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Ethical Dilemmas of Generative AI in Higher Education

Implications for Academic Integrity

Stephen Mongwe, Geesje van den Berg, Patience Kelebogile Mudau

University of South Africa

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Keywords

Academic integrity, ethical dilemmas, artificial intelligence, ChatGPT, connectivism, digital infrastructure, technology acceptance model.

Abstract

The development of generative artificial intelligence (AI) has intensified debates regarding academic integrity in digitally mediated higher education. This study explored AI-related ethical dilemmas affecting academic integrity at a South African research-intensive university. It examined how graduate students interpret and navigate ethical tensions in AI use, and how institutional and structural conditions shape these experiences. A qualitative single-case design was used. Sixteen graduate students from a School of Public Health participated through open-ended questionnaires and semi-structured interviews. Data were analysed using Braun and Clarke's six-phase reflexive thematic analysis. The study was theoretically informed by an integrative framework combining the Technology Acceptance Model (TAM) and connectivism, extended through an academic integrity lens. Two interrelated themes emerged. First, students articulated an ethical adoption tension: while recognising AI's usefulness and efficiency, they expressed concerns about overreliance, blurred authorship, data privacy, and the erosion of critical thinking and scholarly identity. Second, participants highlighted structural and institutional conditions shaping AI engagement, including unequal access to digital resources, uncertainty about institutional expectations, and the need for ethical AI literacy. The study offers a contextually grounded perspective from a Global South setting and reframes academic integrity in the AI era as a systemic governance issue requiring clear AI-integrated academic integrity policies, responsible implementation mechanisms, assessment redesign, and shared institutional accountability.

Corresponding Author: Stephen Mongwe, University of South Africa, 39426610@mylife.unisa.ac.za,
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1. Introduction

The rapid emergence of generative artificial intelligence (AI) technologies, particularly since the release of Open AI's ChatGPT in November 2022, has profoundly disrupted higher education globally. Generative AI tools are now capable of producing essays, summarising research, generating code, synthesising data, and stimulating academic discourse at a level that challenges traditional understandings of authorship and knowledge production (Chan & Colloton, 2024). While these advancements offer undeniable pedagogical benefits, including personalised learning support, language assistance, increased efficiency, and improved access to information, they simultaneously introduce complex ethical dilemmas that directly affect academic integrity. These dilemmas are particularly significant in blended learning approaches, which is the context of this study. Blended learning here refers to an institutional approach that combines face-to-face teaching with digitally mediated learning activities, including online platforms, virtual discussions, and remote assessment. In this context, teaching, learning, and assessment are often mediated through digital platforms, and students heavily depend on remote access to online sources (Singh & Mohamad, 2025). In such contexts, generative AI tools function both as academic support mechanisms and as potential sources of ethical ambiguity, especially where lecturer oversight is less immediate and assessment authenticity is more difficult to verify.

Higher education institutions have historically grounded their missions in principles of honesty, trust, fairness, responsibility and respect. However, the growing integration of AI into academic work has blurred the boundaries between legitimate academic support and academic misconduct. The ability of AI to generate coherent, original-appearing texts raises questions about authorship and academic integrity. For example, who is the true author of AI-generated texts, and at what point does assistance transition into mere substitution? How should institutions distinguish between ethical augmentation and academic dishonesty? These unsolved questions have created uncertainty among students, lecturers, and institutional leaders alike.

Globally, higher education institutions are facing what may be described as an academic integrity crisis in the digital era (Nykyporets, 2023; Nelson, 2024). Traditional plagiarism detection systems were designed to identify copied human text, not synthetically generated content. At the same time, many institutions lack comprehensive policies, staff training, and assessment redesign strategies to respond to AI-enabled misconduct (Muringa, 2025). The result is a widening gap between technological advancement and institutional preparedness. Academic integrity is therefore no longer merely an issue of individual student behaviour; it has become a structural challenge embedded within institutional policy, digital infrastructure, assessment practices, and ethical governance frameworks. In this regard, academic integrity in the context of generative AI should be understood as part of broader institutional AI governance. In this regard, academic integrity in the context of generative AI should be understood as part of broader institutional AI governance, including policy clarity, transparency expectations, accountability, risk monitoring, and support for responsible AI implementation. International frameworks such as UNESCO's guidance on AI in education and the OECD AI Principles emphasise that AI adoption should be human-centred, transparent, equitable, accountable, and aligned with educational values (Cukurova & Miao, 2024; Bo, 2025).

