

Exploring the Pros and Cons of ChatGPT from the Perspectives of Postgraduate Students: A Pilot Qualitative Study at a Graduate Business School in a Public University

Shazanah Abdul Wahab^{1*}, Suharti Ishak², Zaizatul Husna Zaidi³ and Sharizan Sharkawi⁴

¹ Invest-in-Penang Berhad, No. 1, Jalan Sultan Azlan Shah, PSDC Building, 11900 Bayan Lepas, Penang

² Flextronics Technology Penang (M) Sdn Bhd, Plot 13, Kawasan Perusahaan Perai 4, 13600, Perai, Penang

^{3,4} Arshad Ayub Graduate Business School, Kompleks Al-Farabi, Jalan Ilmu/1, UiTM, 40450, Shah Alam

*Corresponding author: shazanabdul@gmail.com

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ABSTRACT

This study aimed to understand the pros and cons of using ChatGPT, an advanced language model from OpenAI, in education. While technology offers new opportunities for both academics and students to enhance learning, its actual impact on education is still debated. Therefore, this study focused on understanding students' real-life experiences and thoughts, with the aim of uncovering the multiple impacts of ChatGPT on communication, research, and learning in an academic setting among postgraduate students at a Graduate Business School in a Public University in Malaysia. In this qualitative exploratory study, semi-structured online interviews were employed. A pilot group of seven participants was selected through purposive and snowball sampling methods. During the interviews, participants freely shared their thoughts and reflections on using ChatGPT in their academic activities. The manually collected data underwent a comprehensive analysis that included four steps: independent coding, initial open coding, refined coding, and axial coding. The resulting codes were then organised into broader themes that provide a holistic understanding of perspectives related to the use of ChatGPT in a postgraduate academic setting. This qualitative study attempted to provide insights into the real-life experiences of postgraduate students using ChatGPT. A limitation of the study is its narrow focus on the responses of a few postgraduate students at that particular Graduate Business School, which may not represent the entire postgraduate community. Based on the interviews, the participants acknowledged that ChatGPT is an alternative for them to prepare their research due to time restrictions (as working adults). Essentially, all the participants agreed that although ChatGPT has more advantages than disadvantages, it will never replace the function of academics. Human touch, emotions, interactions, attractions, and senses cannot be replaced by systems, machines, or robots. Future studies could address this issue by involving participants from various institutions and exploring the perspectives of educators instead of only focusing on students.

Keywords: artificial intelligence, ChatGPT pros, ChatGPT cons, graduate business school, postgraduate students, public university

INTRODUCTION

ChatGPTs are intelligent talking robots developed by OpenAI based on InstructGPT (Ouyang et al., 2022), which is taught to rapidly follow instructions and provide thorough answers (Qasem, 2023). Kirmani (2022) asserted that ChatGPT, an OpenAI public tool, is built on the GPT language model technology. It is an intelligent chatbot capable of satisfying a broad range of text-based demands, such as answering simple queries and doing more complicated duties like leading people through difficult communications regarding productivity challenges (Liu et al., 2021).

Originally, ChatGPT came from the combination of G-Generative, which predicts the following word (language model), P-Pre-trained, where previously trained on a large amount of data, T-Transformers, the encoder-decoder-based neural networks, and ChatGPT means GPT fine-tuned for conversations (chatbot). The progression of GPT

has been divided into four main phases, which are GPT1, GPT2, GPT3, ChatGPT, and coming soon GPT4. As shown below, Figure 1 summarises each evaluation's technical explanation.

