



Student's Reliance on Chat GPT: Academic Dummies in the Making

Claudine Anita Hingston¹, Philani Mndeni Khumalo²

Elisabeth Kanani³, Zandile Ngubane⁴

Article information

Affiliations

¹School of Business Excellence, MANCOSA
Durban, South Africa

²Durban University of Technology
Durban, South Africa

³School of Supply Chain Management, MANCOSA
Durban, South Africa

⁴School of Business Excellence, MANCOSA
Durban, South Africa

Corresponding author

Claudine Hingston
claudine.hingston@mancosa.co.za

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Abstract

The integration of artificial intelligence (AI) tools like ChatGPT into academic environments has transformed how students approach learning, research, and problem-solving. This qualitative study examines the reliance on ChatGPT among students in South Africa and its broader implications for academic growth. There is a complex dynamic at play as some students leverage the tool to enhance comprehension and productivity, while others rely on it to an extent that it undermines their ability to independently process and generate ideas. Thus, while ChatGPT provides convenience for students through instant access to information and support for academic tasks, its potential to weaken critical thinking, creativity, and deep learning is concerning as it may foster a generation of "academic dummies." In consideration of this concern, this paper draws from primary and secondary sources to explore students' patterns of ChatGPT usage in South Africa and its impact on their cognitive and academic skill development. The paper also discusses ethical and pedagogical implications of ChatGPT and offers recommendations for balancing the benefits of AI tools with the cultivation of critical academic skills to ensure responsible and effective usage.

Keywords: Students, ChatGPT, Academic, Dummies, South Africa

Introduction

Artificial intelligence (AI) is a rapidly evolving multidisciplinary field that has grown significantly since the advent of manually operated computers in the 1950s (Haenlein & Kaplan, 2019). It entails

simulating intelligent behaviour in machines, aiming to develop systems that replicate human cognitive abilities, including language comprehension, reasoning, and problem-solving (Chowdhary, 2020). OpenAI (a research laboratory) has made significant contributions to the field of artificial intelligence by developing highly advanced language models such as ChatGPT (Lund et al., 2023). As such, Lund et al (2023) describes ChatGPT as a natural language processing tool developed by OpenAI that can assist in the drafting of essays and other scholarly manuscripts. ChatGPT is thus a public tool developed by OpenAI, that is based on the GPT technology (Kirmani, 2022) and it is used on a global scale. It is trained on a large dataset of internet-based text, that can produce text responses that resemble human-like language when provided with a prompt (Joshi et al., 2024). ChatGPT is essentially an advanced artificial intelligence chatbot capable of handling a wide range of text-based tasks and requests (Liu et al., 2024) and has the potential to revolutionize a wide range of language-related tasks (Lund et al., 2023). ChatGPT can also fulfil more advanced and extensive requests, leveraging its extensive data stores and efficient design (Lund., et al 2023). Its capabilities extend to answering queries, engaging in diverse discussions, and creating original pieces of written work (Taecharungroj, 2023). It is therefore not surprising that ChatGPT and related technologies have been viewed as disruptive innovations with the potential to revolutionise academia and scholarly publishing (Haque et al., 2022).

Whilst ChatGPT undoubtedly has several advantages, for academia, it also has negative implications. In fact, a sense of urgency and apprehension has emerged among professionals in the academic domain regarding the impact of ChatGPT on conventional teaching and learning practices (Joshi et al., 2024). Significant ethical issues that could arise with the use of ChatGPT is explored by Lund et al., (2023) and this include issues of copyright, citation practices, and the potential impact on the "Matthew Effect" (the concept of accumulated advantage in society) in scholarly publishing. There are also concerns that ChatGPT poses a threat to the integrity of science and the reproducibility and transparency of research prompting Lund et al., (2023) to urge researchers, publishers, and the developers of AI-driven language to collaborate and establish guidelines and protocols to ensure that the use of these technologies is ethical, transparent, and accountable.

In a similar vein, Joshi et al., (2024) analysed the strengths and weaknesses associated with the utilisation of ChatGPT as an educational tool in the context of undergraduate computer science education. They noted that ChatGPT's usage in tasks such as solving assignments and exams has the potential to undermine students' learning outcomes and compromise academic integrity. They also pointed out that a potential consequence of students' excessive reliance on ChatGPT for the completion of assignments and exams is tantamount to self-sabotage (Joshi et al., 2024). Vasilatos et al., (2023) share similar sentiments by expressing concerns that AI models such as Chat GPT can compromise academic integrity and noted that the education sector currently tussles with distinguishing student-authored homework assignments from AI-generated ones. Joshi et al., (2024) avers that it has been observed by people in academic circles that students could use ChatGPT for cheating and plagiarism, and that some students have expressed concern that such a tool could stifle their creativity and critical thinking skills. Yu (2023) and Sullivan et al., (2023) warns that AI-driven cheating may compromise academic standards.