In the South African context, this challenge is particularly alarming. While universities increasingly promote innovation and digital transformation, policy development on generative AI remains uneven and, in many cases, reactive rather than proactive (Mulenga & Shilango, 2024). Students operate in an environment where AI tools are freely available, yet limited institutional guidance on ethical use may weaken the credibility of academic work and qualifications awarded by higher education institutions. The core problem underpinning this study is therefore the growing tension between the rapid adoption of generative AI technologies, especially within digitally mediated blended learning environments, and the absence of sufficiently clear ethical frameworks, institutional policies, and educational strategies to safeguard academic integrity.

This study is situated at a South African research-intensive university that offers both blended and face-to-face learning. The institution also

incorporates distance and digitally mediated learning, making it an appropriate context for examining AI-related ethical dilemmas within blended learning environments. As an institution committed to innovation, it is actively engaging with generative AI. However, the lived experiences and ethical perceptions of students within this evolving environment remain underexplored.

Guided by the research gap, the research question guiding the study is:

What are the AI ethical dilemmas undermining academic integrity in higher education institutions?

By exploring graduate students' perspectives, this study aims to contribute to the development of contextually grounded, ethically informed, and practically applicable institutional responses to generative AI in higher education.

2. Literature review

The rapid integration of generative AI tools such as ChatGPT into higher education has prompted intense scholarly debate regarding their ethical implications and impact on academic integrity (Okaiyeto et al., 2023; Hutson, 2024). Emerging research highlights both pedagogical opportunities and profound structural challenges, particularly in contexts where institutional policies and digital infrastructures remain underdeveloped. Three dominant strands of literature are especially relevant to this study:1) ethical dilemmas related to academic integrity, 2) institutional AI governance and responsible implementation and 3) issues of access, digital equity, and institutional support

AI, ethical dilemmas, and academic integrity

A growing body of international scholarship identifies generative AI as a disruptive force in academic writing, assessment, and knowledge production (Chan & Colloton, 2024). Unlike earlier digital tools, AI systems can generate text that appears original, making traditional plagiarism-detection

mechanisms increasingly inadequate. This shift complicates long-standing definitions of authorship, originality, and intellectual contribution.

Mulenga and Shilonga (2024) argue that academic integrity frameworks in many African institutions were designed for conventional plagiarism rather than AI-assisted authorship, resulting in regulatory ambiguity. Similarly, Agrawal (2024) contends that ethical considerations are crucial, including transparent disclosure of AI use, proper attribution, and procedures to prevent misuse. Without such considerations, students operate in ethical grey zones where the boundary between legitimate support and misconduct becomes blurred. However, concerns extend beyond plagiarism. Vasylyshyna et al. (2024) and Huang (2023) highlight risks related to data privacy, algorithm bias, and informed consent. These concerns are particularly relevant in disciplines such as public health, where sensitive data and ethical accountability are paramount. Moreover, Khan (2023) warns that AI systems may unintentionally reinforce structural inequalities if biases embedded in training data are not critically interrogated.

In the South African context, Muringa (2025) notes that many universities lack clear academic integrity regulations pertaining to AI, resulting in moral dilemmas and uncertainty among students and lecturers. This policy gap reinforces students' perceptions that AI use is simultaneously unavoidable and insufficiently regulated.

Institutional AI governance and responsible implementation

In the context of academic integrity, governance extends beyond misconduct prevention to include proactive policy development, assessment redesign, disclosure requirements, staff and student training, data protection, and procedures for responding to AI-related risks. The National Institute of Standards and Technology (NIST) Artificial Intelligence Risk Management Framework also offers a useful way of thinking about responsible AI implementation through four interrelated functions: governing, mapping, measuring, and managing AI-related risks (NIST, 2023). Although developed beyond higher education, this framework is relevant because it shifts attention from individual misuse to institutional processes for identifying risks,

