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Exploring the Dark Side of Online Distance Learning: Cheating Behaviours, Contributing Factors, and Strategies to Enhance the Integrity of Online Assessment

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Abstract
This study investigated cheating behaviours, contributing factors, and strategies to enhance the integrity of assessment in an online learning context. The researchers conducted an analysis of the literature on students' motivation to cheat in online modules and noted that there is limited research on the specific reasons why students cheat in online learning contexts. To contribute to this knowledge gap, this study set out to understand cheating in two English modules with first-year second language students, in an open distance and e-learning institution in South Africa. The purpose of this study is (1) to investigate why students cheat in their online assessments, (2) to explore the contributing factors of cheating behaviours, and (3) to determine strategies to minimise cheating. Using qualitative methods such as focus group discussions with students, evaluation questions with markers, and one-on-one interviews with lecturers, the study found that cheating is a significant issue in distance education, with students admitting to various forms of cheating in online assessments. Using the social cognitive theory of moral disengagement, the study found that cognitive mechanisms motivate students to engage in unethical behaviour such as cheating. The study recommends implementing an interactive module design, lecturer training on student support, and stringent academic integrity policies to minimise cheating. There is a need for studies that explore the impact of cheating and the effectiveness of different strategies for minimising cheating and enhancing integrity in online assessment.

Keywords Academic integrity · Cheating · ODeL · Online assessment · Theory of moral disengagement

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Introduction

Amidst the age of relentless technological innovation, online learning has emerged as an increasingly favoured educational method, enticing students with its unparalleled flexibility and convenience. Researchers have noted that online learning has several benefits, such as students being granted educational opportunities without attending classes (Sevnarayan, 2022a; Valızadeh, 2022). However, online distance learning can include several challenges. First, an increase in transactional distance can hinder effective communication and interaction between students and lecturers (Sevnarayan, 2022a). Second, lecturers may face difficulties in creating an interactive environment between students, potentially impacting the level of engagement and discipline (Noorbehbahani et al., 2022). Last, the issue of cheating arises more prominently in online assessments, necessitating robust strategies to uphold academic integrity (Oravec, 2022).

The term 'cheating' in higher education holds negative connotations (Lancaster, 2021), symbolising actions that defy ethical norms and compromise the credibility of scholarly work. Its usage in this article is justified due to its strong ethical implications, universal perceptions across cultures and disciplines, and abundant support in the academic literature (Lancaster, 2021). Cheating serves as an accurate descriptor for academic dishonesty, emphasising the need to preserve integrity and trust within the scientific community. In the context of this study, cheating refers to any dishonest or unethical behaviour that gives a student an unfair advantage over others in online assessments (Bretag et al., 2019). It involves actions intended to deceive lecturers and compromises the integrity of assessments. Examples of cheating in online learning include copying content from the internet without citations, using unauthorised online resources during assessments, seeking answers from others via social media, for example, during tests, copying and pasting someone else's work, collaborating without permission, falsifying data, exploiting technical vulnerabilities, and impersonating others during online exams or submissions (McCabe et al., 2001; Oravec, 2022; Valızadeh, 2022). It is important to note that these cheating types also occur in face-to-face (traditional) educational contexts.

According to Curran et al. (2011), methods of cheating in traditional university examinations involve concealing notes in a pencil case, behind a ruler, or in clothing, as well as writing on one's palms, arms, or other body parts, or even leaving the room. Notably, technology has accelerated cheating in traditional assessment contexts. Online assessment is not immune to cheating, and this remains a significant issue (Arnold, 2016; Stevens et al., 2022; Oravec, 2022; Valızadeh, 2022), with some arguing that online education makes cheating more difficult to detect (Stevens et al., 2022). Maintaining academic integrity in online assessment poses a fresh set of opportunities and challenges for stakeholders in higher education institutions (HEIs) (Bretag et al., 2014; Ellis et al., 2020; Lee & Aslam, 2023; Noorbehbahani et al., 2022; Sutherland-Smith, 2008). Online assessment emerges as a modern approach that harnesses technology to gauge students' aptitude, knowledge, and competence via digital platforms such as web-based applications, mobile devices, or computer-based tests (Al-Maqbali & Hussain, 2022). A diverse array of assessment types lends itself to this mode of evaluation, encompassing multiple-choice questions, short answers, essays, e-portfolios, self-assessment, and peer evaluation. In HEIs, two prevailing types of assessment are employed: formative assessment and summative assessment. Formative assessment (assignments) serves the purpose of continuous evaluation throughout a course or

