

Is Generative Artificial Intelligence Sculpting or Stunting University Undergraduate Students' Intellect? Perceptions of Lecturers in a Zimbabwean University

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Abstract

Critical thinking and criticality are defining features for higher education. University students are expected to display critical thinking in the presentation of arguments in academic writing as they prepare to join the world of work where problem solving is key. However, ongoing debate suggests that the emergence of Generative Artificial Intelligence (GenAI) seems to be threatening students' critical thinking and problem-solving skills. For example, GenAI tools like ChatGPT can generate natural human-like responses to assignment questions. The question now is: Is GenAI not impacting negatively on students' critical thinking skills if it can do what students are expected to do in academic writing? This qualitative study endeavoured to establish how lecturers perceived the impact of GenAI on students' critical thinking and problem-solving skills as shown in their academic writing. A phenomenology research design was used, with data collected through semi-structured interviews and focus group discussions from 8 conveniently sampled lecturers from one Zimbabwean university. Data were analysed using Braun and Clarke's (2006) thematic approach. Results showed that responsible use of GenAI can facilitate knowledge acquisition, stimulate critical thinking and promote problem-solving. However, participants indicated that students have become over-reliant on GenAI to an extent that they ask it to do everything for them. This compromises their critical thinking and problem-solving skills as they submit AI-generated work without engaging meaningfully with the content. In addition, the lack of anti-plagiarism software and an AI policy at the university has led to widespread academic dishonesty among the undergraduate students. The study recommends that the university offers training to both faculty and students to enable them to harness GenAI to shape and develop students' critical thinking and problem-solving skills.

Keywords: academic writing, ChatGPT, critical thinking, generative artificial intelligence, problem-solving

1. Introduction

1.1 Introduce the Problem

The emergence of Generative Artificial Intelligence (GenAI) and machine learning in the 21st century seem to be threatening critical thinking in humanity since machines seem to be able to do everything that humans can do. The threat of GenAI to higher education students becomes an issue for discussion, given that critical thinking is a cornerstone of higher education. Students are expected to present meaningful arguments in given tasks and assignments to show that they can think critically and ultimately become problem solvers for sustainable development. Barnett (2015:28) notes that in higher education, "...critical thinking is a necessary component of argumentation..." Thus, students in higher education institutions are expected to be critical thinkers for them to present meaningful arguments in academic writing as they prepare to join the world of work.

AI is defined as computing systems that can engage in human-like processes such as learning, adapting, synthesizing, self-correction, and use of data for complex processing tasks (Popenici & Kerr, 2017 cited in Crompton & Song, 2021). This means that AI can simulate human intelligence processes through machines, especially computer systems. Chatbots that are designed for academic support with conversational knowledge exchange as the primary output (Crawford et al., 2024) are mostly used in higher education spaces and offer many benefits to students. For example, a study by Van Wyk (2025) revealed that postgraduate students leveraged Grammarly to assist them in various aspects of academic writing like contextual spelling, grammar correctness, punctuation, sentence structure and clarity in style. However, Bozkurt et al. (2023) observe that the introduction of chatbots like ChatGPT1 and DALL-E has captured

academia's imagination and shaken it in equal measure. While these chatbots can be helpful in supporting students in their academic writing endeavours, questions about ethics and academic integrity often arise. The big question is on the extent to which students can be responsible in using these chatbots for supporting their academic experience without violating their integrity as academics.

1.2 Explore Importance of the Problem

Concerns about ethics and academic integrity in the use of GenAI have been documented. For instance, ChatGPT has been reported to facilitate academic dishonesty and plagiarism (Meniado, 2023). To confirm this, Jarvis (2024) reports that different UK universities had penalised 2962 students for plagiarism. The report further stated that bosses at 82% of the institutions revealed that they had punished students for using banned chatbots, ChatGPT included. Similarly, Aljuaid (2024: 22) reports that, "Middlebury College banned classroom use of ChatGPT over concerns it could impede critical thinking and writing skill development." All these factors may be pointers to challenges associated with GenAI usage in higher education. It is my intention, through this study, to establish how lecturers in a Southern African university perceive GenAI with regards to undergraduate students' critical thinking problem-solving skills, and their reasons for such perceptions.

University educators can play a part in enhancing the use of GenAI in this fast-evolving technological landscape. This calls for the educators' deep understanding of the benefits that GenAI can offer in the higher education enterprise, hence the need to establish their perceptions of these tools on students' critical thinking and problem-solving skills. Of note, also, is the fact that no study known to the researcher has addressed lecturers' perceptions on the impact of Generative Artificial Intelligence on undergraduate students' critical thinking skills in the Zimbabwean university where this study was conducted. This suggests a paucity of research on GenAI in African higher education in general (Crompton & Burke, 2023) and Zimbabwe in particular, hence, the need to conduct this study.