assigning responsibility, monitoring implementation, and improving practice over time. Applied to higher education, this shifts the focus from individual ethical judgement alone to institutional systems that guide, monitor, and support responsible AI use. It requires institution-wide accountability structures, including clear ownership of AI policy, academic integrity committees or working groups, lecturer development, student guidance, data governance protocols, and regular review of assessment practices. In this sense, academic integrity in the AI era is both an ethical and governance challenge. Thus, the literature reveals a significant unresolved tension: while AI enhances efficiency, accessibility, and academic productivity (Giglio & Costa, 2023), it simultaneously destabilises established ethical norms. To address this dilemma, this study draws on empirical insights into how students themselves interpret and navigate these ethical dilemmas within the South African higher education context.

Provision of resources, institutional support, and the digital divide

Parallel to ethical concerns, another major strand of scholarship foregrounds the institutional responsibility to ensure the equitable provision of resources and structured support for AI integration. The debate extends beyond mere access to generative AI tools and instead interrogates how universities can systematically address the AI-driven digital divide. While generative AI platforms are often portrayed as universally accessible, access is mediated by material resources such as reliable internet connectivity, appropriate devices, licensed software, and campus infrastructure. The Organisation for Economic Co-operation and Development (OECD) emphasises that digital equity depends not only on the availability of technology tools but also on institutional investment in connectivity, hardware provision, digital literacy development, and structured academic support (Gottschalk & Wiese, 2023).

In developing contexts, socio-economic disparities significantly shape students' engagement with AI technologies. Chari (2024) argues that without deliberate institutional interventions such as subsidised access, device loan programmes, and data provision, digital transformation initiatives risk deepening rather than narrowing inequalities. The promise of AI as an inclusive educational tool, therefore, depends on systematic infrastructure and

policy support. Beyond physical access, scholars emphasise the importance of digital literacy and ethical AI competence. Qiao et al. (2023) demonstrate that access without structured training leads to misuse or superficial engagement. Students require guided exposure, curriculum integration, and explicit instruction on responsible AI use. Similarly, Fudge et al. (2022) argue for educative approaches to academic integrity that embed ethical practice within teaching rather than punitive enforcement.

In South Africa, where digital divides persist across socio-economic and geographic lines, the integration of AI technologies intersects directly with broader equity challenges. While some students may perceive AI as universally accessible via smartphones or university facilities, others experience connectivity challenges and limited device access. In blended learning contexts, where many students study remotely and lack regular access to on-campus laboratories, libraries, or institutional infrastructure, these disparities become even more pronounced and structurally embedded (Mudau et al., 2022; Woldegiorgis, 2022). This uneven access shapes not only usage patterns but also perceptions of fairness, opportunity, and institutional responsibility.

3. Theoretical framework

The study is grounded in an integrated framework combining the Technology Acceptance Model (TAM) and connectivism, extended through an academic integrity lens. While TAM explains why students adopt AI technologies and connectivism explains how learning occurs within digitally mediated networks, their integration allows for a deeper understanding of how AI use intersects with ethical decision-making and institutional responsibility.

The Technology Acceptance Model (TAM) (Davis, 1989) posits that technology adoption is primarily influenced by perceived usefulness and perceived ease of use. In the context of generative AI, students are likely to adopt tools such as ChatGPT when they perceive them as enhancing academic performance, improving efficiency, or simplifying tasks (Sevnarayan & Potter, 2024). However, while this model provides insights into the positive aspects of AI adoption, it also unveils ethical tensions.

The same attributes that render AI tools appealing, such as speed, accessibility, and efficiency, may inadvertently facilitate misconduct by increasing the temptation to engage in dishonest practices (Asad & Ajaz, 2024). Specifically in blended learning environments where assessment occurs remotely, the apparent usefulness of AI can become a double-edged sword, complicating integrity issues.

Connectivism (Siemens, 2005) conceptualises learning as the formation and navigation of networks that include people, digital platforms, and information systems. In blended learning contexts, generative AI tools function as nodes within students' learning networks, providing rapid access to synthesised knowledge and academic support (Tikhonova & Raitskaya, 2023). Connectivism emphasises autonomy and critical evaluation; therefore, ethical engagement with AI requires digital literacy. Without structured guidance, AI may shift from being a supportive learning node to a cognitive substitute, potentially undermining critical thinking. Connectivism also foregrounds access to networks. In blended learning systems characterised by uneven connectivity and device availability, participation in AI-enhanced learning networks is not equally distributed. Ethical AI integration must therefore be understood alongside issues of digital equity and institutional support (Khan, 2023; Sevnarayan & Potter, 2024).