module, granting students valuable feedback on their areas of proficiency and improvement (Black & William, 1998). In contrast, summative assessment (examinations) comes into play at the culmination of a module, evaluating students' comprehensive skills, knowledge, and capabilities (Al-Maqbali & Hussain, 2022). According to Naidu and Sevnarayan (2023, p. 5), "Some of the drawbacks of online assessment include technical challenges, cheating, and test anxiety". As technology advances, new ways of cheating in online learning contexts emerge, making it more difficult to ensure the preservation of academic integrity.

According to the International Center for Academic Integrity (ICAI), academic integrity involves upholding the values of honesty, trust, respect, fairness, and accountability (ICAI, 2014). When students do not uphold academic integrity, they may be guilty of cheating, which refers to any form of deceit that is linked to the completion of assessments. The proliferation of online learning and continual advancements in technology have resulted in an increase in cheating among students (Lee & Aslam, 2023; Lancaster & Gupta, 2023). These factors provide greater opportunities for students to engage in cheating (Adzima, 2020; Bretag et al., 2019). When students cheat, they may be accused of plagiarism. It must be noted that cheating encompasses a wide range of dishonest behaviours beyond just plagiarism. Plagiarism is the act of using someone else's intellectual property and can include direct copying, paraphrasing, or closely imitating the original work without acknowledging the source (Adzima, 2020). In the context of this study, intellectual property refers to the original and valuable contributions made by researchers (Adzima, 2020). This study focuses on minimising cheating and understanding why students cheat in online distance learning.

Technology and social media promotion has led to evolving cheating practices, with online assessment during the COVID-19 outbreak resulting in higher test scores through illicit means (Lee & Aslam, 2023; Lancaster & Gupta, 2023). Concerns among distance HEIs include the possibility of students paying others to complete assessments and the utilisation of generative artificial intelligence (AI) tools such as ChatGPT-4 for personalised learning materials, enabling cheating in language and critical thinking modules (Kasprzak & Nixon, 2004; Barber et al., 2021; Cotton et al., 2023; Naidu & Sevnarayan, 2023; Zawacki-Richter et al., 2019). While it is true that cheating can occur both in online and face-to-face contexts, it is essential to acknowledge that the online setting introduces a distinct set of challenges and opportunities for dishonest behaviour. Online assessment poses unique challenges that stem from the vast digital resources and tools readily available to students. In contrast to traditional cheating methods like passing notes and copying from peers (Arnold, 2016; ICAI, 2014), online cheating encompasses a broader range of actions, such as utilising online resources during closed-book exams, sharing answers via social media platforms, or even leveraging generative AI tools to create tailored responses aligned with individual proficiency levels. The online environment amplifies the ease and accessibility of these methods, thereby making online assessments susceptible to more diverse and technologically-aided cheating practices. In recognising these differences, we can develop more effective strategies to minimise cheating in online education. To address these challenges and promote academic integrity, effective strategies need to be developed through research on cheating behaviours in online assessment. Consequently, this study seeks to address the following research questions:

- Why do students cheat in online assessments?
- What are the contributing factors to cheating in online assessments?

- What are the most effective strategies for minimising cheating and enhancing academic integrity in online assessments?

Related Works on Academic Dishonesty

Academic research has investigated the potential correlation between individual personality traits and the likelihood of cheating. For instance, Smith et al. (2021) examined the link between the dark triad personality traits of psychopathy, narcissism, Machiavellianism, and cheating. Ngqondi et al. (2021) explored personality traits such as conscientiousness, emotional stability, agreeableness, openness to experience, and extrovertedness concerning cheating behaviours. According to McCabe et al. (2001), cheating could be a learned behaviour due to social conditioning, with students more prone to student collusion if they observe their peers doing so. Ababneh et al. (2022) and Stoesz and Eaton (2020) suggest that when students hold favourable attitudes towards cheating, perceive social approval for cheating from individuals who are significant to them (e.g., peers, lecturers, parents), and believe that cheating can be easily executed (cheating within their control), they are more likely to form intentions to cheat.