By providing an in-depth understanding of how lecturers perceive GenAI's impact on undergraduate students' critical thinking and problem-solving skills, the study contributes to a growing body of research on GenAI's in Higher Education (HE). To add to this, the study draws on Vygotsky's Zone of Proximal Development, hence, it advances theoretical discussions by conceptualising GenAI as a form of digital scaffolding in academic writing. This can help university educators and students to find ways to leverage GenAI for the development of critical thinking and problem-solving skills in academic writing.

1.3 Describe Relevant Scholarship

1.3.1 The Study's Theoretical Framework

To reach an understanding of lecturers' perceptions on the impact of GenAI on students' critical thinking and problem-solving skills, Vygotsky's concept of the Zone of Proximal Development (ZPD) was used (Vygotsky, 1978). The ZPD refers to the gap between what a learner can do independently and what they can do with guidance from an adult/teacher/more competent person or collaboration with more advanced learners (Chaiklin, 2003). Traditionally, the concept of the ZPD centered on human interaction (Ntereke et al., 2025) but scholars such as Chen et al. (2020) have shown that Artificial Intelligence can simulate human behaviours. Thus, this study uses this concept to establish if GenAI can go as far as helping university students develop critical thinking skills like what human teachers can do. Hence, lecturers' perceptions of GenAI were examined to establish if they viewed GenAI as a scaffolding tool (since these tools are regarded as academic writing assistants) within students' ZPD or limiting students' critical thinking skills.

Studies have shown that GenAI tools can facilitate improvement in academic writing among students. For example, findings from Ntereke et al.'s (2025) study revealed that undergraduate students viewed ChatGPT as a teacher because it offered them support in aspects like rectifying language errors such as grammar, spelling and punctuation in their academic writing. In addition, Chen et al. (2022) note that in educational settings, GenAI is used to support learning while learners work as collaborators with GenAI. This seems to suggest that GenAI tools can perform similar tasks performed by 'more competent others' like teachers to help students reach higher performance levels in academic writing. Thus, this study used the concept of the Zone of Proximal Development to establish if lecturers perceived GenAI as a tool that could propel students to higher levels of critical thinking in academic writing or as a hindrance to it.

1.3.2 Benefits of GenAI adoption in Higher Education

The emergence of AI and its rapid development has made it an integral part of different aspects of modern life, HE included. Imran et al. (2024) note that aspects of modern education such as learning, analysis, and teaching, have been significantly transformed by AI. There has been a rapid increase of new AI tools (Crompton & Burke, 2023) and if universities do not move with speed to understand their place in Higher Education, they may miss the opportunities that they offer. These opportunities require a swift change in the direction of these new realities that we find ourselves in this digital age (Akinwalere & Ivanov, 2022). This is especially critical for Higher Education since it is responsible for

knowledge generation and manpower development. Hence, AI is indispensable, as its influence on how HE works seems inevitable. In this section, I will highlight a few studies that have been conducted to situate the current study in the growing body of literature on GenAI in HE. The benefits of GenAI in HE will be discussed first before delving into the challenges as highlighted in literature.

Research is at the core of HE as both students and faculty engage in research for various purposes. Imran et al. (2024) contend that GenAI tools can aid in tasks such as literature review, data analysis, new idea generation, among many other benefits. With GenAI assistance, researchers may no longer need to grapple with routine tasks in research and this can give them more freedom to focus on more critical and innovative thinking (Butson & Spronken-Smith, 2024). According to these scholars, GenAI tools such as Dimensions, Rayyan, Elicit, and AskyourPDF can be handy as they can quickly automate the more strenuous elements of literature. Other computer software such as NVivo and MAZQDA integrate built-in GenAI capabilities to assist in early theme exploration and generation of interpretive summaries of complex focus group or interview data. This means that researchers can generate more rigorous research since they devote more time to critical analysis of information that has already been classified into related themes by GenAI.

GenAI can also help university students grasp course material better as tools such as Google Gemini and ChatGPT have the capacity to give students immediate feedback on questions asked and offer question and answer sessions to aid the students' understanding (Imran et al., 2024). As such, GenAI tools can help in improving student outcomes (Saidakhror, 2024). This is possible because students can get reliable synthesised information at the click of a button instead of having to grapple with consulting different sources and trying to compare the information from these sources to reach a meaningful understanding of the topic. Using GenAI can, thus, give students more time to make sense of the information and engage in meaningful discussions on the topic. To this end, it can be noted that GenAI has the potential to create adaptive learning environments, enhance engagement and participation, and develop students' critical thinking and problem-solving skills (Al-Zahrani & Alasmari, 2024).

Some studies have shown that GenAI can be a driver to critical thinking in higher education. Students can display critical thinking and problem-solving skills in academic writing if they use GenAI responsibly. For example, Al-Zahrani and Alasmari's (2024) study indicated that GenAI had the potential of creating adaptive learning environments which facilitate engagement and participation among learners, improving accessibility and supporting the development of critical thinking and problem solving. In agreement with this, findings from a systematic review conducted by Chanpradit (2025) on generative artificial intelligence in academic writing revealed that generative AI tools provided support for the whole writing process from ideation to refinement, at the same time promoting critical thinking and facilitating self-regulated learning. Another study by Shen and Chen (2025) revealed that the use of ChatGPT developed students' critical thinking skills as they leveraged GenAI-generated texts to develop their own academic writing. Thus, GenAI can be a powerful ally in fulfilling academia's mission to stimulate critical and innovative thinking, generate new knowledge, and contribute solutions to real world educational problems (Butson & Spronken-Smith, 2024).