The framework also requires an institutional governance layer. TAM explains why students may adopt AI tools, and connectivism explains how AI becomes embedded in learning networks, but neither framework fully accounts for institutional accountability, policy direction, or risk management. For this reason, the study also interprets students' experiences through an academic integrity governance lens, focusing on how institutions can create enabling conditions for responsible AI use through policies, training, disclosure mechanisms, assessment redesign, and accountability structures.

Taken together, this integrated framework enables the study to examine how technological affordances, learning networks, ethical decision-making, and institutional conditions interact to either safeguard or undermine academic integrity in the era of generative AI.

4. Methodology

Research context

The study was conducted at a South African research-intensive university offering blended, face-to-face, and online learning strategies. The institution has progressively expanded its use of digital platforms and AI-supported tools to enhance academic engagement and research productivity. This context reflects broader global shifts toward digitalisation in higher education while simultaneously embodying the realities of AI adoption within a Global South setting (Maimela & Mbonde, 2025). In such settings, persistent socio-economic disparities, uneven digital access, and evolving institutional policies create a particularly relevant environment for examining both ethical challenges and issues of equity in AI integration.

Given the fact that significant components of teaching and assessment are digitally mediated, the site offered a valuable opportunity to explore how AI use intersects with academic integrity in technologically facilitated learning environments. Such contexts entail a complex interplay of institutional expectations and ethical challenges that justify further exploration (Alshahrani et al., 2024)

Research Design

The study employed a qualitative single-case study design to investigate graduate students' perceptions of AI-related ethical dilemmas in higher education. A case study is particularly suitable when examining contemporary phenomena embedded within complex institutional contexts (Yin, 2013; Tjandra & Feri, 2023). The selected university constituted a bounded case. Rather than isolating variables, this design allowed for exploration of lived experiences, interpretations, and contextual influences shaping AI.

Participants and Sampling

Participants were recruited from the School of Public Health at the study site. The School offers undergraduate and graduate programmes across diverse disciplines, including community medicine, epidemiology, health policy and advocacy, health economics, occupational health, rural health and social and behavioural change communication. A combination of purposive and convenience sampling was used. Purposive sampling ensured the inclusion of graduate students with experience using AI tools in academic contexts, enabling them to provide informed reflections on ethical considerations and practical use. Convenience sampling facilitated recruitment within the institutional setting.

An invitation outlining the study's purpose and participation requirements was emailed to 20 graduate students. Sixteen students consented and participated in the study. Students from a variety of academic backgrounds and academic stages participated in public health-related programs at a South African university. Students from both coursework and research-based programs, across different ages, comprised the sample, enabling the study to capture a range of viewpoints within the field of public health. Graduate students were intentionally selected for their advanced engagement with academic writing, literature synthesis, data interpretation, and research activities. Their academic maturity provided deeper insight into both the perceived benefits and ethical complexities of AI adoption.

Data Generation

Data were generated using two complementary research instruments: open-ended online questionnaires and follow-up semi-structured interviews. The questionnaire, administered via Google Forms, invited participants to provide written reflections on AI use, academic integrity, ethical concerns, digital access, and institutional support. This instrument allowed participants sufficient time to reflect on sensitive issues such as academic integrity. Subsequently, semi-structured interviews were conducted via Microsoft Teams to deepen and clarify questionnaire responses. The interview guide was informed by key TAM constructs, particularly perceived usefulness and

perceived ease of use, while also probing issues of integrity, authorship, digital access, and institutional responsibility. These two instruments enhanced methodological depth and allowed for triangulation of insights across data sources.

Ethical Considerations

Prior to data generation, institutional ethical clearance was obtained from the relevant authorities. Participants received detailed information regarding the study's objectives, procedures, and voluntary nature. Informed consent was secured electronically before participation started.

Participants were assured of their right to withdraw at any stage of the research without consequences. To protect anonymity, pseudonyms (P1-P16) were assigned during analysis and reporting.