Undoubtedly, ChatGPT usage in academic environments has raised global concerns. South Africa is no exception. Tarisayi (2024) explores the tensions within South African higher education following ChatGPT's launch and presents various arguments on the use of ChatGPT in South Africa's academic landscape. She explores the notion of ChatGPT as a threat to academia and academic integrity as well as the potential benefits of using ChatGPT. Concerns about the use of ChatGPT in South Africa has prompted research on the usage of ChatGPT in South Africa (see Singh, 2023, Tarisayi, 2024, Bosch el., 2023). Empirical studies on ChatGPT's usage in South Africa is however scarce and limited, which

makes the study very significant as it helps to fill in this gap and to contribute to further knowledge on it. This paper enters this discourse by examining the reliance on ChatGPT among students in South Africa and its broader implications for academic growth. In this vein, the paper discusses ethical and pedagogical concerns and implications of students' usage of ChatGPT. Whilst the authors of this paper are of the view that ChatGPT does have its benefits, they are also concerned about ChatGPT's potential to weaken students critical thinking, creativity, and deep learning and the possibility of a generation of "*academic dummies*" being fostered by this. This concern is being prioritised in this study and recommendations are provided that will assist in mitigating this situation. *Academic dummies* in the context of this study refers to students who go through academia yet lack academic intellect and ability.

Methodology

This paper adopts a qualitative methodology and draws from primary and secondary sources to explore students' patterns of ChatGPT usage in South Africa and its impact on their cognitive and academic skill development. Secondary data was collected from secondary sources such as books and journal articles. Primary data was collected via questionnaires administered to academics and students across South Africa to gain the perspectives of both groups. Purposeful sampling was employed as it enabled the identification and selection of information-rich cases related to the phenomenon of interest (Palinkas et al., (2015). Through this sampling technique, questionnaires were administered to twenty-five (25) research participants from Universities and Colleges across South Africa, ranging from 25 years old to forty-five years plus. However, only 18 completed and returned their questionnaires. Whilst the researchers would have welcomed the completion and submission of all twenty-five, the 18 questionnaires returned still yielded significant and meaningful data for the study. The 18 respondents comprised both students and academic lecturers from various fields such as Business, Science, Engineering and the Humanities. This was done to get varied perspectives. It must be noted that the research participants willingly participated in the research. For confidentiality and ethical reasons, their personal details have not been mentioned in this study.

The questionnaire comprised both open and close ended questions. Close-ended questions eased the task of the respondents, thereby increasing their enthusiasm for returning the completed questionnaire and the data can also be quickly coded and analysed (Hyman and Sierra, 2016). Open-ended questions on the other hand offered the respondents an opportunity to provide a wide range of answers, thereby providing more details and new insights for the researchers (Hyman and Sierra, 2016). Using both forms of questions in the questionnaire and as attested by Worley (2015), assists in maintaining the focus and specificity of the research while also maintaining the richness and invitation to say more. Thematic analysis was employed to analyze the study's data by identifying, analyzing, and interpreting patterns of meaning. The process involved reviewing data, generating initial codes, and collating these into potential themes. These themes were then reviewed, refined, and defined, allowing researchers to derive meaningful insights into participants' experiences. Thematic analysis provided a flexible framework for interpreting qualitative data in alignment with the study's objectives (Nowell et al., 2017).

Chat GPT's usage by students in South Africa

This section attempts to explore ChatGPT's usage by students in South Africa's higher education institutions. The advantages of ChatGPT in higher education have been widely documented. Rasul et al., (2023) identifies five primary benefits: personalized adaptive learning, automated feedback, research assistance, administrative support, and innovative assessment design. Viorennita et al. (2023) further highlight ChatGPT's role as a virtual tutor, providing instant responses that enhance student engagement. Baidoo-Anu and Ansah (2023) argue that AI can promote inclusivity by assisting students

with disabilities and language barriers, offering real-time translations and adaptive learning materials. Despite these arguments, sight must not be lost of a tendency to over-rely on ChatGPT in a way that stifles academic growth and integrity. In a systematic review, conducted by Sullivan et al., (2023), it was noted that out of 100 articles, 88 mentioned concerns relating to cheating and academic dishonesty. The study also found several examples of the technology being used to cheat on university exams and highlighted its ability to write college essays, and exams. This ability of ChatGPT to do these activities have resulted in students' reliance on it. Stojanov, Liu, and Koh (2024) categorise student reliance on AI into various profiles, from minimal users to heavy dependents, revealing that those with higher AI literacy tend to use the tool more responsibly.

The adoption of ChatGPT among students in South Africa is a growing trend, reflecting global patterns of increasing AI reliance in academic settings. From the data collected, eleven out of the 18 respondents stated that they use ChatGPT on a weekly and daily basis, whilst the remaining seven indicated that they rarely used ChatGPT but were aware of the challenges it incurred. It must be noted that the seven who expressed rare or no use of ChatGPT fall into the academic lecturer's category. This indicates that the respondent students on the other hand used ChatGPT on a regular basis. Tasks that ChatGPT was used for according to the respondents included "*drafting research reports, editing academic work, generating essay ideas and completing assignments or quizzes.*" They also noted that it was largely effective in accomplishing these tasks. Seventy-five percent of the students agreed that using ChatGPT provides them with a competitive advantage in their studies. The efficiency with which ChatGPT generates academic content gives students a significant edge, particularly in terms of speed and access to information. For example, students can quickly generate ideas for essays, solve complex problems, or obtain explanations of difficult concepts (Perkins, 2023). The ability to quickly generate solutions could make students feel that they are at an advantage compared to peers who are relying solely on traditional methods. A significant 86% of respondents in the survey reported that the use of ChatGPT has further changed their approach to learning. This high percentage reflects a marked shift in how students engage with academic tasks, as AI tools like ChatGPT offer the ability to quickly generate content and provide explanations on complex topics. The tool's immediate availability however encourages students to rely more on AI for support, potentially replacing traditional study methods such as in-depth research or reading primary sources (Liu et al., 2024; Furlong, 2023).