1.3.3 Challenges of GenAI adoption in HE

Several studies conducted in different parts of the world show that while some HE institutions have adopted GenAI use, there are still some challenges that need urgent attention to facilitate its meaningful use by university faculty, administrators, and students. University educators see AI as both a threat and opportunity (Lee et. al, 2024). Research has shown that, if the adoption of GenAI in HE is not well thought out, students' critical thinking and problem-solving skills may be compromised. For instance, studies in a systematic review on generative AI in academic writing revealed that there was an over-reliance on GenAI tools by students and this had a potential to stifle authenticity, creativity, and critical thinking (Chanpradit, 2025). Similarly, Borisov and Stoyanova (2024) found out that students can become over-reliant on AI, leading to a decline in their emotional intelligence, critical thinking, and creativity. Participants in Cheng et al. (2025) were aware of ChatGPT's limitations and potential drawbacks so they approached its use with caution, viewing it as a supplementary resource rather than a replacement for critical thinking and personal input. In other words, they used ChatGPT to stimulate their critical thinking in academic writing and not to make it 'think' for them. Aljuaid (2024) observes that, unlike academic writing courses which emphasise innovative thinking and persuasive reasoning, among other skills, GenAI cannot cultivate deep comprehension and analysis in students, hence, over-reliance on these tools can be problematic. As such, Chanpradit (2025) suggests that these tools should be used as supplementary tools and not replacements for critical thinking and creativity.

1.4 State Research Questions and Their Correspondence to Research Design

The study, being qualitative, was guided by research questions to help unearth lecturers' perceptions on the impact of GenAI on undergraduate students' critical thinking and problem solving skills.

The study intended to answer the following research questions:

1. How do lecturers in the selected university perceive the impact of GenAI on undergraduate students' critical thinking and problem-solving abilities in academic writing?
2. Why do lecturers perceive the impact of GenAI on undergraduate students' critical thinking and problem-solving abilities in academic writing the way they do?

The qualitative approach and the phenomenology research design were used to answer these questions by getting first-hand information (Johnson, et al., 2020) from the lecturers on how they perceive GenAI use by students and its impact on students' critical thinking and problem solving skills based on their lived experiences.

2. Method

The study employed the qualitative approach as it enabled the researcher to make sense of lived and observed phenomenon in a specific context with specially selected persons (Oranga & Matere, 2023). The approach facilitated the researcher's understanding of why lecturers perceived the impact of GenAI on students' critical thinking and problem solving skills the way they did. By using the qualitative approach, an improved understanding (Aspers & Corte, 2019) of the concept of GenAI in the university context was achieved.

2.1 Participant (Subject) Characteristics

The participants were lecturers from the School of Education from a state university in Zimbabwe. They had varying years of experience in teaching at the university level and were of different ages; the youngest being forty-eight and the oldest being sixty-one years old.

2.2 Sampling Procedures

The sample comprised 8 conveniently sampled lecturers from a state university in Zimbabwe. Participation was based on their availability and willingness to participate.

2.3 Measures and Covariates

Data were gathered using semi-structured interviews and Focus Group Discussions (FGDs). Semi-structured interviews enabled me to ask open ended questions from an interview guide (Busetto, et al., 2020) which allowed flexibility to make changes where necessary, although I largely stuck to the general plan and set of questions on the interview guide (Ugwu & Eze Val, 2023). Through the semi-structured interview, I elicited in-depth, individualised accounts of lecturers' beliefs about GenAI's impact on students' higher levels of thinking. It also allowed for adaptability, enabling me to explore issues as they emerged during the interview process. Thus, through semi-structured interviews, I managed to capture context-specific pedagogical insights from lecturers on how they perceived GenAI's impact on students' critical thinking and problem solving skills.

On the other hand, the FGDs allowed a homogenous group (University lecturers) to share their views on a specific topic of interest (Oranga & Matere, 2023) which in this case was the impact of GenAI on university students' critical thinking and problem-solving skills. Phenomena such as perceptions on GenAI in education are shaped through dialogue, professional experiences, and shared institutional contexts of participants. Hence, FGDs facilitated the exploration of multiple perspectives and critical engagement to offer insights into socially constructed understandings of GenAI's impact on undergraduate students' critical thinking and problem-solving skills. This approach is justified because GenAI presents a dual impact, i.e. it can either facilitate critical thinking by prompting reflection and encouraging diverse perspectives, or diminish independent reasoning due to excessive dependence (Olebile & Om, 2025). Thus, group interaction was necessary to capture the complex and contested nature of lecturers' perceptions on the phenomenon.