Data Analysis

The data were analysed using the six-phase reflexive thematic analysis approach as outlined by Braun and Clarke (2022). This approach was selected for its flexibility and suitability for identifying patterns of meaning within qualitative datasets. The analysis followed a systematic process. First, we engaged in repeated reading of questionnaire responses and interview transcripts to develop familiarity with the data. Second, initial codes were generated to capture significant ideas related to ethical concerns, AI usage patterns, and institutional support. Third, the preliminary themes were carefully reviewed and refined to ensure internal coherence and a clear distinction among them. Fourth, these were defined and named to capture their central meanings in relation to the research question and theoretical framework. Lastly, the themes were integrated into a coherent narrative linking participants' perspectives to the broader literature and conceptual framework.

Trustworthiness

To ensure rigour, the study adhered to Lincoln and Guba's (1985) criteria for trustworthiness: credibility, transferability, dependability, and confirmability.

Credibility was strengthened through data triangulation across questionnaires and interviews, as well as sustained engagement with the dataset. A rich description of the institutional context enhances transferability by allowing readers to assess its applicability to similar contexts. An audit trail documenting the data analysis process supports dependability and confirmability. Reflexive awareness was maintained throughout the analysis process to minimise researcher bias.

5. Findings & Discussion

The analysis generated two interrelated themes: how graduate students perceive the ethical dilemmas associated with AI and the institutional conditions that shape its ethical use. Participants in the first theme responded to questions about the ethical concerns of using AI. The findings reveal that AI adoption is experienced not simply as technological uptake, but as a morally negotiated and structurally mediated process.

Ethical tensions and academic integrity in AI use

Several participants expressed concerns about data privacy and algorithm bias. Participant 1 stated that her biggest concern about the ethical usage of AI was "privacy and protection of user data", while Participant 12 elaborated on this concern, highlighting the importance of data privacy, informed consent, and the potential for algorithmic bias, stating, "I believe the ethical implications of using AI are significant and must be carefully considered, particularly in fields like public health and education." These concerns align with Huang (2023) and Vasylyshyna et al. (2024), who emphasise that AI integration introduces complex governance challenges, especially regarding ownership and informed consent. Within a connectivist framework (Siemens, 2005), AI functions as a node within learning networks; however, when knowledge is mediated through opaque algorithms, responsibility becomes distributed and less visible. Participants' concerns demonstrate awareness that AI is not merely a neutral tool but an ethically embedded system. Participant 12 further remarked that "AI systems can unintentionally reinforce inequalities if not properly designed or monitored." This

observation resonates with Khan's (2023) argument that AI may reproduce structural bias if not critically interrogated. This reiterates the fact that ethical concerns extend beyond plagiarism to broader systemic implications.

Participants consistently acknowledged AI's usefulness while simultaneously expressing concern about its misuse. Participant 3 stated, "AI is intended to augment your materials, not perform the thinking for you." Similarly, Participant 6 added:

> "I believe that employing AI comes with a lot of responsibility. It's tempting to rely on it too heavily; therefore, I aim to keep my work original. I believe it is critical to employ AI as a support rather than a shortcut that detracts from personal work or originality.

These comments reflect high perceived usefulness, which is a key TAM construct (Davis, 1989; Sevnarayan & Potter, 2024). However, they also reflect ethical tension. The very attributes that make AI attractive, such a speed, convenience, and efficiency, may increase the temptation to bypass cognitive effort. Participant 7 further highlighted that AI is "challenging, because copy and paste is easier", suggesting that ease of use may lower ethical barriers. Participant 16 warned that, "depending on the use, it can plagiarise work done by others if used as is."

This duality illustrates what may be termed an ethical adoption paradox: students recognise AI's academic value yet fear its potential to undermine integrity. This extends TAM beyond adoption intention by demonstrating that perceived usefulness does not eliminate ambivalence. This ambivalence is further amplified in online learning contexts, where assessment is digitally mediated, and lecturer oversight is less immediate (Singh & Mohamad, 2025).