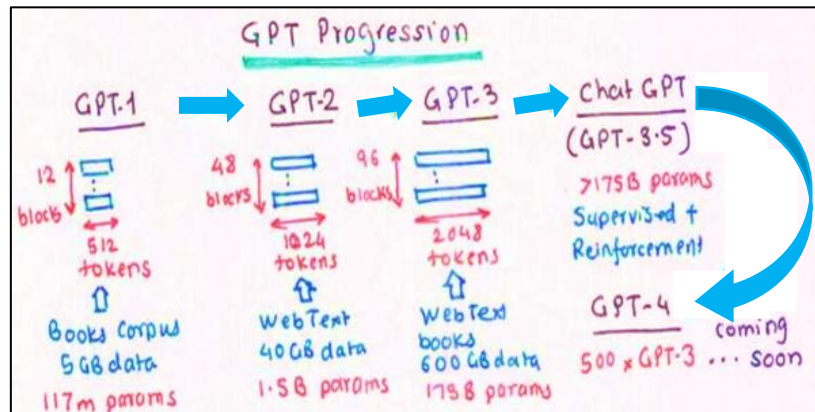


Figure 1: The ChatGPT Progression
(Source: Yoger Kulkarni, 2023)

ChatGPT is known as the most powerful chatbot. Since its launch in November 2022, it has experienced rapid growth and widespread adoption. It has received one million users in five days and about one hundred million active users after almost three months. This record has beaten other well-known applications, such as Instagram, Facebook, Twitter, Netflix, and others (<https://bootcamp.uxdesign.cc/chatgpt-vs-bing-chat-which-is-better-2e46fa821d7d>). ChatGPT is expected to generate a revenue of \$200 million by the end of 2023 (<https://www.beyondgames.biz/41356/openais-chatgpt-could-generate-1-billion-revenue-by-2024/>). Its role in education, however, remains a topic of contention. This new education invention gives a new opportunity to academia and students to explore and enhance the learning process.

According to Shidiq (2023), education sectors, particularly schools, universities, and colleges with sufficient educational resources extensively use artificial intelligence to facilitate learning. They use this type of artificial intelligence in conjunction with virtual teachers, smart classrooms and materials, automated assessments, and personalised learning. The system's simplicity helps students to complete their assigned homework or assignments by responding to text or voice queries. ChatGPT, on the other hand, provides many challenges, especially in developing students' creative writing skills; however, there are also some benefits. Meanwhile, according to Malinka et al., the most discussed topics are typically malicious artificial intelligence usage (cheating, plagiarism) and its consequences (loss of critical thinking, etc.). A teacher's professional competencies include positive personal attributes, preparation (such as subject matter knowledge), and the ability or skills to recognise and comprehend students' needs and learning processes, all of which are required for effective instruction (Abd & Mashudi, 2022). There are also positive effects, which, with appropriate assistance, can significantly accelerate some phases of learning.

In a recent statement, the Malaysian Academic Movement (Gerak) said there was an “urgent need” for a high-level task force or committee of experts from education and technology to develop cross-sector policies and guidelines to meet its potential and challenges (Thomas, 2023). It is critical to consider how to use ChatGPT's technology properly and morally as a professional to improve work rather than misuse it (Shidiq, 2023). The educational community must engage in a debate about the use of ChatGPT as it bears the responsibility of determining its ethical and transparent use, as well as establishing a set of ground principles (Lund & Wang, 2023). Thus, it is vital to consider the potentially significant benefits of using this technology in the higher education system and its implications (Malinka et al., 2023). However, little is known about the awareness of ChatGPT among postgraduate students. How well do postgraduate students understand the pros and cons of ChatGPT, and what is the reason and frequency for which they have used ChatGPT? Another important criterion is the postgraduate students' impressions of ChatGPT, and whether it is a valuable tool for their academic work. Most existing research is very much focused on undergraduate university and college students (Shidiq, 2023; Dai, Liu & Lim, 2023).

Therefore, the primary purpose of this study was to gain a comprehensive understanding and explore the pros and cons of ChatGPT in the education sector, with a particular focus on improving research writing from the postgraduate students' viewpoints in a Graduate Business School at a Public University in Malaysia. Participants

from the Graduate Business School were selected because the school had permitted postgraduate students to use ChatGPT as an AI tool for learning. This study was to investigate deeper into the usage and capture the experience of the students. In addition, all the authors were students and also working adults, providing a convenient pool of participants who are actively involved in higher education and may have an understanding of developing technologies such as ChatGPT.

