

Challenges faced by students using ChatGPT: A qualitative study at private universities in Malaysia



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ABSTRACT

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The rising presence of artificial intelligence (AI) tools such as ChatGPT is shifting the way students are involved with academic content. While many students value its capability to quickly assist with assignments, create content, and support study efforts, the practice of using ChatGPT also presents various challenges in educational settings. The purpose of this study is to explore the problems students face when depending on ChatGPT for academic work. Using data collected from 441 students at two private universities in Malaysia, a thematic analysis method was employed to identify recurring themes. The findings reveal seven central themes: concerns about accuracy and reliability, technical access issues, difficulties in crafting effective prompts, limitations in subject-specific understanding, language and communication barriers, questions of academic integrity, and emotional or cognitive effects. The results also indicate that although students recognize the tool's usefulness, there are significant issues such as distortion of information, overdependence, ethical risks, and inadequate access. The implications of this research emphasize the importance of equipping students with improved digital literacy skills, establishing clear strategies for ethical AI use, and ensuring AI tools are adaptable to diverse academic and linguistic needs. These insights aim to promote a more responsible and balanced integration of AI in higher education, supporting students in leveraging these technologies effectively while mitigating associated risks.

Contribution/ Originality: This research is unique and contributes by focusing on Malaysian university students' experiences with ChatGPT, highlighting issues such as over-dependence, misrepresentation, and academic integrity. Unlike previous studies that primarily emphasize benefits, this research distinctly identifies the limitations and practical concerns within real educational settings.

1. INTRODUCTION

The usage of artificial intelligence (AI) in education has significantly reformed how students find and engage with academic information (Administrator, 2021; Alkan, 2024; Londoño, 2024). One of the most prominent developments is ChatGPT, established by OpenAI, which has rapidly become common for its capacity to produce answers that thoroughly mimic human conversation (Dwivedi et al., 2023; Javaid, Haleem, & Singh, 2023). Because it is easy to access and offers fast, on-demand support, many students turn to ChatGPT for assistance with projects, learning, and content making (Dwivedi et al., 2023; Youssef, Medhat, Abdellatif, & Al Malek, 2024). AI can tailor learning content to individual learning styles and modes by improving student engagement and understanding (Jagwani, 2024; Singh, 2024) enables personalized learning experiences and allows for more cooperative

communication between teachers and students (Amsal & Sagita, 2024). AI can modify educational content to specific student needs, learning preferences, and paces (Olabiya & Henry, 2024).

This personalized experience will increase response and adaptive content delivery, thus helping persevere student interest and motivation (Duarte, Pérez, Beltran, & García, 2023). Moreover, AI tools modernize administrative duties by permitting educators to emphasize more on instructional excellence. This revolution in educational practices promotes an improved learning environment, thus eventually enlightening how knowledge is disseminated and learned by students across various fields (Mon, Wasfi, Hayajneh, & Slim, 2023). AI has changed education by offering personalized learning experiences, improving student engagement through adaptive learning platforms, and applying smart teaching systems. These inventions redesign how students access and cooperate with academic material, making learning more effective and personalized to individual needs (Ou, 2024).

However, this digital aid has amplified the ease of committing plagiarism, requiring the use of detection tools and educational efforts to maintain academic honesty (DeJong, 2014). Its rising use also carries a variety of encounters. Though some students realize it as a supportive tool, others face issues like imprecise answers, technical malfunctions, language problems, and right concerns such as plagiarism (Nashwan, Sadallah, & Bouteraa, 2023). The application of AI in education increases concerns about data confidentiality, principled use, and the necessity for adequate guidance for instructors (Singh, 2024). Safeguarding reasonable access to AI technologies ruins a serious challenge that must be spoken to expand their potential in education (Duarte et al., 2023). The nonexistence of human decision and emotional understanding also restricts its usefulness for more tailored learning experiences (Ahmad et al., 2023). As universities in Malaysia continue to accept AI-based tools (Al Shloul et al., 2024), it's important to discover how students experience these technologies in their academic lives.