To conduct the interviews, prior arrangements were made with individual lecturers as to when the online interviews would be conducted. After all the lecturers had been interviewed, a focus group discussion was conducted on an agreed date with the 8 participants.

2.3.1 Research Design

The phenomenology research design was used to analyse the participants' perceptions, and beliefs (Ugwu & Eze Val, 2023) to help in the understanding of the core phenomenon under study. It was deemed the most ideal design for this study which sought to understand lecturers' perceptions and interpretations of how GenAI influences undergraduate students' critical thinking and problem solving skills. The design was, therefore, suitable for exploring how individuals (lecturers) make meaning of their lived experiences and the significance they attach to a phenomenon, rather than merely describing their behaviours (Tavakol & Sandars, 2025). By examining the lived experiences of the people who lived it (Tomaszewski, et al., 2020), the phenomenon on perceptions of lecturers on how GenAI adoption has impacted on students' critical thinking and problem-solving skills was better understood.

Phenomenology prioritises understanding subjective experiences and meaning making (Alhazmi & Kaufmann, 2022), therefore, it was ideal for this study as it enabled an in-depth exploration of lecturers' perceptions, capturing how they

interpret both the opportunities and challenges of GenAI in shaping undergraduate students' higher order thinking. This could not have been achieved if other qualitative designs—such as grounded theory or ethnography—had been used, since they do not focus on the lived experiences of the participants, but rather on developing explanatory theory and examining shared cultural practices, respectively.

2.3.2 Data Analysis Techniques

To analyse the data from interviews and focus group discussions, Braun and Clarke's (2006) reflexive thematic analysis approach was used. This involved familiarisation with the data through repeated reading of transcribed interviews, followed by coding to establish patterns emerging from the data. Codes were organised into potential themes which were then revised, refined and clearly defined guided by the study's focus on the lecturers' perceptions on the impact of GenAI on students' critical thinking and problem-solving skills. A reflexive approach was maintained throughout to guarantee rigorous and lucid theme development.

2.3.3 Trustworthiness Measures

To ensure trustworthiness of findings, the study adopted Lincoln and Guba's (1985) trustworthiness framework which includes credibility, transferability, dependability, and confirmability. Credibility was ensured through the triangulation of methods (interviews and FGDs) as well as use of verbatim quotations in the presentation of findings. Transferability—which refers to the extent to which findings can be applied in other contexts (Lincoln & Guba, 1985)—was ensured through the use of thick descriptions of the participants and research setting. Thick descriptions allow readers to determine if the research can be applicable in their own context. Dependability, which refers to the consistency and stability of data over time (Korstjens & Moser, 2018), was ensured by providing detailed descriptions of data collection and analysis procedures alongside clear descriptions of methods used. Finally, confirmability of the study's results was ensured through the triangulation of findings from FGDs and semi-structured interviews.

3. Results

Findings reveal that lecturers had mixed perceptions regarding the impact of GenAI on undergraduate students' intellect. While they acknowledged GenAI's potential to promote critical thinking, they expressed concerns about its misuse by students. The subsequent section highlights the reasons for positive perceptions of GenAI on its impact on undergraduate students' critical thinking and problem-solving skills in academic writing. The names used in the presentation of findings are pseudonyms to ensure the anonymity of participants.

3.1 *Reasons for Positive Perceptions of GenAI's Impact on Students' Critical Thinking and Problem-solving Skills*

Lecturers felt that if GenAI tools are used responsibly, they can enhance students' critical thinking and problem-solving skills. They highlighted two ways in which GenAI tools can enhance critical thinking and problem solving among undergraduate students. These are discussed in detail below.

3.1.1 GenAI Provides Vast Amounts of Information on a Topic

One of the reasons why some lecturers thought that GenAI had the potential to promote students' critical thinking and problem-solving skills in academic writing was that it is a platform that provides a vast amount of information on a topic which enables students to make an evaluation of that information. Responses like, 'It makes tasks easier that students will have time to read and synthesise the information and come up with comprehensive arguments in their writing' and 'AI widens the base of sources of research material, and it makes comparative evaluation possible', show that students can become critical thinkers with the assistance of GenAI tools. The ability by students to critically evaluate the information readily given by GenAI reflects critical thinking. This reflects GenAI's role in promoting critical thinking as it provides a platform for quick evaluation of readily available material.

GenAI can work as a scaffold to enable learners to reach their potential to think critically and solve problems as they write their academic work through providing sources of information at the click of a button. This saves the students' time in looking for sources, leaving them with ample time to engage critically with the information for meaningful presentation in academic writing. Responses like, 'AI provides a wide variety of sources of information which students can read and compare to come up with a comprehensive analysis of issues. This means that AI can facilitate critical thinking in academic writing as it provides information for analysis by students at a click of a button' and 'AI is good because it saves time. Students do not waste time looking for literature since AI can easily provide the sources for them hence, they will spend more time reading and analysing the information' captured the gist of participants' responses and imply that, instead of spending hours trying to identify relevant sources of information to answer an assignment question, students would devote more time to analysing information provided by GenAI tools and come up with comprehensive arguments.