Participants voiced concern about diminishing reasoning capacity. Participant 8 cautioned that "reasoning capacity will be limited and solely rely on AI for the information that one would easily obtain", while Participant 9 stated that "it cannot be used to replace human effort." These comments resonate with Nelson's (2024) analysis of academic identity in the AI era, in which he

argues that generative AI disrupts traditional understandings of authorship, intellectual ownership, and scholarly voice. When students rely heavily on AI-generated content, the boundaries between individual intellectual labour and machine-assisted production blur. In this study, participants' concerns about AI "replacing human effort" and limiting "reasoning capacity" suggest an awareness that overreliance on AI may weaken not only critical thinking but also the development of scholarly identity. From a connectivist perspective (Siemens, 2005), AI becomes a node within the student's network; however, if that node begins to dominate cognitive processes rather than support them, the student's intellectual identity may be diminished. This, tension reflects more than anxiety about plagiarism; it reflects deeper concerns about what it means to think, write, and learn authentically in an AI-mediated environment. Interestingly, participants did not outright reject AI. Rather, they held balanced views and advocated integration within ethical norms, which echo the views of Asad and Ajaz (2024) that AI should function as scaffolding, not substitution.

Participants consistently called for clearer institutional policies. Participant 14 stated unequivocally,

> "As AI evolves, there should be stronger policies and educational efforts to ensure its ethical use and security measures, particularly in sensitive areas like education.

Participant 2 emphasised that "…AI access will be revoked if you are found using it for the wrong things", later clarifying that "wrong things" referred to practices such as plagiarism and academic fraud.

These remarks reflect uncertainty regarding institutional expectations. Muringa (2025) notes that South African universities often lack explicit AI-integrated integrity frameworks. Participants' calls for structured guidance confirm that ethical dilemmas are not solely individual failings but institutional governance issues, in line with Nykyporets (2023), who argues that academic integrity in the AI era is structural rather than behavioural.

These findings suggest that institutional responses should move beyond general warnings against plagiarism. Participants' uncertainty points to the need for clearer AI governance mechanisms that clarify acceptable AI use, disclosure expectations, and shared responsibilities across students, lecturers, departments, and institutional leadership.

Provision of Resources, Institutional Support, and the AI Digital Divide

While Theme 1 focussed on ethical tensions, Theme 2 revealed how structural access conditions shape AI engagement in blended learning contexts. The responses were based on questions on how institutions can make AI technologies more accessible to students.

Participants strongly emphasised financial and structural barriers. Participant 1 proposed "installing the applications for free for them", while Participant 5 said,

> "AI is only accessible through the use of technologies, so the university should have a laptop use program that may be incorporated into the fees.

"Data provision to students of low-income households" was mentioned by Participant 10, highlighting the need to include affordable internet access. Several participants argued for better on-campus amenities, acknowledging that not all students have access to computers or dependable home internet. For example, both Participants 6 and 15 advised that universities "install AI in libraries" and "set up computer labs where students can freely use AI tools", respectively, highlighting the importance of physical places on campus in ensuring equitable access. These responses reflect awareness that access extends beyond tool availability to structured environments for equitable engagement. Participants further felt that institutions should provide free or subsidised access to software and equipment. Suggestions were made that AI tools be included in loan programmes, to further support the idea of hardware accessibility. For example, Participant 12 reiterated this, emphasising that "loan programs for laptops and data packages" were one

way that institutions could provide assistance. This aligns with OECD guidance (Gottschalk & Wiese, 2023), emphasising institutional responsibility for digital access.

These views align with Chari (2024), who warns that digital transformation without equity mechanisms risks deepening inequalities. In blended learning models, where students depend on personal devices and connectivity (Mudau et al., 2022); Woldegiorgis, 2022), unequal access directly affects participation in AI-enhanced learning networks. Also, from a connectivist standpoint, students excluded from digital networks cannot fully participate in knowledge construction.

However, in contrast to the above views, Participant 3 stated:

> “Fortunately, most students have smartphones, and there are libraries … so I don’t think access is still a challenge.

This divergence reveals differing perceptions of digital readiness, highlighting how perceived access may differ from structural realities documented in digital divide research (Woldegiorgis et al., 2022).