This study aims to explore the common challenges students face when utilizing ChatGPT, with the objective of highlighting its limitations and offering ideas for more effective and accountable practices in educational settings. While the tool proposes rich benefits, its downsides cannot be ignored (Ngo, 2023). Concerning the consistency of information, preserving academic honesty, and potential influences on critical thinking were often noted (Lukashchuk, 2023), later potentially reducing critical thinking and creativity if not managed properly (Devaki, 2025). Many students struggle to determine whether ChatGPT's answers are precise or reliable, increasing the risk of depending on misinformation (Miah et al., 2024; Purwasih & Sahnan, 2023). Additionally, because the tool produces writing that looks well-written, students might accidentally submit AI-produced content as their own, raising serious academic trustworthiness concerns (Ruyat, Jatiwahyuni, & Suroso, 2024). Another key problem is over-dependence on ChatGPT, which could depressingly affect students' ability to think critically and solve problems on their own. When students get used to fast responses, they may participate less actively with their homework (Yazid & Dzulfikri, 2024). This can distort their thoughtfulness of knowledge, particularly when AI replies are acknowledged without correct questioning or authentication (Azmi et al., 2024).

For students with adequate digital literacy assistance, the attraction of using ChatGPT as a shortcut can further lead to detachment and damage to the uniqueness of their work (Anon, 2024). In some cases, this dependence may even affect students' motivation and creativity (Kayali, Yavuz, Balat, & Çalışan, 2023). Despite these challenges, the rising usage of tools like ChatGPT indicates a need for educational institutions to change. Clear procedures, support systems, and digital literacy education are essential to safeguard students who can benefit from AI while avoiding its possible drawbacks. Reassuring accountable and well-versed usage will benefit increase its worth in academic settings (Mosaiyebzadeh et al., 2023). Hence, universities must balance AI's benefits with human participation to preserve ethical learning environments and encourage intellectual progress (Devaki, 2025).

This research is unique and contributes by focusing on Malaysian university students' lived experiences with ChatGPT, highlighting issues such as over-dependence, misrepresentation, and academic integrity. Unlike prior studies that emphasize benefits, this research distinctly identifies limitations and practical concerns within real educational settings.

2. METHODOLOGY

This study implemented a qualitative method, using thematic analysis to gain a deeper understanding of the problems students face when using ChatGPT for academic tasks. Thematic analysis was selected for its flexibility in analyzing extensive written answers and its effectiveness in identifying common themes, patterns, and insights drawn from respondents' personal experiences and viewpoints (Clarke & Braun, 2017; Sandhiya & Bhuvaneswari, 2025; Squires, 2023). A total of 441 students from a private university in Petaling Jaya and Ipoh participated in the study. By employing random sampling methods, the sample included students from various academic disciplines, levels of study (undergraduate and postgraduate), years of study, and learning modes, including both conventional and modular programs. Data was collected using an open-ended interview survey administered through Google Forms. The key question posed to participants was, "Are there any challenges you face when using ChatGPT for your studies?"

This format allowed students to express their experiences freely and in their own words, providing rich qualitative data suitable for thematic analysis. The survey was distributed online, ensuring accessibility and convenience for students across different modes of learning. To ensure the content validity of the survey instrument, a pilot study was conducted with 30 students who shared similar characteristics with the main study sample in terms of university affiliation, level of study, and learning mode. Feedback from the pilot study helped refine the questions for clarity and relevance. Content validity was further supported by expert reviews from academic staff experienced in qualitative research and student assessment.

The responses were analyzed using Braun and Clarke (2006) six-phase thematic analysis framework: 1. Familiarization with the data, all responses were read multiple times to gain an in-depth understanding of the content and identify initial impressions. 2. Generating initial codes, relevant statements and ideas were systematically coded using data-driven (inductive) coding to capture meaningful segments that indicated challenges. 3. Searching for themes, codes were examined and grouped into potential themes that represented broader patterns or issues. 4. Reviewing themes, themes were reviewed and refined to ensure they were coherent, distinct, and accurately reflected in the dataset. 5. Defining and naming themes, each theme was clearly defined to convey the essence of the challenge it represented. 6. Producing the report, a comprehensive narrative was developed around the final themes, supported by representative quotes from the participants (Khan & Paliwal, 2023; Maguire & Delahunt, 2017). Ethical clearance was obtained prior to data collection. Participants were informed of the purpose of the study and provided their consent before submitting responses. Anonymity and confidentiality were maintained throughout the process, and participation was entirely voluntary.

3. FINDING

This study employed a thematic analysis approach to examine the challenges students face when using ChatGPT for academic purposes. The responses from the open-ended survey question, "Are there any challenges you face when using ChatGPT for your studies?", were analysed to identify recurring patterns and themes. The analysis followed Braun and Clarke's (2006) six-phase framework for thematic analysis: familiarization, coding, theme generation, reviewing, defining, and writing up. The thematic analysis identified seven key challenges faced by students in using ChatGPT for academic purposes: (1) accuracy and reliability, (2) technical limitations, (3) prompting challenges, (4) subject-specific limitations, (5) language barriers, (6) ethical concerns, and (7) emotional impact. These findings underscore the need for improved digital literacy training, transparent AI use guidelines in education, and the development of more context-aware AI tools to better support student learning.