According to Yu (2023), nearly 89% of students in American universities, have used ChatGPT for completing assignments, while 22% have utilised it during examinations. Youssef et al., 2024; Tajik & Tajik, 2024) reported that ChatGPT generate appropriate responses to human input in a conversational manner, making writing and managing educational tasks more appealing. This includes summarisation and answering questions. Research done by Zhai (2022) and Urban et al., (2024) confirmed that ChatGPT helps students' complete essays faster with less mental effort. Similarly, experiments by Noy & Zhang (2023) and Urban et al. (2024) found that ChatGPT boosts confidence in solving tasks. Students and other users spent less time generating content but still produced higher-quality work. Noy and Zhang (2023) demonstrated that ChatGPT can enhance the quality of solutions, while Yilmaz and Yilmaz (2023) found that its use improved learning performance in a programming class. ChatGPT can generate multiple representations of a problem, as well as offering information that can aid in solving it (Zhai, 2022, Urban et al.,2024). This ability of ChatGPT to make academic work easier and quicker has in turn increased the tendency for students to rely on ChatGPT usage.

Some researchers even stated that AI tools, including ChatGPT, may foster an environment where students prioritise speed over intellectual rigor, undermining the process of acquiring and internalising knowledge (Severance & Zawacki-Richter, 2022). While useful in providing quick solutions and

answers, ChatGPT encourages surface-level engagement with academic material and lowers academic standards. Thus, while AI can be a useful support tool, its overuse compromises the development of essential academic skills. Tarisayi (2024) indicates that there is a potential for South African students to become reliant on ChatGPT with a resultant adverse impact on their critical thinking and originality. Thus, while ChatGPT can assist students in navigating complex subjects, this reliance on AI limits opportunities for deeper cognitive engagement and the development of critical thinking skills (Gartner, 2023). This thinking is echoed by many academic professionals in South Africa prompting research, although currently very limited. Singh (2023) for instance garnered the views of three established professors in South Africa to understand the impact of ChatGPT on plagiarism and scholarly writing in universities in South Africa. Beyond academic or scholarly articles, there are newspaper and blog articles on students ChatGPT's usage in South Africa as well as several academic debates, conferences, discussions, seminars and symposiums students on the same topic. This indicates the prevalence of ChatGPT's usage in academic environments and the concerns surrounding it. The authors of this study opine that if ChatGPT related concerns are not addressed or regulated, there is a potential of students becoming *academic dummies*. To enable the way forward of addressing these concerns, it is important to put these in perspective.

Concerns: Plagiarism, Academic Integrity and Others

A concern expressed by multiple respondents in the study was students using ChatGPT to generate assignments without proper attribution, thereby enabling plagiarism and diminishing academic integrity. The issue of academic integrity is a key concern for both students and academics. All students in the survey agreed that ChatGPT has affected academic integrity. Students are acutely aware that using AI tools to generate content without attribution could be considered plagiarism, even if the student does not intend to deceive (Binns, 2022). Among the students surveyed, 75% expressed concern about the originality of their academic work when utilising ChatGPT, suggesting that plagiarism remains a prominent issue. Given that AI can produce highly relevant and coherent text based on prompts, students may be tempted to submit AI-generated content without proper modification or citation (Hempel, 2023).

The concern over plagiarism is not unfounded, as AI tools can seamlessly integrate various sources of information into one coherent response, making it difficult to trace the origins of the content (Vardi, 2023). Therefore, students may inadvertently fail to engage in proper academic practices, further complicating the challenge of maintaining academic integrity. However, 12.5% of respondents of this study expressed a neutral stance or disagreed with concerns over plagiarism, suggesting that some students view ChatGPT as a tool that can complement their academic work, rather than replacing their efforts altogether. For such students, ChatGPT is used to enhance their learning experience, rather than merely as shortcuts for completing assignments.

Academics universally however agree that ChatGPT contributes to academic dishonesty and plagiarism. The ease with which AI can generate high-quality text has raised concerns about the growing potential for students to submit AI-generated content as their own work (Feldstein & Witzke, 2023). This undermines the traditional expectation that students should create original work based on their own understanding and research. The ability of AI to provide answers that are difficult to distinguish from student-generated work presents a challenge for educators attempting to enforce academic integrity standards.