Participants consistently emphasised that access to AI tools alone is insufficient without structured training and ethical guidance. Participant 2 proposed “a workshop that is going to be teaching students about the new technologies”, while Participant 16 recommended “courses on the safe use of AI and different freely available platforms.” These responses suggest that students do not view AI misuse as inevitable, but rather as preventable through education and structured support. The finding aligns with Qiao et al., (2023), who argue that technological access without guided digital literacy often results in superficial or inappropriate engagement. From a TAM perspective, perceived ease of use may accelerate AI adoption; however, ease without ethical literacy may lower resistance to misuse. Participants’ call for workshops and formal integration suggests recognition that perceived usefulness must be accompanied by clarity. In other words, adoption calls for ethical framing. Participants’ emphasis on training further reflects awareness that digital competence involves not only technical proficiency, but also the

ability to interrogate AI outputs, recognise bias, and maintain intellectual ownership. This aligns with the arguments of Khan (2023), arguing that ethical AI integration depends on cultivating critical awareness rather than assuming technological neutrality.

6. Implications of the Findings

The findings suggest that academic integrity in the era of generative AI must be reconceptualised as a structural and pedagogical challenge rather than solely a matter of individual misconduct. Participants demonstrated ethical awareness, but they also expressed uncertainty regarding institutional expectations, acceptable AI use, authorship, and the boundaries between support and substitution. This indicates that academic integrity risks are intensified when policies, assessment practices, and institutional guidance do not keep pace with students' actual use of AI. In blended learning contexts, where teaching, learning, and assessment are digitally mediated and lecturer oversight may be less immediate, these tensions become even more pronounced. Institutions should therefore move beyond reactive or punitive responses and develop proactive approaches that support responsible AI use while safeguarding intellectual authenticity.

Assessment redesign is central to this shift. The findings suggest that AI-related integrity concerns cannot be addressed only through detection tools or warnings against plagiarism. Institutions need to consider how assessment tasks can value process, reflection, contextual application, oral defence, iterative drafting, and authentic problem-solving, rather than relying primarily on final written products that may be easily generated or heavily supported by AI. At the same time, assessment redesign must remain fair, scalable, inclusive, and sensitive to unequal access to digital resources. AI-resilient assessment should therefore not only aim to prevent misconduct, but also promote deeper learning, transparency, student accountability, and the development of independent scholarly judgement.

The findings also point to the need for AI-integrated academic integrity frameworks and responsible implementation mechanisms. Such frameworks should clarify the difference between acceptable AI-assisted learning,

inappropriate AI substitution, and academic misconduct. They should also establish disclosure expectations, including when and how students should acknowledge AI use in idea generation, editing, translation, data analysis, or text production. In addition, institutions should develop accountability structures, such as institutional AI committees, teaching and learning units, ethics offices, and academic integrity bodies, to coordinate policy development and implementation. Responsible AI implementation should include lecturer development, student training, data privacy guidance, assessment support, and regular review of AI-related policies as technologies and student practices continue to evolve. These implications align with broader responsible AI principles that emphasise transparency, human-centred values, safety, accountability, and continuous risk management.

The study further highlights that ethical AI engagement is inseparable from digital literacy and digital equity. Participants' comments on access to devices, data, software, laboratories, and institutional support show that responsible AI use cannot be separated from the broader material conditions under which students learn. Technological adoption must therefore be accompanied by ethical competence, critical evaluation skills, and equitable access. Without structured support, AI may deepen existing inequalities by benefiting students who already have stronger digital access, higher levels of confidence, and better institutional resources. Universities should therefore approach AI literacy not only as technical training, but as a broader educational responsibility that includes ethical judgement, critical interrogation of AI outputs, awareness of bias, and understanding of authorship and academic integrity.

The integrated theoretical framework provides a useful basis for interpreting these implications. TAM explains why students are likely to adopt generative AI when they perceive it as useful, efficient, and easy to use. However, the findings show that these same adoption drivers may create academic integrity risks when institutional expectations are unclear. Connectivism further explains how AI becomes embedded as a node within students' digital learning networks. Yet, when access, guidance, and critical literacy are uneven, AI may either support learning or contribute to overreliance, reduced intellectual effort, and inequitable participation. The findings therefore

suggest that theoretical understandings of AI adoption and networked learning must be extended through institutional governance mechanisms that regulate, guide, and support responsible AI use.