3.1. Theme 1: Accuracy and Reliability of Information

One of the most prevalent themes was the inaccuracy and generality of the responses generated by ChatGPT. Many students expressed concerns that ChatGPT often provides incorrect, overly simplified, or outdated information.

These limitations were particularly problematic for academic tasks that required precise, contextual, or citation-based answers. For instance.

"The answer by ChatGPT sometimes is not accurate".

"Some of the answers are too general and vague. Need to have a very specific and descriptive prompt for a better response".

"It's doesn't improve my confidence since I doubt their answer".

"I am not really known their sentence is not human".

"The source is not authentic, just a fabrication that has nothing to do with the learning topic".

This theme reflects a lack of confidence in the tool's ability to consistently provide trustworthy academic support and highlights the need for cross-verification of ChatGPT-generated content.

3.2. Theme 2: Technical Limitations and Access Barriers

Several students reported experiencing technical issues while using ChatGPT, particularly related to the free version of the tool. These included lagging, time-out errors, limited chat usage, and restrictions on premium features.

"As I'm using the free version of ChatGPT, sometimes it lags when I used it for so long".

"The time-gate limitation of free version. User needs to wait 4 hours after the number of chats entered reached its limit".

"I use it to find information that is difficult to find but still try to find information myself".

These technical and access limitations disrupted the flow of study and learning, creating frustration and reducing the perceived usefulness of the tool in time-sensitive academic situations.

3.3. Theme 3: Prompting and Query Formulation Challenges

A considerable number of respondents indicated difficulties in knowing how to interact effectively with ChatGPT. The effectiveness of responses was closely linked to the specificity and clarity of the questions asked. Students who were unfamiliar with how to frame prompts found it challenging to retrieve meaningful information.

"I have to search deeper and ask more detailed questions to get the correct answer".

"Sometimes I don't know how to describe, so it makes my study hard to understand my question".

This theme illustrates that while ChatGPT is powerful, its utility depends on user literacy in AI prompting, a skill not yet universally developed among students.

3.4. Theme 4: Subject-Specific and Contextual Limitations

Participants reported that ChatGPT's performance varied across different academic subjects. It was found to be particularly weak in technical fields such as mathematics, accounting, and religious studies (e.g., *Tahfiz* and *Qiraat*), where deep contextual understanding or precise calculations are required.

"Usually, ChatGPT makes mistakes while solving maths. It gave me a hard time in this aspect."

"ChatGPT is limited in its knowledge about Tahfiz and Qiraat education".

"Ofcourse there is, ChatGPT has limited knowledge in some religious sciences, among them are large Arabic books like hadith, he cannot access them/gives inaccurate information".

These limitations suggest that ChatGPT is more suitable for general conceptual understanding rather than specialized or discipline-specific tasks.

3.5. Theme 5: Language and Communication Barriers

For non-native English speakers, language was a barrier in both input (formulating queries) and output (understanding responses). Some students had to translate questions into English or switch from their native language to interact effectively with the tool.

"Language challenge, sometimes I must translate from Bahasa Indonesia to Bahasa Melayu/Malaysia".

"Need to use English sentences to get accurate information".

This reflects a need for multilingual support or localized versions of ChatGPT to increase accessibility for diverse student populations.

3.6. Theme 6: Ethical and Academic Integrity Concerns

Several students raised concerns about plagiarism, over-reliance on AI tools, and the risk of violating academic integrity policies. They acknowledged that while ChatGPT could assist with idea generation and structuring, excessive dependence could diminish their own critical thinking and learning.

"We must control ourselves from using it in the wrong way such as plagiarism".

"I think, by using chat GPT, it makes us feel too comfortable and lazy in studying because there is no hard work effort needed as it gives us the answer that we want".

"The challenge is how we can control ourself from using it in a wrong way as a plagiarism, and do our work by own self.

We can search for idea and information, but we must honest to ourselves".

These concerns highlight the tension between convenience and academic responsibility in AI-assisted learning environments.

3.7. Theme 7: Emotional and Cognitive Impact

Some participants indicated that ChatGPT's use affected their motivation, confidence, and self-regulation. While it offered efficiency, there were cases where it reduced the effort students put into learning or created confusion due to overly complex or unclear answers.

"It makes me feel too comfortable to rely on it".

"Sometimes it makes me lose confidence".

"Although chatGPT give me an answer, I will do multiple checks of the answers from many websites to ensure the information given is accurate, so we as users must be creative in using it and should not believe the answers before doing multiple checks".