The reported cheating behaviours in both traditional exams and coursework have been a matter of concern for lecturers and institutions alike. Studies have indicated that cheating is prevalent in various educational contexts, which can undermine the integrity of the academic system. A study conducted by Bretag et al. (2019) in eight Australian universities revealed that students whose native language was not English but who studied at English-instruction universities were more prone to contract cheating when completing their formative assessments. This was attributed to the added cognitive load of tackling challenging assignments in a nonnative language. In traditional exams, cheating methods such as passing notes, copying from neighbouring students, or smuggling unauthorised materials into the examination room have been documented (Arnold, 2016; Bretag et al., 2019). These practices not only compromise the fairness of assessment but also create an uneven playing field for honest students who work diligently to demonstrate their knowledge and skills.

The prevalence of online learning has also introduced new challenges in detecting cheating behaviours to enhance academic integrity. According to Malik et al. (2023), in a study conducted with online school, college, and university students in Pakistan, 60% of students admitted to frequent cheating during online exams, while 30% admitted to cheating at least once. The remaining 10% reported that they did not cheat. Despite this, students achieved higher grades on online exams than on physical exams. Novick et al. (2022) surveyed over 500 students at five universities in New York during the pandemic and found that students experienced more stress and perceived a greater workload in online modules, leading to a preference for in-person modules. With the rise of technology, students have exploited online resources and social media to share answers, seek external help during online assessments, and even employ generative AI tools to generate customised responses (Naidu & Sevnarayan, 2023).

As opposed to in-person invigilation to curb cheating during classroom-based assessment, HEIs have adopted various technological measures to minimise cheating. Legal cases concerning the appropriate utilisation of systems like Turnitin have seen a substantial

increase (Oravec, 2022). However, Rogerson and McCarthy's (2017) research reveals a disconcerting trend wherein students exploit online paraphrasing tools to evade detection by text-matching software like Turnitin. New types of online proctoring systems in online assessment are emerging that are licenced by universities and incorporated into learning management systems (LMSs). These systems have names such as ProctorU, Proctortrack, Proctorio, and Examity (Oravec, 2022; OReilly & Creagh, 2016). E-proctoring is an effective method for monitoring online exams, deterring cheating, and ensuring fairness. Its advantages include accessibility, convenience, and AI-based detection of suspicious behaviours (Oravec, 2022). However, it comes with privacy concerns and potential technical challenges. Addressing privacy issues and refining e-proctoring systems are essential for successful adoption. The alternative methods for detecting cheating in the literature revealed that universities have employed various other online techniques to curb cheating. Grym and Liljander (2016) reported the use of drones for headcounts, while Blair et al. (2015) and Novick et al. (2022) noted the utilisation of webcams to capture students' physical reactions. Additionally, Shackelford (2016) found that wearable technologies have been employed to measure students' stress levels. Despite the potential benefits of utilising innovative technologies like drones, webcams, and wearables for enhancing academic integrity, it is imperative to consider the disruptive impact on students. The constant surveillance and data collection may inadvertently create an environment of anxiety, invasion of privacy, and stress, which can significantly hinder the learning experience. However, only a few HEIs are assessing the accountability of their anti-cheating systems. Recently, Elkhatat et al. (2023) compared the performance of AI content detection tools, such as those developed by OpenAI, Writer, Copyleaks, GPTZero, and CrossPlag in distinguishing between human-generated and AI-generated text. Using 15 paragraphs each from ChatGPT Models 3.5 and 4 on cooling towers, alongside five human-written control samples, the study found varying accuracy among tools. While GPT 3.5-generated content was generally well-identified, GPT 4-generated content posed challenges, emphasizing the evolving complexity of AI-generated content detection and suggesting the need for continuous advancements in detection tools. The results reveal a notable disparity in accuracy, where the AI detection tools exhibited a higher proficiency in identifying content originating from GPT 3.5 compared to GPT 4. This discrepancy raises concerns about the efficacy of generative AI content detection tools.