3.1.2 GenAI Promotes a Meaningful Grasp of Information by Students

In addition to the above, participants indicated that GenAI tools such as ChatGPT can facilitate a meaningful grasp of

information by students. The ability by students to understand a topic can stimulate critical thinking as they explore it further. This can be seen in the following interview responses:

AI tools like ChatGPT explain concepts in a way that is easy to understand which helps students master those concepts easily (Mr. Jones)

AI provides critical insights and leads in a clear way which one could possibly have missed by working all alone without AI. Thus, AI gives direction, and this may prompt critical thinking (Mr. Cole)

It helps students to brainstorm on a topic. AI can be a friend that helps students in simplifying complex topics (Mr. Tom).

It makes tasks easier that students will have time to read and synthesise the information and come up with comprehensive arguments in their writing (Mr. Bots)

The participants' responses indicate that the ability by GenAI tools like ChatGPT to explain concepts in a simple way can facilitate a meaningful grasp of information which can stimulate students' critical thinking skills. Mr. Tom's response shows that GenAI can be a friend which students can utilise to understand complex topics. These responses show that with GenAI tools' assistance, students can synthesise information and present well thought out academic arguments. Mr. Cole's response seems to suggest that without GenAI assistance, there is a possibility that students may miss some critical insights on a topic, which could then affect their critical presentation of ideas in academic writing. During the focus group discussion, some participants acknowledged that summarised information is normally easy to understand and if GenAI provides such, it could stimulate students' critical thinking and problem-solving skills when presenting academic arguments.

However, participants highlighted that if not carefully approached, the use of GenAI can stunt students' critical thinking and problem-solving skills, and this is the status of GenAI use in the university. The participants' general perception of GenAI use by undergraduate students in the university was negative owing to a number of reasons. The subsequent section discusses the reasons for participants' negative perceptions of GenAI on students' critical thinking and problem-solving skills in academic writing.

3.2 Reasons for Negative Perceptions of GenAI's Impact on Students' Critical Thinking and Problem-Solving Skills

Participants highlighted that irresponsible use of GenAI tools by students may hinder their critical thinking and problem-solving skills. They highlighted three major reasons why they perceived GenAI as a hindrance to critical thinking among undergraduate students. These reasons are discussed in detail in the subsequent discussion.

3.2.1 GenAI Promotes Laziness Among Students

Participants indicated that GenAI has the potential to promote laziness hence; it may stifle students' critical thinking and problem-solving skills. Some of their responses are as follows:

AI is making students lazy. They are no longer 'students' (derived from study) but just gatherers of ready-made answers. AI encourages the so-called students to park their brains or to be chauffeur driven to their graduation podium! Chauffeur driven by AI that thinks on their behalf (Mr. Nick)

The ama2k (those born in the year 2000 and after) are very lazy and ChatGPT is assisting them to graduate without working (Mr. Bots).

Relying too much on AI makes it harder for students to engage deeply with the subject matter and grow as scholars (Mr. Jones).

The responses above echo participants' negative perceptions about the use of GenAI as they suggest that GenAI can stunt students' critical thinking and problem-solving skills if they let it do the work for them instead of seeking its assistance in academic writing. One participant thought that those born in the year 2000 and after are generally lazy and AI is assisting them to graduate without working. Due to their laziness, they over-rely on GenAI to an extent that they do not engage deeply with the subject matter, which leads to lack of critical thinking. Another response indicates that in the wake of GenAI, students are no longer making an effort to study as expected of them. They simply collect ready-made answers generated by AI tools; hence, they can safely 'park' their brains while GenAI does the job for them. This, according to the participants, is contrary to the meaning of the word 'student' which suggests a deliberate undertaking where one is expected to research for themselves to gain substantive knowledge of the field they are studying. Participants felt that the arguments raised by the students should reflect criticality through meaningful synthesis of researched information to develop their own position on the subject. However, if students have parked their brains because GenAI is 'thinking' for them, then the tool is possibly stunting critical thinking rather than scaffolding students to higher levels of critical thinking to fill their Zone of Proximal Development.

During the focus group discussion, participants were adamant that most students have become lazy to an extent that they now ask GenAI to do everything for them. The participants indicated that they could easily identify GenAI generated assignments by their uniqueness, flow and lack of general errors but without acknowledgement of sources. Responses like ‘Students perform exceptionally well in assignments but dismally in exams’ and ‘AI is promoting the copy and paste approach among students, and in the long run, citizenry may become lazy to think’ show that participants think that GenAI had catalysed laziness among students as they simply copy and paste information provided by GenAI. According to them, students’ intellectual capabilities are tested during the exams where most of them perform dismally since, during the semester, they submit GenAI-generated assignments for coursework and never engage meaningfully with the content.