BACKGROUND OF STUDY

ChatGPT (Chat Generative Pre-Trained Transformer) is now a buzzword in our community, particularly in the education community, as it has the capability to generate human-like responses to text-based prompts developed by OpenAI. This type of AI chatbot was trained with reinforcement learning, where all the answers were generated based on a large corpus of text from various internet sources, including articles, websites, and books (Brown et al., 2020). Despite ChatGPT garnering significant attention in the research community, its study remains limited due to its novelty and the scarcity of published research outcomes worldwide (Karthikeyan, 2023).

As the world's most advanced chatbot, ChatGPT can impress higher education by providing opportunities for students to utilise this artificial intelligence technology in their academic writing or research (Idil & Gulen, 2023). Researchers and students believe ChatGPT can overcome writer's block by providing 24/7 virtual assistance to brainstorm, advise, and guide them, ultimately boosting the speed of their overall work (Toh & Michelle, 2023). Additionally, ChatGPT is capable of producing lengthy research papers and articles. To evaluate ChatGPT's performance in taking part in academic research, Srivastava (2023) was among the first researchers that tested ChatGPT's capability to completely generate a research paper, starting from the topic selection to creating all the relevant content, where the output has been published in the International Conference on Learning Representations (ICLR) 2023. Moreover, ChatGPT has also shown great potential in assisting the process of conducting a comprehensive systematic literature review by effectively generating Boolean queries in a short period of time (Wang et al., 2023).

On the other hand, ChatGPT also poses threats to the education industry, raising questions about the novelty of the research area (Karthikeyan, 2023). In a similar vein, the unethical use of ChatGPT by students could lead to human unintelligence and unlearning, as it eliminates critical thinking and normalises plagiarism (Al Afnan et al., 2023). This is also supported by Idil and Gulen (2023), asserting that the production of research content may encounter reliability issues, leading to plundering and ethical issues. Similarly, the usage of ChatGPT in conducting research work would expose factual errors and misinterpretations, as well as originate from less credible sources, thereby jeopardising the quality of the produced research (Van Dis et al., 2023).

Despite the opportunities and challenges of ChatGPT, experts believe this AI tool can positively impact the learning community when used responsibly, potentially serving as a valuable tool for both students and teachers in enhancing academic-related activities. Nevertheless, how this ChatGPT influences postgraduate students in a Graduate Business School in a Public University in Malaysia, is still in question, and this qualitative research was conducted to explore in detail the pros and cons of the ChatGPT as an assistance in their research work.

METHOD

This study employed a qualitative research approach that allows the researchers to understand the pros and cons of ChatGPT among postgraduate students, particularly in improving their research work. In addition, the study employed an interpretivism research paradigm, which emphasises the significance of comprehending the subjective meanings and interpretations individuals assign to their experiences (Creswell, 2013). An inductive approach was applied to understand the essence of the postgraduate students' experiences using ChatGPT, where data were collected from interview sessions.

This study conducted semi-structured interviews online in April 2023 using the Zoom, Webex, and Microsoft Team platforms. Seven participants participated in this study. The sample size is relatively small, as this is a pilot study. Pilot studies often involve a smaller sample size to refine research methods and assess the feasibility of a larger study (Dwivedi, 2023). A non-probability sampling technique was chosen as it incorporated both purposive and snowball sampling. The purposive sampling ensures that all the participants have first-hand experience with the research topic, and thus the Graduate Business School's postgraduate students who have been using ChatGPT were chosen as a sample for this pilot study. Besides that, due to time and resource constraints, samples were gathered from friends' circles and then followed by the snowballing method to reach additional participants. Table 1 below provides an overview of the participant's profiles:

Table 1: Details of Participants' Profiles

Participant ID	Gender	Age	Designation	Postgraduate Program
Participant 1	Male	42	Manager	Master in Business Administration - Executive (EMBA)
Participant 2	Female	41	Production Trainer	Master in Business Administration - Executive (EMBA)
Participant 3	Female	37	Lecturer	Master in Business Administration - Executive (EMBA)
Participant 4	Male	32	Freelancer	Master in Business Administration - Executive (EMBA)
Participant 5	Female	29	Executive	Master in Business Administration - Executive (EMBA)
Participant 6	Female	29	Self-Employed	Master in Business Administration - Executive (EMBA)
Participant 7	Female	35	Executive	Master in Business Administration - Executive (EMBA)

In this study, open-ended interview questions guided the interview sessions, providing the researchers with detailed and in-depth information about ChatGPT usage. Open-ended questions help capture the complexity and diversity of responses, providing unexpected discoveries, letting respondents express themselves freely and truthfully, and mitigating the researcher's or questionnaire's bias (Aznar-Mas, Huerta & Marin-Garcia, 2023). Hence, for this study, the questions mainly comprised the pros and cons of using ChatGPT in assisting the participants in their academic writing or research work. Several probing questions were also asked when the participants' initial responses were insufficient or unclear. One of the advantages of open-ended and probing questions is that they allow the respondents to use their own language to express their ideas and feelings, resulting in more thorough and meaningful information (Luebker, 2020). All the interview sessions lasted about half an hour on average.

Prior to the interview, the participants were briefed about its purpose and objectives, and they were provided with a consent form to facilitate the interview. The researchers then informed the participants about the importance of integrity, confidentiality, and privacy when participating in this study. No information, facts, visuals, statistics, or evidence pertaining to the participants or organizations would be disclosed. The interviewees granted permission for the recordings, which the researchers stored on their devices and re-played during the transcribing process. All the interview responses were transcribed manually.

RESULTS AND ANALYSIS

This study adopted the constant comparative method to analyse the data, whereby the data are compared within and across cases to identify the similarities and differences, which then assist in developing any related concepts and categories (Glaser & Strauss, 1967). This method is effective in identifying patterns and relationships that exist within the data through a process of constant comparison and refinement. The data were analysed according to four steps: 1. Independent Coding 2. Initial Open Coding 3. Refined Open Coding 4. Axial Coding

1. Independent Coding

The researchers coded all seven transcripts individually and separately. The coding was identified by different colours, whereby yellow represents the pros and blue represents the cons as per Table 2. There were some differences in the codes because of various interpretations by different participants; the codes were directly derived from participant conversation, and there were some duplications based on the code's meanings. Although the

participants were interviewed independently, the researchers engaged in mutual consensus by discussing, correcting, and summarising the coding.

Table 2: Independent Coding

Author 1	Author 2	Author 3
Helpful	Ideas about assignment	Speed up academic writing
Simplify	Library/dictionary	Saves time
Save Times	Information	Assistant
Stuck	Reference	Literature review
Generate Ideas	Counter-check to verify	Easier
Help to Write	Saves time in searching for article	Saves time
More Focus	Sentence structure	Relevant sources
Easy to Use	Conjunction words	Free access
Misinterpret	Example and suggestions	Summarise journals
Use Specific Keywords	Shortcuts	Plagiarism issue
Not Reliable	Recommendations	Re-check
Dependent	Idea	Do not trust AI tool
Limited Usage	Google search to find the actual article	Short cut
Misinterpret	Doubt information	less meaningful
Fast Ideas	Do not understand the question	Hinder critical thinking
Convenient	No critical thinking	Not independent
Provide Answers	Only to assist	Save time
Search Topic	Not in the ChatGPT program	Easier
Literature Review	Ability/functionality	Convenient
Independent Variables	Capability in problem-solving	Citation
Guidelines	Mimic/forecast the future	Definition
In-Depth Citation	behaviour	Assistant
References	Save time	Busy schedule
Inaccuracy	Predict the outcome	User-friendly
Based on What is Asked	Improvement in research	Easy to use
Not Up-to-date	Links to resources	Helpful
	User-friendly	Literature review
	More interactive	Citation
	Self-learning	Reliable
	Problem solver	Website hang
	Can answer for anything	Refresh
	Can get the answer easily	Loss conversation
	Lazy	Plagiarism issue
	Less potential to think	Take time to rephrase
	Innovation	
	Critical thinking decreased	
	Take things easily	
	Less tedious procedures	
	Increase knowledge	
	Provides information	
	Plagiarism issues	
	Manipulate	
	No stability thinking	