Numerous factors contribute to cheating behaviours in online assessment, including the lack of face-to-face interaction and anonymity. The findings by Locquiao and Ives (2020) reveal several troubling trends. Primarily, it is evident that students commence their university studies with glaring deficiencies in their understanding of citations, references, a propensity for test and assignment cheating, and a disregard for academic integrity. This stark reality stands in contrast to the expectations set by HEIs regarding adherence to academic conventions and ethical standards. Cheating is a significant issue that requires more than just monitoring to encourage creativity and deter the growing theft of intellectual property. In using the theory of moral disengagement (Bandura, 1999), this study aims to contribute to the ongoing discussion of cheating in online assessment and provide insights into the factors that contribute to cheating behaviours and strategies that lecturers can adopt to promote academic integrity.

A Theory of Moral Disengagement

The theory of moral disengagement, developed by psychologist Albert Bandura, proposes that individuals can disconnect their moral and ethical standards from their behaviour in certain situations. This can lead to unethical or even immoral behaviour, such as cheating. In the context of open distance e-learning (ODeL), the lack of face-to-face interaction, student collusion and the anonymity of online contexts may make it easier for students to engage in cheating behaviours in online assessment. Students may feel less connected to their peers and lecturers and may be more likely to rationalise their cheating as a victimless crime. Additionally, the theory of moral disengagement suggests that students may use various cognitive mechanisms or 'moral justifications' to justify their unethical behaviour (Bandura, 1999). Bandura (1999) posits that moral disengagement mechanisms occur in a specific order, with the initial stage being the behavioural locus and its associated mechanisms. The subsequent stages include the agency, outcomes, and victim loci and their associated mechanisms. Thus, moral disengagement is viewed as a linear progression where an individual can only attain the final stage of moral disengagement, which includes victim dehumanisation and victim blaming, by first progressing through the previous three loci (Newman et al., 2019). Bandura (1999) classifies these eight mechanisms into four categories or "sets": behavioural, agency, outcomes, and victim, as the researchers illustrate in Table 1 below:

The first locus is behavioural, which refers to individuals' moral disengagement through rationalising their behaviours using several mechanisms. This category includes mechanisms such as moral justification, euphemistic labelling, and advantageous comparison (Newman et al., 2019). Moral justification is a mechanism of moral disengagement where individuals believe that their unethical behaviour is justified for the greater good. This mechanism allows individuals to justify their actions by making them seem necessary for a greater cause. Moral justification helps individuals to disengage from their moral standards and feel less guilty about their behaviour. Euphemistic labelling is a mechanism of moral disengagement in which individuals use less emotionally charged language to describe unethical behaviour.

The second locus of moral disengagement pertains to agency. It involves how individuals perceive and make sense of their own choices and actions. The agency locus includes both displacement and diffusion of responsibility mechanisms. Displacement of responsibility is another mechanism of moral disengagement, where individuals blame external factors for their unethical behaviour, such as peer pressure or authority figures. Diffusion of responsibility is a mechanism of moral disengagement where individuals believe that their behaviour is not their responsibility but rather a collective responsibility of a group.

The third locus of moral disengagement, termed "outcomes," includes only one mechanism - disregard or distortion of consequences. This mechanism involves perpetrators ignor-

Table 1 Categories of moral disengagement

Locus 1: Behavioural	Locus 2: Agency	Locus 3: Outcomes	Locus 4: Victim
Moral justification	Displacement of responsibility	Disregard or distortion of consequences	Dehumanisation
Euphemistic labelling	Diffusion of responsibility		Attribution of blame
Advantageous comparison			

ing or downplaying the harm they have caused. Alternatively, they may argue that they have not caused any harm at all (Bandura, 1999). Individuals disengage from their moral and ethical standards by overlooking or verbally reducing the negativity of the outcome.

The fourth and final locus of moral disengagement pertains to the perpetrator's treatment of the victim, and it includes two mechanisms: dehumanisation and attribution of blame. Dehumanisation is a mechanism of moral disengagement where individuals treat the victim as less than human to justify their unethical behaviour. Attribution of blame is another mechanism of moral disengagement where individuals blame the victim for their own unethical behaviour. This mechanism allows individuals to avoid taking responsibility for their actions by shifting the blame onto the victim. This theory can help to explain why students engage in cheating behaviours in online assessment and what factors contribute to their decisions to cheat.