This suggests that AI tools like ChatGPT, if not used mindfully, may lead to passive learning behaviors or reduced cognitive engagement.

Table 1 summarizes the seven main challenges or themes students encountered when using ChatGPT. The first theme, accuracy and reliability of information, highlights fears about unclear, imprecise, or non-syllabus-aligned responses, which weaken students' confidence in using the tool.

The second theme, technical limitations and access barriers, reproduces frustrations with lagging, time-out errors, and subscription restrictions that disturb the learning flow. The third theme, prompting and query formulation challenges, illustrates that the actual use of ChatGPT requires precise and clear prompts, a skill that many students are still developing.

The fourth theme, subject-specific and contextual limitations, captures the tool's weaker performance in areas such as mathematics, accounting, and religious studies, where correctness and appropriate knowledge are critical. The fifth theme, language and communication barriers, highlights problems faced by non-native English speakers in both requesting questions and interpreting answers.

The sixth theme, ethical and academic integrity concerns, underlines doubts about over-dependence, plagiarism, and the potential destruction of autonomous learning. Finally, the seventh theme, emotional and cognitive impact, describes how ChatGPT sometimes diminishes motivation, fosters passivity, and fails to provide emotional support in learning. Collectively, these themes demonstrate that while ChatGPT can be a beneficial academic aid, its limitations require students to engage critically, verify information, and balance convenience with responsible learning practices.

Table 1. Summary table of themes.

Theme	Example codes
Accuracy and reliability	Inaccurate info, vague, not syllabus-aligned
Technical limitations	Lag, timeout, word limit, subscription needed
Prompting challenges	Need specific prompts, unclear instructions
Subject/Context limitations	Math problems, religious topics, accounting
Language and communication	Language barrier, unclear explanations
Ethical/Academic concerns	Over-reliance, plagiarism, AI detection
Emotional and cognitive impact	Too comfortable, no emotional support.

4. DISCUSSION

The results from this study expose a variety of challenges faced by students when using ChatGPT as an instrument to support their academic work. These encounters can be generally classified into four main themes: imprecision and inconsistency of information, language and communication barriers, technical restrictions and access problems, and user dependence and ethical concerns. The most frequently mentioned topic relates to the accuracy and reliability of information provided by ChatGPT. An important number of participants voiced concerns that the platform regularly offers generalized or unclear answers, lacks academic guidance, or occasionally provides outdated or inappropriate information. These results suggest that while ChatGPT can serve as a helpful supplementary source, it may not yet be sufficiently reliable to function as a standalone academic tool. This aligns with previous research noting the risks of relying too heavily on generative AI, particularly given its tendency to produce imprecise or unverifiable data (Habib, 2025; Ochieng et al., 2024; Yaprak, 2024). A study in a university in Malaysia by Bani Younes, Hassan, Abdullah, and Latiff Azmi (2024) found that students in Malaysia face challenges consuming ChatGPT, with the incapability to express unique writing skills, dealing with imprecise citation formats, and struggling to revise created answers. These problems delay the effective integration of ChatGPT content into their written communication assignments. As such, the findings highlight the necessity for students to critically evaluate and cross-check AI-produced content, which is vital practice in academic settings where exactness and trustworthiness are essential.

Language and communication matter also appeared as a key challenge, mostly among students who are not fluent in English, such as students from Malay Language and religious courses. Numerous reports indicated that they require assistance in interpreting their queries or struggle to phrase them in ways that would elicit precise responses. This is consistent with studies pointing to the problems language models face in managing non-native inputs or culturally specific language (He, 2025; Hellmich, Vinall, Brandt, Chen, & Sparks, 2024). Such encounters can place students in multilingual or non-English-dominant environments at a difficulty, possibly restricting the availability and efficiency of tools like ChatGPT as comprehensive educational assistance (Khan & Paliwal, 2023). A study conducted in a public university in Malaysia to explore ESL learners' challenges in using ChatGPT by Muniandy and Selvanathan (2024) highlighted the problems such as trouble in making appropriate responses, understanding multifaceted language structures, and the necessity for effective guidance from instructors to improve their speaking skills.