2. Initial Open Coding

Based on the interviews, 29 open codes were found for pros as per Table 3 and 14 were found for cons, as illustrated in Table 4. The entire set of codes was then examined and refined. Throughout the data analysis process, continuous refining took place.

Table 3: Initial Open Coding - ChatGPT's Pros

Convenient	Saves time	More interactive
Generate Ideas	Search topic	Self-learning
Guidelines	Simplify	Innovation
Helpful	Capability in problem-solving	Less tedious procedures
Deciding Variables	Functionality	Increase knowledge
In-Depth Citation	Mimic/forecast the future	Summarise journals
Literature Review	Construct sentences	Relevant sources
More Focus	Recommendations	Free access
Provide Answers	Improvement in research	speed up academic writing
References	User-friendly	

Table 4: Initial Open Coding - ChatGPT's Cons

Misinterpret	Information not updated	Less meaningful
Use specific keywords	No critical thinking	Website hang
Not reliable	Lazy	Loss conversation
Limited usage	Take things easily	Take time to rephrase
Inaccuracy	Plagiarism issues	

3. Refined Open Coding

Some codes had been grouped and renamed. Some of the examples are “increase knowledge” renamed as “self-learning”, “providing answers” and “capability in problem-solving” which were renamed as “reliable”, “less tedious procedures” renamed “simplify”, and “speed-up academic writing” grouped as “save time”. Tables 5 and 6 illustrate the pros and cons that emerged from refined open coding.

Table 5: Refined Open Coding - ChatGPT's Pros

Helpful	Guidelines	Deciding Variables	Summarise Journals	Self-learning
Save Time	Search Topic	In-Depth Citation	Improvement in Research	Innovation
Simplify	More Focus	Literature Review	Functionality	Interactive
Free Access	Construct Sentences	References	Mimic/Forecast the Future	
Generate Ideas	Relevant Sources	Recommendations	User-friendly	

Table 6: Refined Open Coding - ChatGPT's Cons

Misinterpret	Loss conversation	Take things easily
Inaccuracy	Use specific keywords	Plagiarism issues
Limited Usage	No critical thinking	Take time to rephrase
Website Hang	Lazy	
Information not updated	Less Meaningful	

4. Axial Coding

The open codes were then classified into five ChatGPT pros axial codes as shown in Table 7 and three ChatGPT cons axial codes as in Table 8

Table 7: ChatGPT pros axial codes

CONVENIENT	INFORMATIVE	SOLVING PROBLEMS	USER-FRIENDLY SYSTEM	IMPROVE RESEARCH
Helpful Save Time Simplify Generate Ideas	Guidelines Search Topics More Focus Construct Sentences Relevant Sources Increase Knowledge	Functionality Mimic/Forecast Future	Self-learning Innovation Interactive Free Access	Deciding Variables In-Depth Citation Literature Review References Recommendations Summarises Journals

Table 8: ChatGPT cons axial codes

UNRELIABLE	TECHNICAL LIMITATIONS	LACK OF CRITICAL THINKING
Misinterpret Inaccuracy	Limited Usage Website Hang Information Not Updated Loss Conversation Use Specific Keyword Take Time to Rephrase	No Critical Thinking Lazy Less Meaningful Take Things Easily Plagiarism Issue

Axial Code (ChatGPT Pros)

The interview revealed five benefits of using ChatGPT in postgraduate research work: convenience, informativeness, problem-solving, a user-friendly system, and improved research.