3.2.2 GenAI Promotes Academic Dishonesty Among Students

Participants also highlighted that GenAI may also promote academic dishonesty among students. This is because GenAI gives answers without acknowledging the sources; hence, Mr. Jones felt that ‘AI is an advanced form of plagiarism.’ Because students believe that GenAI has all the answers, they tend to take GenAI-generated material and present it as their own without acknowledging the sources. The participants indicated that sometimes students presented fake references for the material presented in their research projects or assignments. Responses like ‘AI makes students academically dishonest as they fail to acknowledge sources of information’, ‘AI stifles students’ research ability and reduces their critical views on issues, let alone their natural problem-solving capabilities’ show the negative perceptions held by participants highlighting that GenAI is promoting academic dishonesty among undergraduate students in the university under study. According to participants, students often fail to acknowledge sources in their writing and critically examine issues. As a result ‘Students cannot own the assignment/dissertation they submit’ (Mr. Tom).

Participants highlighted that plagiarism is rampant among undergraduate students at the university due to GenAI. Students at the university, according to the participants, use GenAI-generated content unethically because they believe that the computer has all the answers. The participants felt that this academic dishonesty and unethical use of GenAI-generated content constrains students’ critical thinking skills. This can be seen in responses like, ‘AI sometimes provides information without acknowledging the sources. Then students simply copy and paste that information and submit it for marking’, and ‘Over reliance on AI numbs critical thinking powers due to students’ belief that the computer has all the answers.’ These responses show that the belief by some students that the computer has all the answers leads them to copy and paste information and submit it unaltered for marking. This, according to the participants, impacts negatively on students’ critical thinking skills as they over-rely on GenAI content without making an attempt to critically engage with it.

Academic dishonesty may ultimately lead to the production of incompetent professionals who do not have an in-depth knowledge of the subject matter in their areas of specialisation. The following response confirms this:

Whoever is the brainchild of AI is ruining our students. AI promotes shortcuts, opposed to critical thinking. We will end up producing substandard lawyers, doctors, managers, pilots and engineers discharging poor services and even killing people because students simply submit AI generated content without critically synthesising it (Ms. Glenda)

The practice of using GenAI-generated content without critically evaluating it leads to the production of incompetent graduates who never allowed themselves to think critically for meaningful mastery of subject matter. Lecturers felt that GenAI is facilitating academic dishonesty by many undergraduate students at the university who are unethically using GenAI-generated content without acknowledging and critically examining it for academic writing. A response from one of the lecturers during the focus group discussion illustrates the risks of assuming that GenAI provides fully reliable answers when she said, ‘Some of the views provided by AI are shallow and sometimes inaccurate. If learners are not aware of this and take AI as the Bible, they may lose out on critical thinking, analysis and evaluation.’

Under normal circumstances, students who plagiarise and use information unethically should be penalised. However, at the institution under study, this has been difficult because the university does not have resources and a clear policy on GenAI use. The subsequent section discusses these issues in detail.

3.2.3 Lack of Resources and Institutional Policy on GenAI Use

The findings indicate that the widespread misuse and overdependence on GenAI tools by the students at the university under study has largely gone unpunished. This is because participants indicated that they lacked the resources to confirm that students were indeed plagiarising GenAI-generated content. Responses like ‘Some institutions like ours struggle to even acquire anti-plagiarism software. Such institutions struggle to equip the lecturer with the skills, software and gadgets to combat the adverse effects of AI’, ‘We do not currently have an active subscription for Turnitin at the university’ and ‘I think the impact of AI is negative especially for ill-prepared institutions and lecturers in resource constrained institutions in developing countries like ours’ show why it has been difficult to curb unethical use

of information by the undergraduate students at the university. The lack of resources, according to participants, had adversely impacted students' use of GenAI, leading to overdependence and increased instances of academic dishonesty. This, in turn, weakens the development of students' critical thinking and problem-solving skills, creating long-term problems in their academic and professional growth.

The challenges associated with GenAI integration in academic writing at the university are exacerbated by lack of institutional policy to guide students and faculty. According to the participants, their institution only spoke to them about GenAI in a one-day workshop that was facilitated by the Zimbabwe Council for Higher Education (ZIMCHE). The participants indicated that they were not sure if a similar workshop had been done with the students, and if not, this may have contributed to the extensive misuse of GenAI tools by students. This can be confirmed in the following responses:

There is a lack of institutional policy to guide students and faculty on how to use AI responsibly (Mr. Bots).

The university only spoke with us about AI in a one-day workshop that was facilitated by the Zimbabwe Council for Higher Education (ZIMCHE) recently. Otherwise, there is no AI use policy here (Mr. Cole).

Universities should be proactive and train both faculty and students on how to use AI responsibly (Mr. Charles).

Participants agreed that there was need for institutions to equip both faculty and students with skills to use GenAI responsibly. This may help them to embrace and acknowledge the potential that GenAI has in developing students' critical thinking and problem-solving skills, thus becoming better academic writers.