Moreover, AI tools like ChatGPT introduce the possibility of students bypassing the learning process entirely by using AI to generate responses for assignments, reducing the amount of time spent on original thought and engagement with the material (Gartner, 2023). This shift raises serious questions

about the long-term impact on students' academic development and the preservation of academic standards.

Another concern expressed is that AI-generated content can be misleading or biased, reinforcing the need for students to critically evaluate AI-generated responses. Attention must therefore be called to the fact that ChatGPT may generate information that seems coherent and credible but lacks factual accuracy. As a result, its use in educational settings could present significant challenges (Lim et al., 2023; Peters et al., 2023; Urban et al., 2024). It has also been noted that in most multiple-choice question (MCQ) exams, ChatGPT failed to pass, scoring significantly lower than the average student (Newton, 2023). There is a tendency however for students to not cross check information generated by ChatGPT. This concern is echoed by Dilekli and Boyraz (2024), who stated that students often accept AI-generated content without verifying its accuracy. Sok and Heng (2023) also highlight the risks of AI-generated misinformation and call for the development of critical AI literacy skills.

A further concern raised by the respondents relates to the unequal access to AI tools like ChatGPT, particularly for students from disadvantaged backgrounds. In this regard, the rapid advancements of AI tools like ChatGPT could alter academic competitiveness. As noted by Lim et al., (2023), while Generative AI tools have the potential to democratise access to knowledge, their availability may be restricted by resource limitations, exacerbating equity and accessibility challenges, making it essential to critically assess the potential negative impact on students who lack the financial means for consistent access. This disparity further emphasises the need for fair access and equity when integrating AI into academia. This reflects Baidoo-Anu and Ansah's (2023) argument that disparities in AI access could widen educational inequalities. Thus, the issue of fairness and equity must be addressed in AI considerations in academic environments, particularly for students who may not have access to such resources (Delgado, 2024). Beyond the concerns already discussed, respondents also raised concerns about data privacy and security and the role of educators. Some respondents fear that AI platforms might collect and misuse student data, raising ethical concerns about privacy. This issue is discussed by Sullivan et al. (2023), who stresses the importance of safeguarding user data. There was also concern that heavy reliance on AI could shift the traditional student-teacher dynamic. The next section focuses on a significant concern of ChatGPT's usage by students in South Africa.

Concerns: ChatGPT's potential to weaken critical thinking, academic creativity, and deep learning

A main concern echoed by nearly all the research participants is that students may become overly dependent on ChatGPT, leading to diminished creativity, reduced independent thinking, and an overall decline in learning quality. They stated that students who use AI tools excessively may struggle to develop foundational academic skills, such as critical analysis and original argumentation. This aligns with Stojanov (2024), who found that students who rely heavily on AI tend to lack deep learning and problem-solving abilities. Over reliance on AI, may neglect critical engagement with primary sources or fail to develop the independent problem-solving skills that are vital for academic success (Smith et al., 2022). One participant expressed concern about the future of education, highlighting that the prevalent practice among students of copying and pasting may significantly undermine learning outcomes and hinder the development of critical thinking among graduates. This trend could reduce the depth of learning, as AI tools do not foster the same intellectual struggle and engagement that traditional research or manual problem-solving methods do (Binns, 2022). Furthermore, AI tools like ChatGPT might prevent students from developing the critical thinking skills necessary for assessing and synthesizing information. Research has shown that critical thinking is a vital academic skill, and over-reliance on AI could diminish this ability (Zhao et al., 2023). By providing students with ready-

made solutions, AI could inadvertently reduce opportunities for students to grapple with complex problems independently.

Academics are also concerned that the use of ChatGPT might diminish students' ability to think critically and independently. According to Barta et al., (2022) students' critical thinking abilities refer to their ability to systematically analyse, assess, and synthesize information. Suriano et al. (2025) avers that technology use such as ChatGPT can affect a crucial cognitive ability in education, namely the ability to engage in complex critical thinking. Over-reliance on AI tools could result in students becoming passive consumers of information, rather than active, critical participants in their own learning process. The development of independent thinking is crucial for academic success, and AI tools that provide answers without requiring deep thought could impede this development (Smith et al., 2022). By solving problems for students, ChatGPT and similar tools could prevent students from engaging in the type of rigorous intellectual work that leads to the formation of well-reasoned arguments and conclusions. In fact, out of 18 participants in the study, only four disagreed that using ChatGPT had affected their ability to think critically and independently, which suggests that the majority nursed this thinking, even though they may not be open about it. Dilekli and Boyraz (2024) found that students frequently accept AI-generated content without verification, leading to reduced engagement with deeper cognitive processes. Similarly, Stojanov (2024) observed that students primarily motivated by performance goals tend to use ChatGPT as a shortcut for completing assignments and quizzes rather than as a tool for fostering deep learning. The convenience of access may lead to students developing an overreliance on the chatbot, potentially weakening their critical judgment and overall cognitive abilities. (Lo, 2023; Mijwil et al., 2023).