Convenient

Some educators have already begun testing the efficacy of ChatGPT by incorporating it into their educational activities (e.g., research, teaching, assessment). They discovered that by automating certain tasks and processes, ChatGPT provides convenience and can free up time for other important activities, like spending more time with students (Alshater, 2022; Terwiesch, 2023). The research findings indicate that the primary reason postgraduate students use ChatGPT is its convenience (helpful, saves time, simplifies, and generates ideas). This is mainly because the participants (postgraduate students) are both full-time working adults and part-time students. This convenience was manifested in many ways, including:

"... ChatGPT can also save time by providing references and citations as well as the required information" [Participant 1]

"Using ChatGPT simplify my work and save a lot of time" [Participant 4]

"ChatGPT helps me to generate ideas that I have never thought of" [Participant 4]

"ChatGPT helps speed up my academic writing and saves my time" [Participant 6]

"... also definitely be helpful, especially in doing my literature review, as it is easy to find the past relevant studies" [Participant 7]

Informative

Alotaibi et al. (2020) found that chatbots can improve student performance and knowledge retention, which aligns with the theme of personalised learning in this study's analysis (Firat, 2023). The study revealed that the participants found ChatGPT to be highly informative:

"ChatGPT is an AI application/website that provides a lot of information in advanced mode" [Participant 1]

"It will make things easy for the postgraduate students because they can ask the things that ChatGPT can answer for anything" Participant 3]

Solving problems

ChatGPT focuses on integrating critical thinking, creativity, problem-solving, and digital literacy skills by prioritising curricula and pedagogical approaches that better address the capabilities of AI tools (Firat, 2023). ChatGPT helps generate ideas for lesson plans and class activities or plug in their students' writing to get recommendations and edits (Fahr, 2023). Several participants agreed that ChatGPT solves their problems:

"If we have a problem, we ask then ChatGPT can solve the problem" [Participant 3]

"Before this, I will use Google to get all the information, but now when I'm using ChatGPT, it is so convenient. I only need to write what information I need, any citation, or even the definition of a certain concept, and ChatGPT will provide the answer, without having to open lots of websites to search and get the information." [Participant 7]

User-friendly system

According to Firat (2023), previous research has demonstrated that chatbot technologies can enhance student interaction and learning processes (D'Mello et al., 2014), enrich learning experiences by impacting student success in higher education (Winkler & Söllner, 2018), and potentially improve student motivation, engagement, and learning outcomes (Deng & Yu, 2023). In this study, the participants agreed that ChatGPT is user-friendly, interactive, and easy to use.

"I think ChatGPT has offered a very user-friendly platform. It is very easy to use ChatGPT, where you just need to chat, and all your inquiries will be answered." [Participant 7]

"ChatGPT gives shortcuts or recommendations to get the related article to the study" [Participant 2]

"ChatGPT is more interactive, so we can do self-learning, and they can learn or initiate ways which we can learn ourselves" [Participant 3]

Improve research

Students use ChatGPT as a research tool, creating research papers, essays, and homework assignments by simply asking the application to do so (Fahr, 2023). Several participants shared their experiences about how ChatGPT enhanced their research work:

"It helps to provide guidelines on writing starting with the introduction and then elaboration on the points. It helps us to generate ideas on what to write and to highlight the main purpose of the thesis" [Participant 4]

"The most benefits for me are when we search for a topic for our research. This is to ensure the topic that we have chosen is supported with literature review" [Participant 5]

Axial Code (ChatGPT Cons)

The interview revealed three drawbacks of using ChatGPT in postgraduate research work: unreliability, technical limitations, and a lack of critical thinking.