In this regard, institutional AI readiness requires more than access to digital tools. It includes policy readiness, staff capacity, student AI literacy, data governance, assessment preparedness, infrastructure, and the ability of institutional leaders to coordinate responsible implementation across academic and support units. Without such readiness, AI integration may remain fragmented, uneven, and dependent on individual lecturers or students rather than supported through coherent institutional strategy. The broader implication is that higher education institutions should develop future-oriented AI governance models that are developmental, participatory, and iterative. Such models should support ongoing policy review, human oversight, responsible innovation, and shared accountability among students, lecturers, academic departments, professional support units, and institutional leadership.

7. Conclusion

This study set out to explore AI-related ethical dilemmas perceived as undermining academic integrity in higher education institutions, within a specific context. By examining graduate students' perspectives, it sought to understand how generative AI is experienced not merely as a technological innovation, but as an ethically complex and institutionally mediated phenomenon.

From the findings, two interrelated themes emerged. First, students articulated a persistent tension between recognising AI's academic usefulness and fearing its potential to compromise originality, critical thinking, and scholarly identity. Concerns extended beyond plagiarism to include data privacy, algorithm bias, and authorship ambiguity, reflecting a sophisticated awareness of AI as an ethically embedded system. Second, participants highlighted structural conditions shaping AI engagement, including uneven digital access, the need for institutional support, and the importance of ethical

and digital literacy. Together, these findings demonstrate that AI-related integrity challenges are both morally negotiated and materially conditioned.

The study contributes to the evolving scholarship on AI in higher education by providing empirically grounded insights from a Global South perspective and by integrating the TAM and connectivism within the academic integrity framework. By conceptualising AI adoption as technologically enabled, ethically negotiated, and structurally mediated, the study advances a multidimensional understanding of integrity in the era of generative AI.

However, several limitations should be acknowledged. The study was conducted within a single institutional case. It focussed on graduate students from one academic school, which might limit the transferability of the findings to other disciplines and institutions. The relatively small sample also constrains the breadth of perspective represented. Future research could extend this work by including multiple institutional and comparative disciplinary analyses, as well as the perspectives of lecturers and institutional leaders. Additionally, quantitative and mixed-methods research could explore the relationships between perceived usefulness, ethical awareness, and actual AI usage patterns at scale.

As generative AI continues to transform higher education, the central challenge is not whether institutions will integrate AI, but whether they can do so in ways that sustain intellectual authenticity, promote equity, and preserve public trust. The study therefore points to the need for future-oriented AI governance models that combine policy clarity, human oversight, participatory institutional decision-making, AI literacy development, and continuous review of emerging AI risks. Such models are essential for learning ecosystems in which technological innovation and ethical responsibility evolve together.

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9. Short biographies

Stephen Mongwe is pursuing a PhD in Education – Open Distance Learning. He currently serves as a Postgraduate Officer at the University of the Witwatersrand's School of Construction Economics and Management. Prior to this role, he worked across several divisions, including the Faculty of Health Sciences, the Student Equity and Talent Management Unit, and the International Students Office at the University of the Witwatersrand, Johannesburg. His research focuses on technology-enhanced learning, with a

particular emphasis on the use of Artificial Intelligence in higher education and e-learning.

Email: 39426610@mylife.unisa.ac.za

Geesje van den Berg (PhD) is a Professor in the Department of Curriculum and Instructional Studies at the University of South Africa. She holds the Commonwealth of Learning Chair in Open and Distance Learning for Teacher Education. She has published widely in accredited journals and books and has supervised numerous postgraduate students. Her research focuses on open distance learning in teacher education, student interaction with technology, and artificial intelligence in education. She is an established researcher rated by the National Research Foundation

Email: vdberg@unisa.ac.za

Patience Kelebogile Mudau (PhD) is a Professor in the Department of Curriculum and Instructional Studies in the College of Education at the University of South Africa (UNISA). Her research focuses on pedagogy for teaching and learning in Open Distance e-Learning (ODeL), Open Education Practices, and technology-enhanced learning. Her work explores innovative approaches to enhance student engagement, assessment practices, and inclusive teaching in open and distance learning environments.

Email: mudaupk@unisa.ac.za