Contrary to the above, some authors have argued that ChatGPT can enable critical thinking abilities. Essel et al. (2024) for instance reported in their study that the integration of ChatGPT into classroom activities have a positive impact on students' critical, creative, and reflective thinking abilities. Suriano et al. (2025) avers that interaction with AI-based chatbots can be a valuable resource for the development of students' critical thinking skills. The findings of Guo, and Lee, (2023) study on the integration of ChatGPT-based activity into introductory chemistry courses highlights significant improvements in students' confidence to ask insightful questions, analyse information, and understand complex concepts. In this study, the students further reported that ChatGPT offered diverse perspectives and encouraged them to think more critically. Students who utilised ChatGPT produced solutions that were more original, elaborated, and better aligned with the task objectives (Urban et al., 2024; Noy & Zhang, 2023; Yilmaz & Yilmaz, 2023). However, despite the arguments in favour of ChatGPT being an enabler of students critical thinking abilities, sight must not be lost of the fact that that it does derail and undermine student's creative and intellectual abilities, especially when fully relied upon. This signals that over reliance on ChatGPT could be very problematic and as alluded by some of the respondents, this may have a long-term negative impact on learning.

The Need for Regulating AI Usage

Based on all the above concerns sourced from the respondents and from secondary data, the authors of this study argue that over reliance on ChatGPT and its unregulated use can breed a generation of students that have no academic intellect and academic abilities and lacks independent and critically thinking (*academic dummies*). While there is the risk and potential of this happening, the harsh truth is that ChatGPT cannot just be wished away. As noted by one of the participants, "*ChatGPT is here to stay and the good and bad use of it is all up to us as humans.*" In fact, it is worth noting that none of the research participants advocated for the banning of ChatGPT within academic environments. They instead advocated for it to be regulated. The authors of this study also take this stance, as even though

they are concerned about the potential of ChatGPT usage by students in South Africa to foster academic dummies, they do acknowledge the role ChatGPT can play in enhancing academic work.

Research has confirmed that ChatGPT can be a valuable learning tool for students, assisting with answering questions, summarizing information, and fostering collaboration. Its response prompts encourage inquiry, creating an environment where students can apply their knowledge and reasoning skills (Lo, 2023). In their 2024 study, Urban et al., (2024) examined the impact of ChatGPT on performance in a complex creative problem-solving task among 77 university students. The results indicated that the use of ChatGPT significantly improved self-efficacy in task resolution and enhanced the quality, elaboration, and originality of the solutions. Participants who received assistance from ChatGPT perceived the task as easier and requiring less mental effort (Urban et al., 2024). As such one cannot outrightly condemn the use of ChatGPT but advocate instead for it to be regulated in a manner that facilitates academic intellectualism, fairness and integrity, a stance supported by the authors of this study

In fact, 100% of the students in the survey agreed that universities should regulate or set clear guidelines for using AI tools like ChatGPT in academic work. This reflects the recognition among students that while AI tools offer valuable assistance, there are ethical implications that require careful consideration. Students perceive the establishment of formal regulations as an essential step in ensuring that AI is used ethically without undermining the integrity of academic work. Regulation could help clarify when it is appropriate to use AI for specific tasks and ensure that students do not rely on AI-generated content as a substitute for their own intellectual contributions (Stewart & Lister, 2023).

As with students, the academics in the study also overwhelmingly supported the creation of clear guidelines for the use of AI tools like ChatGPT in students work. Despite their concerns about the potential negative impacts on critical thinking and academic integrity, 88% of the academics support the integration of AI tools like ChatGPT into the curriculum, provided clear guidelines for ethical use are established. These guidelines would help prevent misuse and ensure that AI is used as a complement to student learning rather than as a replacement for it (Stewart & Lister, 2023). By establishing boundaries for appropriate AI use, universities can encourage students to engage in more thoughtful and responsible academic practices, ensuring that AI assists in learning rather than undermining it. This willingness to incorporate AI reflects a recognition that these tools can enhance learning if used responsibly. With appropriate guidelines, students can be encouraged to use AI in ways that complement their learning while still maintaining academic rigor and integrity (Vardi, 2023).

It is worth reiterating, that despite the concerns both students and academics in the study recognise the significant role that AI tools like ChatGPT play in the modern-day higher education landscape. While students appreciate the efficiency and competitive advantages AI provides, they also acknowledge the concerns surrounding plagiarism and academic integrity. Similarly, academics are concerned about the potential for AI to encourage academic dishonesty and reduce critical thinking, but they also recognise the potential benefits of using AI as an educational tool when regulated properly. As is evident, both groups agree on the need for clear institutional guidelines that regulate AI usage, ensuring that it enhances learning without compromising academic standard. As summarised by one of the participants – *“ChatGPT can be a powerful tool for enhancing learning and productivity in academia, but its use must be guided by clear ethical frameworks and balanced with traditional methods to ensure skill development and academic integrity.”*

The Way Forward: Recommendations and Suggestions

To balance AI's benefits while ensuring academic integrity and critical skill development, several recommendations and strategies have been proposed by both the literature and survey responses. A key recommendation is that higher education institutions should develop AI usage programmes and implement AI trainings. Training workshops should be implemented to teach students how to use AI tools ethically and effectively (Baidoo-Anu & Owusu Ansah, 2023). Higher education institutions should thus provide training on responsible usage to mitigate risks such as plagiarism and overreliance. These trainings should emphasise ChatGPT as a tool for idea generation rather than a replacement for critical thinking and creativity. Ethical training on AI usage should therefore be integrated into academic programs, ensuring students develop essential skills in independent reasoning and problem-solving while maintaining academic integrity.