Unreliable

As AI tools like ChatGPT are reliable only according to the information that has been fed into the systems, they may not have access to the most up-to-date information (Levente, 2023). It cannot be denied that ChatGPT may provide incomplete or imperfect responses, necessitating users to verify and evaluate the information from other sources. ChatGPT may struggle to understand complex queries or context-specific language, which leads to incorrect or irrelevant responses (Levente, 2023). This unreliability was manifested in many ways, including:

"The data generated from ChatGPT is limited up to the year 2021..." [Participant 5]

"For me, I have to recheck the information given by ChatGPT as I don't 100% trust the AI tool" [Participant 6]

Technical limitations

ChatGPT has technical limitations that impact its performance and accuracy. For instance, ChatGPT may not always have a deep understanding of the context in which a given question is made. Besides that, ChatGPT can also experience technical issues such as downtime, bugs, or errors, which can lead to a poor user experience (Levente., 2023). Several participants have shared their experience with the technical limitations of ChatGPT:

"For me, I did encounter a problem where the ChatGPT website will usually hang whenever I use it." [Participant 7]

"It did happen several times and I need to refresh a few times to continue using ChatGPT. Then I need to retype everything as all the conversation with ChatGPT is lost." [Participant 7]

Lack of critical thinking

The usage of chatbots like ChatGPT may hinder critical thinking as the users tend to rely on the answers provided by ChatGPT. Moreover, the users may also feel less motivated to engage in critical thinking as there is only one-way interaction, and they may also rely on surface-level information without any effort to deeply think about the issues at hand (Ho et al., 2020).

Aside from that, the users cannot come up with creative solutions or think outside the box, which can be a limitation in complex inquiries. It is important to note that humans can use creativity and problem-solving skills to find unique solutions to any issue, which is something that ChatGPT cannot do (Levente, 2023). In a similar vein, the use of ChatGPT exposes users to a high probability of plagiarism issues, especially if they fail to properly paraphrase and cite the information. This lack of critical thinking was expressed in many ways in this study, including:

"Relying on ChatGPT will hinder the student's critical thinking and there will be a problem later as the student cannot be independent in their research writing." [Participant 6]

"There is a high probability to get plagiarism. So, I need to change the sentence / rephrase first to avoid high plagiarism." [Participant 7]

LIMITATIONS OF THE STUDY

This study has several limitations that should be considered and used to improve future research. To begin, the sample size was limited to a small group of postgraduate students from a graduate business school in a public university in Malaysia. As a result, the findings may not be typical of other universities' larger postgraduate student populations. The perspectives gathered in this study might be influenced by the participants' academic environment, fields, or demographic traits, thereby limiting the generalisability of the findings. Because this was a pilot project, the scope was purposely limited in order to evaluate the feasibility of the research methodology and obtain preliminary findings. Future research could broaden the reach by enrolling a wider and more diverse sample of postgraduate students, not just from this particular Graduate Business School, but also from other faculties, institutions, and colleges. Such an expansion would allow for a more in-depth evaluation of the benefits and drawbacks of ChatGPT in various academic settings and student groups.

Furthermore, while this study only examined the viewpoints of postgraduate students, future research could benefit from integrating the opinions of other stakeholders, such as academicians and undergraduate students. Academics, in particular, may provide useful insights into the educational implications of adopting ChatGPT in higher education, such as potential effects on teaching approaches, student engagement, and academic integrity.

While this pilot study provides useful preliminary insights, its limitations underscore the need for additional research to gain a more thorough and differentiated understanding of the function of AI tools such as ChatGPT in higher education. Expanding the sample size, expanding the participant pool, and investigating the viewpoints of other stakeholders will be critical steps toward progressing this field of study.

CONCLUSIONS AND RECOMMENDATIONS

Based on the interview sessions, the participants agreed that ChatGPT is convenient to use as all of them are full-time working and part-time studying. Given their time constraints, ChatGPT serves as an alternative guide for them to prepare their research. A wealth of information can be obtained from ChatGPT, which can help to expand students' knowledge and aid in their research preparation. ChatGPT helps postgraduate students solve problems,

especially in writing and preparing for research papers. ChatGPT can also suggest variables, previous research citations, etc. The system is user-friendly, easy to use, and serves as an alternative tool for postgraduate students to generate ideas and collect information.