Method

Research Approach and Design

This qualitative study aims to explore how individuals make meaning of their social realities and the case observed in a real-life situation (Mohajan, 2018; Bailey, 2015; Kumar, 2011). This study uses a phenomenological research design that prioritises individuals' subjective experiences and involves iterative data analysis to understand the phenomena being studied in detail (Greening, 2019; Saghafian & O'Neill, 2018; Creswell & Creswell, 2018). Using this design in the study allowed the examination of personal encounters of students who may not have engaged in online distance cheating but possess knowledge or understanding of cheating in HEIs.

Research Context

This study focuses on two online distance learning modules offered by an ODeL university based in South Africa, which registers approximately 500 000 students per year and caters to an extensive international community across 132 countries, such as Nigeria, Namibia, Zimbabwe, India, Congo, Ethiopia, United States of America, and China. The student cohort is diverse in terms of financial, linguistic, and social backgrounds. Most students pursue part-time studies while working full-time, and their ages range from 18 to 70 years old. The student body comprises various ethnicities, including Black, White, Coloured (mixed race), Indian, and Asian, with a substantial majority from middle- to low-income families. Notably, many students reside in remote areas where access to a stable internet connection is limited, leading some to complete and submit assessments through cell phones or local internet cafes. Language barriers also play a significant role for South African students, as English may not be their native language.

English for academic purposes (ENG153) is a first-year English language module offered to students with English as their first, second, or additional language. It spans a semester (four months) and aims to enhance students' academic language and literacy skills. In contrast, English for Economics and Management Sciences (ENG154) is a module designed for first-year students with English as their additional language, focusing on business

English proficiency. The selection of students was based on the courses they chose, ensuring fairness. ENG153 is the largest module in the Department of English Studies, enrolling approximately 16 000 students per semester. However, ENG154 is a smaller module with approximately 400 students per semester. The main difference between ENG153 and ENG154 lies in their specific focus within the English language curriculum. ENG153 provides a broad foundation for English proficiency across various academic disciplines, while ENG154 concentrates on language skills relevant to economics and management sciences, covering terminology, concepts, and writing styles specific to these fields. It is important to note that ENG153 and ENG154 are not prerequisites for each other. Students can enrol in either module independently without needing to complete the other first. Although the modules may complement each other in developing English language skills, they are designed to address different subject areas and cater to diverse student needs.

In online distance learning, modules are delivered exclusively through the Moodle Learning Management System (LMS). At the beginning of the semester, through 'meet and greet' livestream sessions, lecturers discuss the purpose of assessment for each module with the students. Students are regularly educated about source attribution and plagiarism consequences through various channels, including live-streamed classes, LMS announcements, emails, Telegram groups, and discussion forums throughout the semester. To support students, lecturers regularly conduct livestream classes and use diverse interactive materials such as podcasts, vodcasts, and TikTok videos, which are accessible on the LMS. Communication between lecturers and students occurs via discussion forums, emails, Microsoft Teams, LMS announcements, and a Telegram group. The present study explores attitudes towards cheating in online assessment within these distinctive modules, aiming to uncover prevalence and underlying factors contributing to cheating in ODeL. The study aims to reveal potential gaps or vulnerabilities in the academic system, informing targeted interventions and opportunities for enhancements.

Population and Sampling

In qualitative research, the population is defined as the group of individuals, events, or phenomena that the researcher intends to study (Vazquez-Cancela et al., 2021; Weeks, 2020; Gould, 2015). The population in ENG153 includes approximately 16 000 students, seven lecturers, and 30 markers during the second semester of 2022. In ENG154, the population includes 447 students, two lecturers, and two markers during the second semester of 2022. The researchers were interesting in understanding the voices of first year students from ENG153 and ENG154 who are representative of both male and female, from diverse racial and linguistic backgrounds, and who speak English as a first, second or additional language. To obtain a representative sample of the population, avoid bias, and stay within the qualitative nature of this study (Creswell & Creswell, 2018), the study employs purposive sampling to select 16 student participants from ENG153, four student participants from ENG154, 10 marker participants from ENG153 and two marker participants from ENG154. Purposive sampling was also used to select all lecturers from both modules (Creswell & Creswell, 2018).