4. Discussion

The results presented in the preceding section show that participants had mixed perceptions of GenAI use in relation to university students' critical thinking and problem-solving skills as reflected in their academic writing. While participants acknowledged that GenAI could be a useful tool in enabling students to produce academic writing tasks that display critical thinking and problem-solving skills, they felt that most students were not using it responsibly. As a result, they thought GenAI stifled creativity, problem-solving and critical thinking in many undergraduate students.

The findings indicate that if used responsibly, GenAI had the potential to promote critical thinking and problem-solving skills among university students. GenAI provides vast amounts of information on a subject and this can facilitate critical thinking in students as they synthesise, evaluate, and analyse that information to construct comprehensive academic arguments. This implies that, with the assistance of GenAI, students can access information on a topic/subject from a variety of sources which will enable them to reach a meaningful conclusion on the subject/topic. Hence, they will produce well thought out academic arguments using the evidence from the sources that GenAI would have provided. This is in agreement with Vygotsky's Zone of Proximal Development that with assistance, learners can reach better levels of performance (Chaiklin, 2003). Also, this aligns with the notion that appropriately structured support facilitates learners' ability to operate within their ZPD. When students engage meaningfully with GenAI through questioning outputs, refining prompts, and comparing different solutions, GenAI acts a 'more knowledgeable other.' This corroborates Al-Zahrani and Alasmari's (2024) observation that GenAI has the potential to create adaptive learning environments for students, enhance their engagement and participation and develop their critical thinking and problem-solving skills.

Participants also highlighted that GenAI makes information easily accessible to undergraduate students. With good prompting, GenAI can summarise information on a subject making it easy for the students to comprehend main ideas. The fact that participants indicated that GenAI presents information in a way that makes it easy to comprehend can justify their positive perceptions on GenAI tools' ability to promote critical thinking and problem-solving as students may be able to expand on issues that they would have understood with the assistance of GenAI tools. In other words, GenAI can be a 'teacher' (Ntereke, et al., 2025) who can scaffold students to better levels of performance in academic writing. This implies that GenAI can be viewed as a digital scaffold that students can leverage to achieve higher thinking ability; similar to how more knowledgeable others in Vygtsky's Zone of Proximal Development can help learners. These findings confirm Shen and Chen's (2025) findings that the use of GenAI (specifically ChatGPT) has the potential to develop students' critical thinking skills as reflected by participants in their study who decoded GenAI-generated texts to develop their own academic writing.

However, results also show that if poorly managed, GenAI use by university students can undermine their critical thinking skills. Participants indicated that GenAI can promote laziness among students, especially those who believe that GenAI tools like ChatGPT have all the answers. Consequently, students may stop engaging critically with information or evaluating it themselves, relying instead on GenAI tools to do the work for them. When students over-rely on GenAI tools without cognitive engagement, the support provided by these tools bypasses their ZPD instead of operating within it. Instead of working as a scaffold to higher levels of thinking, GenAI becomes a shortcut to productive struggle, which is indispensable for cognitive development. What this means is that, in Vygotskian terms,

there is no meaningful mediation as learners depend on these tools and do not actively participate in the co-construction of knowledge. Ultimately, this dependence can weaken their independent critical thinking and problem-solving skills. These findings corroborate Chanpradit's (2025) findings that over-reliance on GenAI by students stifles authenticity, creativity, and critical thinking. This, therefore, implies that students' over-reliance on GenAI undermines academia's mission to stimulate critical and innovative thinking, generate new knowledge, and contribute solutions to real world educational problems (Buston & Spronken-Smith, 2024).

Another reason why participants perceived GenAI tools such as ChatGPT negatively was that most undergraduate students seemed to plagiarise GenAI generated content, which in some cases was incorrect. Instead of using GenAI to access the general idea on a topic or to seek clarification on points of study, participants claimed that students were simply copying and pasting answers provided by GenAI tools. Lack of knowledge about the tools' shortcomings led students to adopting GenAI-generated content and submitting it for marking without analysing the information to answer questions. Participants thus felt that GenAI had a negative impact on students' critical thinking and problem-solving skills as students were literally taking everything from GenAI and presenting it as their own without acknowledgement. These findings may explain why institutions like Middlebury College have banned otherwise useful GenAI tools such as ChatGPT, due to concerns that it could impede development of students' critical thinking skills through the unethical use of GenAI generated content (Aljuaid, 2024). This is consistent with what some of the participants in this study highlighted. As a result of all these factors, participants perceived GenAI as negatively impacting students' critical thinking and some of them outrightly rejected its use in academic writing.

Participants also indicated that GenAI tools promoted academic dishonesty among students. They highlighted that sometimes GenAI tools provided information without acknowledging sources and some students would just use it without attempting to find the sources of the information presented. According to the participants, some students seemed unaware that at times GenAI tools did not acknowledge sources of information. This led to serious academic dishonesty among many undergraduate students, confirming Meniado's (2023) concerns that ChatGPT promotes academic dishonesty and plagiarism. Consequently, students inadvertently become complicit in academic dishonesty by utilising GenAI tools that provide information without proper source acknowledgement. This practice adversely affects the quality of students' academic writing, as they often fail to engage critically with GenAI-generated content, opting instead to submit it unaltered without demonstrating the analytical rigor expected in scholarly writing.