Although there are many pros for ChatGPT, there are also some cons. ChatGPT is not entirely reliable due to its inability to comprehend certain types of questions being asked. This is due to the technical limitations whereby the information stored is only up to the year 2021. Besides that, excessive reliance on ChatGPT may lead to a reduction in human creative thinking skills, as they become overly dependent on the chatbots. ChatGPT can produce college-level essays in seconds and meet with both enthusiasm and concern among Malaysian academics. The near indistinguishability of its precise and comprehensive responses from human-written text raises concerns about its potential use for plagiarism and cheating (Thomas, 2023).

Some recommendations to create awareness about ChatGPT use among university students include incorporating training sessions into the academic curriculum. These sessions should emphasise the responsible use of ChatGPT, focusing on its role as a supplemental tool rather than a replacement for critical thinking and original work. For example, organising workshops on academic integrity, examining the ethical issues of utilising AI in academic work, and advocating for best practices for honesty in scholarly pursuits could be beneficial. The University should consider adopting clear standards for the usage of AI tools such as ChatGPT, which outline permissible actions and the implications of misuse in academic settings. Establishing procedures to monitor the influence of AI technologies on students' academic performance and integrity, allows for early actions if detrimental patterns emerge. Likewise, by establishing regular feedback and continuous discussions regarding the influence of ChatGPT on teaching and learning, students can share their experiences and issues with ChatGPT, allowing the university to adjust its methods and policies in real time depending on student feedback.

IMPLICATIONS OF THE STUDY

This study found numerous potential areas for improvement in the use of ChatGPT, such as issues of translating complicated inquiries, the development of inaccurate or irrelevant responses, and potential biases in the content created. Future research could go deeper into these challenges, investigating how these constraints impact the user experience and educational outcomes for students. Future studies could help develop more effective and dependable AI technologies targeted to the demands of postgraduate students and the academic community as a whole. Postgraduate students may also give insight into the ethical implications of using AI chatbots such as ChatGPT. This may include worries about data privacy, algorithmic biases, or the proper application of AI in academic contexts. Based on the findings, there may be a need to incorporate AI technologies such as ChatGPT into the curriculum, not just as supplemental resources but as essential components of teaching and learning. It could help guide decisions about how to best employ these tools to improve student learning results. It could lead to the creation of rules or policies to ensure the ethical use of AI in academic contexts, addressing issues such as academic integrity, data privacy, and the risk of over-reliance on AI tools. Furthermore, academicians should evaluate how these technologies are used, ensuring that they complement rather than replace critical thinking and problem-solving skills.

In essence, all the participants strongly agreed that, although there are more pros than cons, ChatGPT can never replace the role of academicians. Human touch, emotions, interactions, attractions, and senses can never be replaced by systems, machines, or robots. Two-way and face-to-face interactions with academicians/humans are very important where in-depth discussions and changing of opinions take place, especially, in academics. According to Lazim, Abdullah, Ariffin, Hassan, Jaffri, Jamal, and Samah (2023), support from lecturers is very important for students to complete tasks effectively. In addition, based on the study's findings, there may be an opportunity to tailor ChatGPT to the Malaysian educational context, taking into account language preferences, cultural concerns, and academic standards. Postgraduate students' insights could provide significant feedback to software developers working on ChatGPT and similar applications. They may use the findings to enhance the tool's user experience, usefulness, and accessibility for academic reasons.

AUTHORS' CONTRIBUTIONS

SAW prepared the introduction, problem statement, research objectives, and research questions, as well as the interview consent form. SI prepared the pros and cons of ChatGPT, the interview questionnaire, and strategies for engaging participants for the interview sessions. ZHZ prepared the problem statement and interview questionnaire. All authors contributed to the literature review, conducted interview sessions, coded, transcribed, and analysed the gathered data, and provided inputs for findings and discussion. SS reviewed and provided feedback on the whole article.

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CONFLICT OF INTEREST STATEMENT

“None declared”

DECLARATION OF STATEMENT

The lead author confirmed the manuscript's integrity, stating that it provides an honest, accurate, and transparent account of the reported study. No crucial aspects of the study were omitted, and any discrepancies from the planned (and, if applicable, registered) study have been appropriately explained.

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