Research Instruments

To address the research questions, three different research instruments were used to collect data: focus group discussions with students, one-on-one interviews with lecturers, and open-ended evaluation questions which were emailed to external markers. The focus group discussions with students allow in-depth exploration of attitudes and experiences of students regarding cheating (Colom, 2022), one-on-one interviews with lecturers provide expert insights into contributing factors regarding cheating (Hennink & Kaiser, 2022), and open-ended evaluation questions were sent via email to markers gather qualitative information to support the data from focus group discussions and one-on-one interviews (Sevnarayan, 2022b). This combination of research instruments offers a comprehensive view of the research topic.

The researchers first facilitated two Microsoft Teams focus group discussions with students from ENG153 and ENG154. The focus group discussion spanned 60 min. Additionally, one-on-one interviews with lecturers from both modules were also conducted by the researchers using Microsoft Teams. Finally, the researchers sent open-ended evaluation questions through email to markers. The markers sent their responses to the questions to one of the researchers through email. To enhance data trustworthiness, triangulation of instruments was employed, increasing credibility and validity (Floridi, 2019; Liviu & Liliana, 2018).

Ethical Considerations

The Research Ethics Committee at the university under study granted the researchers permission to collect data, and the ethical clearance number is Ref: 90268091_CREC_CHS_2022. To maintain the anonymity and confidentiality of all participants and the institution, pseudonyms were used for the university, modules, and participants in this article. Participants were given pseudonyms in the article, and it must be noted that these are not participants' real names. All participants in the study received consent forms beforehand, stating the objectives and nature of the study. Consent forms also emphasised that participation is voluntary, with no monetary gain or assessment marks attached. Participants willingly showed their interest in participating in the study by signing the forms. Participants were assured their identities would be protected when reporting their data in the study's findings. Researchers proactively engaged students in a comprehensive discussion about the nature of the study, elucidating various forms of cheating in online assessment. Emphatically, they were apprised of the study's exclusive focus on cheating, specifically encompassing deceptive practices aimed at gaining an unfair advantage in academic assessments.

Data Analysis

The data analysis in this study employed a rigorous thematic analysis approach (Braun & Clarke, 2021), which involved the collection of qualitative data through focus group discussions with students, one-on-one interviews with lecturers, and evaluation questions with markers. The researchers followed Braun and Clarke's (2021) six steps of thematic analysis which included data collection and transcription, coding and theme generation, theme identification, data synthesis and alignment, checking and validation, checking against existing

literature, aligning with the research questions. A validation process conducted by an external reviewer ensured the themes' accuracy by checking against the raw data and the findings in the article. Throughout the analysis, themes were aligned with existing literature and the theory of moral disengagement (Bandura, 1999). The findings recommend a multifaceted approach, integrating pedagogical, technological, and cultural elements to minimise cheating and enhance integrity in online assessments.

Findings and Discussion

The purpose of this section is to share and discuss data generated from three main research questions. Three themes were derived from the data collection:

- Underlying reasons for cheating in online assessment.
- Contributing factors to cheating in online assessment.
- Effective strategies for minimising cheating and enhancing integrity.

To analyse the data within these themes, the researchers draw upon Bandura's (1999) theory of moral disengagement, providing a theoretical framework to understand the complexities of cheating behaviours in online assessment contexts.