Another recommendation is that assessments and grading systems should be redesigned. According to the study's respondents, universities should create assessment models that emphasize original thought and problem-solving, to minimise the effectiveness of AI-generated content. This recommendation is supported by Stojanov (2024). Respondents also recommended the development of tools to identify assessments solely generated by ChatGPT with no input from students. A proposed solution to this according to Vasilatos et al., (2023) could be the introduction of HowkGPT in academic institutions, designed to identify homework assignments generated by AI. Vasilatos et al., (2023) study emphasised the critical need for effective strategies to uphold academic integrity amidst the growing influence of AI tools like ChatGPT and providing an approach to ensure fair and accurate grading in educational institutions. Additionally, respondents advocated for universities to create or develop AI usage policies. Clear guidelines and policies must be developed to prevent misuse and uphold academic integrity. This is necessary to ensure the responsible use of AI tools like ChatGPT in education. Rasul et al., (2023) argues for standardised AI policies to regulate its use in academia.

A further recommendation is that higher education institutions should undertake continuous monitoring to assess AI's impact on learning outcomes to maintain a balance between technology and conventional teaching practices. Also, specific goals should be set to ensure AI enhances rather than replaces traditional methods, supporting activities such as summarizing, clarifying difficult topics, and generating ideas. AI should in effect primarily serve as a supplement to traditional learning, such as in paraphrasing, brainstorming, and breaking down complex concepts into manageable steps. Faculty members should therefore be trained to incorporate AI responsibly into their teaching methods, ensuring it complements rather than replaces human instruction (Viorennita et al., 2023). In this vein, it was suggested that a blended teaching and learning approach be employed wherein ChatGPT should be used to complement traditional lectures and discussions. Students should also be required to disclose their use of AI tools in academic work, and strict AI policies should guide their application.

A final recommendation is that AI should be leveraged as a support tool. ChatGPT or any AI tools should not replace direct engagement with lecturers, peers, or experiential learning activities, which are crucial for developing interpersonal and analytical skills. It should instead be leveraged as a supportive aid, to enhance learning while preserving creativity, originality, and ethical academic practices.

These recommendations will no doubt aid to reduce the chance of students becoming *academic dummies* through ChatGPT's usage.

Conclusion

This study investigates the reliance on ChatGPT among students in South Africa and its broader implications for academic development. It adopted a qualitative methodology and drew from primary and secondary sources. Secondary data was collected from secondary sources and primary data was collected via questionnaires administered to academics and students across South Africa. The paper

initiates with an introduction that establishes the context of the research. It also explored students' use of ChatGPT within the framework of concerns regarding plagiarism and academic integrity. More importantly, it examined the potential impact of ChatGPT on students' cognitive abilities, arguing that excessive dependence on the tool may diminish critical thinking, academic creativity, and deep learning, ultimately leading to the breeding of *academic dummies*. Furthermore, the paper advocates for the regulation of AI usage in academic settings and offers a series of recommendations on how ChatGPT can be utilised responsibly and ethically to mitigate its potential adverse effects on student learning.

Declarations

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Competing Interests

The authors declare no financial or personal relationships that could have influenced the research inappropriately.

Author Contributions

CAH provided overall guidance throughout the research process. PMK drafted the questionnaire that was administered to participants. All authors developed the theoretical framework, conducted the analyses, and prepared the first draft of the manuscript. All authors contributed to data collection, interpretation, and critical revisions of the manuscript. All authors reviewed and approved the final version of the manuscript.

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The data supporting the findings of this study are not publicly available due to confidentiality considerations but may be obtained from the corresponding author upon reasonable request. The corresponding author reserves the right to grant or decline access to the data.

References

- Baidoo-Anu, D., & Ansah, L. O. (2023). Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. *Journal of AI*, 7(1), 52-62.
- Barta, A., Fodor, L. A., Tamas, B., & Szamoskozi, I. (2022). The development of students' critical thinking abilities and dispositions through the concept mapping learning method – A meta-analysis. *Educational Research Review*, 37, Article 100481. <https://doi.org/10.1016/j.edurev.2022.100481>
- Binns, J. (2022). Ethical considerations of using AI in higher education. *Journal of Educational Ethics*, 16(4), 50-65.