Whilst participants were aware that plagiarism was a serious academic offense, they could not penalise students because they did not have anti-plagiarism software at their institution. As such, students used GenAI-generated content without fear of being penalised because they seemed to know that the university did not have an active Turnitin subscription. To complicate matters further, no form of training had been offered to both students and faculty to offer guidance on the responsible use of GenAI in academic writing. The university did not also have an AI usage policy. This lack of guidance consequently led to widespread plagiarism among undergraduate students, some of whom mistakenly believed that GenAI-generated content was inherently correct and acceptable. Despite the potential that GenAI had to promote critical thinking among students, this was not realised in the current study due to lack of institutional support in training faculty and students on responsible GenAI use and providing antiplagiarism software to help lecturers curb the widespread academic dishonesty among students.

Participants acknowledged that GenAI had the potential to shape and develop undergraduate students' critical thinking and problem-solving skills. However, they perceived GenAI as negatively impacting their students' critical thinking and problem-solving skills owing to lack of institutional support and policy to guide GenAI usage by students. Laziness and academic dishonesty were common among the undergraduate students who had since 'parked' their brains to let GenAI do the work for them. This seems to suggest that, within the context of this study; GenAI use has impeded rather than enhanced critical thinking among undergraduate students. Participants thus considered GenAI as both a threat and opportunity as observed by Lee et al., (2024). Overall, these findings indicate that GenAI can either expand or limit the students' Zone of Proximal Development, depending on whether it is used as a scaffold for thinking or a substitute for critical thinking. As such, pedagogical approaches should focus on guided interaction with GenAI to ensure that its use remains within the students' Zone of Proximal Development to promote authentic cognitive development rather than dependency.

The findings of this study offer empirical insights into both the enabling and restraining effects of GenAI, showing the role of critical engagement with GenAI-generated content in mediating its influence on higher order thinking among university undergraduate students. From a Zone of Proximal Development point of view, the major issue is not the presence of GenAI, but the manner in which it is integrated into the learning process. When students use it responsibly, it can provide cues that guide reasoning, offer feedback that challenges students' thinking, and demonstrate problem solving. However, when misused, it replaces rather than supports cognition, and encourages passive learning and unethical practices. By focusing on lecturers' perspectives, the study addresses a gap in GenAI research in Higher education, which has largely centred on students (Crompton & Burke, 2023), providing pedagogical implications for the responsible integration of GenAI in academic writing.

5. Limitations of the Study and Future Research Directions

The study unearthed the challenges and potential of GenAI in developing students' critical thinking and problem-solving skills. If used responsibly, it can scaffold students to higher levels of critical thinking in academic writing and ultimately, when they become professionals.

However, the study has its limitations. The major limitation was that it was a case study of one university in Zimbabwe and focused on the lecturers' perceptions of GenAI's impact on students' critical thinking but did not consider the views of the students. Future research could compare lecturers and students' perceptions from different universities in Zimbabwe and beyond as this could offer a more comprehensive understanding of the perceptions of these key stakeholders on the impact of GenAI on students' critical thinking.

6. Conclusion and Recommendations

The findings of this study reveal a nuanced perception of GenAI among lecturers at the selected university. While they acknowledged its potential to enhance critical thinking and problem-solving skills among undergraduate students, they were skeptical about its actual impact. This skepticism emanated from the observation that most students over-relied on GenAI to an extent that they let it 'think' on their behalf, thereby undermining the very skills GenAI is expected to promote.

The study highlights that the transformative potential of GenAI to enhance critical thinking and problem-solving in university undergraduate students is not being fully realised, mainly due to irresponsible usage by the students. While GenAI tools possess the capacity to foster critical thinking and problem-solving when used responsibly, their misuse; driven by inadequate literacy and institutional oversight can impact negatively on university undergraduate students' intellectual development. It can thus be concluded that, where no AI usage policies are in place, students will likely misuse and engage in unethical use of GenAI-generated content leading to the production of graduates who lack critical thinking and problem-solving skills. For GenAI to serve as a catalyst for intellectual growth, the following recommendations are made:

- Universities should have clear AI use policies to guide students and faculty on how to use GenAI tools responsibly.
- Universities should invest in GenAI education. Both lecturers and students should be equipped with GenAI literacy skills for them to embrace its presence and harness its affordances to enhance critical thinking while safeguarding academic integrity.
- Universities should adopt a proactive approach to the evolving realities of GenAI by designing assessment tasks that minimise opportunities of academic dishonesty, including unethical use of GenAI-generated content. This may involve incorporating more authentic and critical thinking-oriented assessments that are less susceptible to plagiarism.

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