Technical restrictions were also a prominent concern, mostly among students relying on the free version of ChatGPT. Many reported issues such as timeouts, lagging, and limitations on the number of daily interactions problems that frequently led to frustration during academic periods like exam preparation or approaching deadlines. These issues highlight the drawbacks of the tiered access model, where full functionality is often restricted behind a payment. Furthermore, the need for a constant internet connection posed additional challenges for students in areas with limited connectivity, such as distance learners who do not have full internet coverage at university, compared to face-to-face students who regularly attend campus. Such technical barriers not only disrupted the learning experience but also widened the existing digital gap among students. These findings resonate with earlier studies that identified

similar restrictions for free users of ChatGPT, particularly concerning performance and availability during critical academic moments (Chavez et al., 2024; Dikilitas, Klippen, & Keles, 2024).

Technical restrictions may also affect students from lower-income families, as pointed out by Azmi et al. (2024). Students from lower-salary families are more likely to be impacted by these restrictions, further exacerbating educational inequalities. Students from wealthier families in this country, who have access to educational tools such as ChatGPT, tend to achieve better results compared to their counterparts. In Malaysia, students face challenges in using ChatGPT, including a lack of resources and digital literacy. Similarly, in remote and poorer areas like Sabah and Sarawak (eastern Malaysia), access is often limited due to inadequate internet connectivity and other infrastructural constraints.

Another significant theme that emerged from the results was concern regarding user reliance and ethical consequences. Many students pointed out the risk of academic dishonesty and expressed doubts about becoming overly dependent on AI-generated content. The findings are consistent with a study by Pallivathukal et al. (2024) that students in Malaysia voiced worries about data precision, plagiarism, moral issues, and reliance on ChatGPT for academic duties. These encounters focus the necessity for guidelines in applying generative AI chatbots in healthcare education. Mokhtar and Khairul (2024) highlights important ethical concerns regarding ChatGPT's usage in education, emphasizing the need for comprehensive guidelines. Encounters faced by students include potential misapplication, issues related to academic honesty, and the necessity for an outline to address these moral dilemmas effectively. Daud et al. (2024) stresses the importance of observing its usage to preserve academic integrity and proposes that lecturers offer clear plans to avoid misuse.

The overdependence increases integrity problems but may also delay the growth of crucial skills like critical and creative thinking and problem-solving skills, thus decreasing employability that Malaysian graduates must have. A study conducted by Ibrahim, Saad, and Rajikon (2024) shows that students at Universiti Teknikal Malaysia Melaka expressed concerns about ChatGPT possibly undermining educational objectives (mean = 3.90) and adversely affecting creative writing skills (mean = 3.46). This study highlights the necessity for moral guidelines in its educational incorporation.

These fears underpin earlier discoveries, such as those obtained by Pahuja, Kaur, Budhraj, and Kathuria (2024), which highlight how extreme dependence on tools like ChatGPT can compromise both academic trust and intellectual development. Some respondents self-confessed that although ChatGPT can be supportive for suggesting or forming ideas, it should not be seen as an additional for innovative thought or in-depth research (AlZaabi, ALamri, Albalushi, Aljabri, & AalAbdulsalam, 2023; Osama, Afridi, & Maaz, 2023). Generally, while ChatGPT has promising applications in educational settings, the encounters conveyed by users focus on the imperative need for stronger digital literacy education, better AI accuracy, and well-defined institutional policies to guide responsible use. By addressing these matters, university educators in Malaysia can help ensure a more ethical and reasonable incorporation of AI in academic settings (Kővări, 2025). Professional growth plans are vital for preparing educators with the essential skills to successfully incorporate AI into their teaching practices. Continuous training can help alleviate skill gaps among academic staff, allowing them to leverage AI technologies for better educational outcomes (Ali, 2024).

5. CONCLUSION

The incorporation of ChatGPT into educational settings marks a significant change in how students engage with material and learning resources. Although the tool offers valuable advantages such as quick access to content, support in idea development, and assistance with autonomous learning, this study highlights that its usage is not without complications. Thematic analysis of student responses revealed a variety of concerns, including issues with accuracy and consistency, technical limitations, challenges in expressing effective stimuli, subject-specific restrictions, language barriers, ethical dilemmas, and emotional effects. These insights underscore the crucial need to enhance students' digital literacy and to establish clearer institutional strategies for the responsible use of AI technologies.

Rather than replacing traditional learning methods, ChatGPT should serve as a complementary resource that fosters critical thinking and active engagement. Simultaneously, educators and policymakers must remain cautious about potential misuse and overreliance, particularly concerning academic integrity and the development of students' independent learning skills. As AI tools continue to evolve, future research should aim to develop pedagogically grounded frameworks that leverage these technologies in ways that support rather than undermine educational objectives. Ensuring students are equipped to use AI tools like ChatGPT responsibly and effectively will be essential for achieving equitable and meaningful outcomes in modern education.

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Transparency: The author states that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

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