- Bosch, T., Jordaan, M., Mwaura, J., Nkoala, S., Schoon, A., Smit, A., Uzuegbunam, C., & Mare, A. (2023). South African university students' use of AI-powered tools for engaged learning. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4595655>
- Chowdhary, K. (2020). Natural language processing. In *Fundamentals of artificial intelligence* (p. 603-649). Springer.
- Delgado, M. (2024). Access to AI tools and academic equity: An emerging issue. *Journal of Education and Technology*, 22(1), 20-34.
- Dilekli, Y., & Boyraz, S. (2024). From "Can AI think?" to "Can AI help thinking deeper?": Is use of ChatGPT in higher education a tool of transformation or fraud? *International Journal of Modern Education Studies*, 8(1), 49-71.
- Essel, H. B., Vlachopoulos, D., Essuman, A. B., & Amankwa, J. O. (2024). ChatGPT effects on cognitive skills of undergraduate students: Receiving instant responses from AI-based conversational large language models (LLMs). *Computers and Education: Artificial Intelligence*, 6, Article 100198. <https://doi.org/10.1016/j.caeai.2023.100198>
- Feldstein, M., & Witzke, G. (2023). Plagiarism and academic dishonesty in the age of AI: A review of ethical implications. *Journal of Higher Education Ethics*, 28(1), 35-50.
- Furlong, M. (2023). AI in education: Opportunities and challenges. *Journal of Educational Technology*, 18(2), 97-110.
- Gartner, B. (2023). Critical thinking and AI: The implications for education. *Journal of Educational Philosophy*, 24(4), 101-117.
- Guo, Y., & Lee, D. (2023). Leveraging ChatGPT for enhancing critical thinking skills. *Journal of Chemical Education*, 100(12), 4876-4883.
- Haenlein, M., & Kaplan, A. (2019). A brief history of artificial intelligence: On the past, present, and future of artificial intelligence. *California Management Review*, 61(4), 5-14. <https://doi.org/10.1177/0008125619864925>
- Haque, M. U., Dharmadasa, I., Sworna, Z. T., Rajapakse, R. N., & Ahmad, H. (2022). "I think this is the most disruptive technology": Exploring Sentiments of ChatGPT Early Adopters using Twitter Data. arXiv. <https://doi.org/10.48550/arXiv.2212.05856>
- Hempel, C. (2023). The risk of AI plagiarism: How educators can respond. *Journal of Academic Integrity*, 19(1), 112-128.
- Hyman, M., & Sierra, J. (2016). Open- versus close-ended survey questions. *NMSU Business Outlook*, 14.
- Joshi, I., Budhiraja, R., Dev, H., Kadia, J., Ataullah, M., Mitra, S., Akolekar, H., & Kumar, D. (2024). ChatGPT in the classroom: An analysis of its strengths and weaknesses for solving undergraduate computer science questions. *Proceedings of the 2024 Conference on Educational Technology*, 625-631. <https://doi.org/10.1145/3626252.3630803>
- Kirmani, A. R. (2022). Artificial intelligence-enabled science poetry. *ACS Energy Letters*, 8, 574-576. <https://doi.org/10.1021/acscenergylett.2c02758>
- Lim, W.M., Gunasekara, A., Pallant, J.L., Pallant, J.I. and Pechenkina, E. (2023) 'Generative AI and the future of education: Ragnarök or reformation? A paradoxical perspective from management educators', *The International Journal of Management Education*, 21(2).
- Liu, X., Zheng, Y., Du, Z., Ding, M., Qian, Y., Yang, Z., & Tang, J. (2024). GPT understands, too. *AI Open*, 5, 208-215.
- Lo, C. K. (2023). What is the impact of ChatGPT on education? A rapid review of the literature. *Education Sciences*, 13(4), 410. <https://doi.org/10.3390/educsci13040410>

