Chat GPT's responses and verify information to improve their accuracy and understanding of content.
3. **Balance AI with Traditional Learning:** Encourage students to combine AI tools with traditional resources like books, peer discussions, and teacher feedback to develop comprehensive academic skills.
4. **Incorporate Chat GPT into Curriculum:** Educational institutions can integrate the use of AI into their academic programs by teaching students how to formulate effective prompts and by examining the limitations of Chat GPT's, thereby enhancing its educational advantages.
5. **Promote Ethical AI Use:** Stress the importance of transparency in the application of Chat GPT, including the proper acknowledgment of AI assistance where applicable, to uphold academic integrity and build trust in its use.

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

References

- Abd Rahim, M. E., Abd Rahim, E. M., Razawi, N. A., & Mohamed, N. (2023). Students' perception on the use of Chat GPT as a language learning tool. *Ideology Journal*, 8(2). Retrieved from: <https://doi.org/10.24191/idealogy.v8i2.456>
- Abdul Rapa, A., Saja, I. & Azmi, A. (2024). The Use of Artificial Intelligence (AI) Translation Tools: Implications for Third Language Proficiency. *International Journal of Research and Innovation in Social Science (IJRISS)*, Vol. 8, No. 9. University of Technology MARA (UITM) Melaka and Perlis Branches. 1952-1960.
- Baskara, F. R., & Mukarto, F. (2023). Exploring the implications of Chat GPT for language learning in higher education.
- Camacho, A., Alves, R. A., & Boscolo, P.(2021). Writing motivation in school: A systematic review of empirical research in the early twenty-first century. *Educational Psychology Review*, 33(1), pp. 213–247. Retrieved from: <https://doi.org/10.1007/s10648-020-09530-4>
- Dale, R. (2021). GPT-3: What's it good for ?. *Natural Language Engineering*, 27(1), pp.113–118. Retrieved from: <https://doi.org/10.1017/s1351324920000601>
- Dewi, H. K., Rahim, N. A., Putri, R. E., Wardani, T. I., Rumambo, M. G., & Pandin, M. G. R. (2023). The use of AI (artificial intelligence) in English learning among university students: Case study in English department, Universitas Airlangga.
- Eaton, S. E., Mindzak, M., & Morrison, R. (2021). Artificial intelligence, algorithmic writing & educational ethics [Paper presentation]. Canadian Society for the Study of Education_[Société canadienne pour l'étude de l'éducation] (CSSE), Edmonton, AB, Canada. Retrieved from: <http://hdl.handle.net/1880/113569>
- Grimes, D., & Warschauer, M. (2010). Utility in a Fallible Tool: A Multi-Site Case Study of Automated Writing Evaluation. *The Journal of Technology, Learning and Assessment*, 8(6),pp. 1-44.
- Retrieved from: <https://ejournals.bc.edu/index.php/jtla/article/view/1625>
- Godwin-Jones, R. (2018). Second language writing online: An update. *Language Learning & Technology*, 22(1), pp.1–15.

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

- Goundar, S. (2012). Research methodology and research method. Research Gate. Retrieved from: <https://www.researchgate.net/publication/333015026>
- Hasanah, U., & Nurcholis, I. A. (2024). English education students' perception of the use of Chat GPT in writing articles. *Pubmedia Jurnal Pendidikan Bahasa Inggris*, 1(2), 10. Retrieved from: <https://doi.org/10.47134/jpbi.v1i2.298>
- McLeod, S. (2024). Vygotsky's Zone Of Proximal Development. Simply Psychology. Retrieved from: <https://www.simplypsychology.org/zone-of-proximal-development.html>
- Meniado, J. C. (2023). The impact of Chat GPT on English language teaching, learning, and assessment: A rapid review of literature. *Arab World English Journal*, 14(4), pp. 3–18. Retrieved from: <https://doi.org/10.24093/awej/vol14no4.1>
- Nunes, A., Cordeiro, C., Limpo, T., & Castro, S. L. (2021). Effectiveness of automated writing evaluation systems in school settings: A systematic review of studies from 2000 to 2020. *Journal of Computer Assisted Learning*, 38(2), pp. 599–620. Retrieved from: <https://doi.org/10.1111/jcal.12635>
- Pellet, S., & Myers, L. (2022). What's wrong with "Whatisyourname?" > "Quelestvotrenom?": Teaching responsible use of MT through discursive competence and met a language awareness. *L2 Journal*, 14(1), pp. 166–194. Retrieved from: <https://doi.org/10.5070/l214151739>
- Ranalli, J. (2021). L2 student engagement with automated feedback on writing: Potential for learning and issues of trust. *Journal of Second Language Writing*, 52, 100816. <https://doi.org/10.1016/j.jslw.2021.100816>
- Sila, C. A., William, C., Yunus, M. M., & Rafiq, K. R. (2023). Exploring students' perception of using Chat GPT in higher education. *International Journal of Academic Research in Business and Social Sciences*, 13(12), pp. 4044–4054. Retrieved from: <https://doi.org/10.6007/IJARBS/v13-i12/20250>
- Valova, I., Mladenova, T., & Kanev, G. (2024). Students' perception of Chat GPT usage in education. *International Journal of Advanced Computer Science and Applications*, 15(1). Retrieved from: <https://doi.org/10.14569/IJACSA.2024.0150143>

"Investigating the Role of Chat GPT on Accomplishing Undergraduate Students' Academic Learning Tasks"

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Xiao, Y., & Zhi, Y. (2023). An exploratory study of EFL learners' use of Chat GPT for language learning tasks: Experience and perceptions. *Languages*, 8(3), 212. Retrieved from: <https://doi.org/10.3390/languages8030212>

Yilmaz, H., Maxutov, S., Baitekov, A., & Balta, N. (2023). Student attitudes towards Chat GPT: A technology acceptance model survey. *International Educational Review*, 1(1), pp. 57–83. Retrieved from: <https://doi.org/10.58693/ier.114>