- Lund, B. D., Wang, T., Mannuru, N. R., Nie, B., Shimray, S., & Wang, Z. (2023). ChatGPT and a new academic reality: AI-written research papers and the ethics of the large language models in scholarly publishing. *JASIS&T*. <https://doi.org/10.1002/asi.24750>
- Mijwil, M. M., Hiran, K. K., Doshi, R., Dadhich, M., Al-Mistarehi, A.-H., & Bala, I. (2023). ChatGPT and the future of academic integrity in the artificial intelligence era: A new frontier. *Al-Salam Journal for Engineering and Technology*, 2(2), 116-127. <https://doi.org/10.55145/ajest.2023.02.02.015>
- Newton, P. M. (2023). ChatGPT performance on MCQ-based exams. *EdArXiv*. <https://doi.org/10.35542/osf.io/sytu3>
- Nowell L., Norris J.M., White D., & Moules N.J. 2017. Thematic Analysis. *International Journal of Qualitative Methods*, 16(1), 1-13.
- Noy, S., & Zhang, W. (2023). Experimental evidence on the productivity effects of generative artificial intelligence. *SSRN Scholarly Paper 4375283*. <https://doi.org/10.2139/ssrn.4375283>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed-method implementation research. *Administration and Policy in Mental Health*, 42(5), 533-544. <https://doi.org/10.1007/s10488-013-0528-y>
- Perkins, R. (2023). AI as a learning tool in academia: Perspectives and concerns. *Educational Technology Review*, 29(2), 102-119.
- Peters, M. A., Jackson, L., Papastephanou, M., Jandrić, P., Lazaroiu, G., & Fuller, S. (2023). AI and the future of humanity: ChatGPT-4, philosophy and education – Critical responses. *Educational Philosophy and Theory*. <https://doi.org/10.1080/00131857.2023.2213437>
- Rasul, T., Nair, S., Kalendra, D., Robin, M., de Oliveira Santini, F., Ladeira, W. J., Sun, M., Day, I., Rather, R. A., & Heathcote, L. (2023). The role of ChatGPT in higher education: Benefits, challenges, and future research directions. *Journal of Applied Learning and Teaching*, 6(1), 41-56.
- Severance, R., & Zawacki-Richter, O. (2022). AI in education: Impacts on learning and pedagogy. *International Journal of Educational Technology*, 23(3), 43-58.
- Singh, M. (2023). Maintaining the integrity of the South African university: The impact of ChatGPT on plagiarism and scholarly writing. *South African Journal of Higher Education*, 37(5), 203-220. <https://doi.org/10.20853/37-5-5941>
- Smith, J., Watson, L., & Lee, T. (2022). The dangers of AI overuse in higher education. *Journal of Educational Policy*, 18(2), 105-118.
- Sok, S., & Heng, K. (2023). ChatGPT for education and research: A review of benefits and risks. *Cambodian Journal of Educational Research*, 3(1), 110-121.
- Stewart, C., & Lister, S. (2023). Ethical AI use in education: Developing guidelines for academic integrity. *Journal of Educational Policy*, 20(2), 128-142.
- Stojanov, A. (2024). Achievement goal motivation and reliance on ChatGPT for learning. *Psychological Applications and Trends*, 2024.
- Stojanov, A., Liu, Q., & Koh, J. H. L. (2024). University students' self-reported reliance on ChatGPT for learning: A latent profile analysis. *Computers and Education: Artificial Intelligence*, 6, 100243. <https://doi.org/10.1016/j.caeai.2024.100243>
- Sullivan, M., Kelly, A., & McLaughlan, P. (2023). ChatGPT in higher education: Considerations for academic integrity and student learning. *Journal of Applied Learning & Teaching*, 6(1), 1-10. <https://doi.org/10.37074/jalt.2023.6.1.17>
- Suriano, R., Plebe, A., Acciai, A., & Fabio, R. A. (2025). Student interaction with ChatGPT can promote complex critical thinking skills. *Learning and Instruction*, 95, 102011. <https://doi.org/10.1016/j.learninstruc.2025.102011>

- Taecharungroj, V. (2023). What can ChatGPT do? Analyzing early reactions to the innovative AI chatbot on Twitter. *Big Data and Cognitive Computing*, 7(1), 35. <https://doi.org/10.3390/bdcc7010035>
- Tajik, E., & Tajik, F. (2024). A comprehensive examination of the potential application of ChatGPT in higher education institutions. *SSRN Scholarly Paper* 4699304. <https://doi.org/10.2139/ssrn.4699304>
- Tarisayi, K. (2024). ChatGPT use in universities in South Africa through a socio-technical lens. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2023.2295654>
- Urban, M., Děchtěrenko, F., Lukavský, J., Hrabalová, V., Svacha, F., Brom, C., & Urban, K. (2024). ChatGPT improves creative problem-solving performance in university students: An experimental study. *Computers & Education*, 215, 105031. <https://doi.org/10.1016/j.compedu.2024.105031>
- Vardi, M. (2023). Artificial intelligence and academic integrity: Navigating the ethical landscape. *Journal of Higher Education Research*, 31(1), 75-88.
- Vasilatos, C., Alam, M., Rahwan, T., Zaki, Y., & Maniatakos, M. (2023). HowkGPT: Investigating the detection of ChatGPT-generated university student homework through context-aware perplexity analysis. <https://doi.org/10.48550/arXiv.2305.18226>
- Viorennita, A., Dewi, L., & Riyana, C. (2023). The role of ChatGPT AI in student learning experience. *Indonesian Journal of Multidisciplinary Research*, 3(2), 445-452.
- Worley, P. (2015). Open thinking, closed questioning: Two kinds of open and closed question. *Journal of Philosophy in Schools*, 2, 1269. <https://doi.org/10.21913/JPS.v2i2.1269>
- Yılmaz, F. G. K., & Yılmaz, R. (2023). The effect of generative artificial intelligence (AI)-based tool use on students' computational thinking skills, programming self-efficacy, and motivation. *Computers & Education: Artificial Intelligence*, 4, 100147. <https://doi.org/10.1016/j.caeai.2023.100147>
- Youssef, E., Medhat, M., Abdellatif, S., & Al Malek, M. (2024). Examining the effect of ChatGPT usage on students' academic learning and achievement: A survey-based study in Ajman, UAE. *Computers and Education: Artificial Intelligence*, 7, 100316. <https://doi.org/10.1016/j.caeai.2024.100316>
- Yu, H. (2023). Reflection on whether ChatGPT should be banned by academia from the perspective of education and teaching. *Frontiers in Psychology*, 14, 1181712. <https://doi.org/10.3389/fpsyg.2023.1181712>
- Zhai, X. (2022). ChatGPT user experience: Implications for education. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4312418>
- Zhao, Y., Wang, H., & Wu, X. (2023). AI-enhanced learning: Students' perceptions of ChatGPT in academic work. *Journal of Educational Technology & Society*, 26(1), 45-61.