Underlying Reasons for Cheating in Online Assessment

The first research question, which focused on why students cheat in online assessment in the ENG153 and ENG154 modules, sought to understand students' experiences of cheating in focus group discussions. One student, Helen from the ENG153 focus group, mentioned that "being lazy to study… I mean, how does one even study an essay? Additionally, too much workload, and the fact that we study ourselves without supervision may also result in student cheating" (ENG153, focus group discussion). Helen's response highlights factors that contribute to cheating among students in online assessment. These factors include the students' own behaviours, such as laziness, lack of cognitive abilities to grapple with academic writing, and poor time management, as well as institutional factors, such as the lack of supervision and support from the university. In response to the same question, Thabang, a student from the ENG154 focus group, cited, "I am someone who submits at the last minute, there is a potential cause of cheating, some laziness I admit…[laughing]…we love being spoon-fed man… maybe we just lack discipline and motivation". Thabang's response similarly pointed to a focus on self-blame and a lack of motivation. The response from Thabang indicates that what appears, to some, to be laziness could be a struggle to maintain a work-life balance. From the focus group discussion, it is noted that students did not fear answering questions about why they cheat; their responses were unperturbed and relaxed. Another student who responded to the same question indicated that

> "My friends cheat, lie, or defend themselves. I see this all the time in our private WhatsApp groups, and I think, if they cheat…why can't I do the same? The same students who share answers end up passing. However, I don't cheat, I am just making an example" (Shayne, ENG153 focus group discussion).

Shayne's response reveals that peer pressure and student collusion are other reasons why students cheat. Social media groups may aggravate cheating, students may feel comfortable with each other, and cheating may seem attractive. Students often mentioned 'advantageous comparisons' when explaining their reasons for cheating, citing instances where their peers cheated and still successfully passed their assessments (McCabe et al., 2001). In the second locus, a lack of agency was apparent in the students' responses. Shayne further stated that "Referencing and citations are my enemy, Assignment 01 results showed me flames, plus our time is so short and writing essays are so hard…but yeah…we would all be doing the right thing…" (ENG153, focus group discussion). According to Shayne's response, students seem to cheat because they are not given enough time in online assessments for writing tasks, they do not feel adequately prepared for academic writing and they are afraid of failing the module. Findings in both ENG153 and ENG154 suggest that there are several behavioural factors that contribute to cheating in online learning contexts. Interestingly, in the focus group discussions, students remained emotionally distant in their responses, where they responded in a matter-of-fact manner with no further justification. This suggests euphemistic labelling, as they discussed why they cheat without using emotionally charged language. This is apparent when a student remarked that the internet is their lecturer. Researchers argue that when cheating becomes a socially conditioned behaviour and is intentional (McCabe et al., 2001), students intrinsically believe that it can be normalised and executed (Ababneh et al., 2022; Stoesz & Eaton, 2020). Helen insisted that:

> "Students fail to manage their time, which results in minimal time to study for assignments, leading to cheating. I don't even know my lecturers, the internet is my best friend…in distance learning, we don't get one-on-one interaction with them, so students feel pressurised and frustrated and the internet becomes our lecturers plus English is not our native language" (Helen, ENG153 focus group discussion).

Within the first locus of the theory of moral disengagement, students used moral justification to justify why they cheated (Bandura, 1999), for example, the lack of lecturer presence, time management, isolation in distance learning, language barriers to learning, a high workload, laziness, and lack of interest, discipline, and motivation in their studies. This moral justification normalises cheating and becomes a learned behaviour due to social conditioning, as supported by previous literature (Bretag et al., 2019; Stoesz & Eaton, 2020). Interestingly, a student from ENG154 echoed:

> "I have a fear of failure which can result in cheating. As a first-year student, I struggle with English. English is not even my second language. It is the third language that I speak. As a result, I do feel like I lack confidence in my ability to write. It is also embarrassing because my peers do so well" (Eva, ENG154 focus group discussion).

Nana (ENG153, focus group discussion) similarly added that "I fear failing examination because English is not my home language and I get tempted to look for answers on the internet. I think writing examination from home makes things even worse." The phenomenon of cheating in online assessment is accentuated by apprehensions regarding failure and a dearth of language self-assurance, particularly pertinent to students for whom English is not their native language. Owing to substantial enrolment figures, lecturers lack insight

into individual language proficiencies within the distance education context. This situation might lead students to feel reticent about seeking assistance from their lecturers. In both modules, the Moodle LMS serves as an interactive platform, complemented by communication through the Telegram social media app. Livestream sessions are regularly conducted by lecturers throughout the semester, with the option for one-on-one consultations upon student request. It is imperative to highlight that within a given cohort of students, a mere fraction, specifically less than 10% of the group, partake in livestream sessions. Many of these students show a reluctance to use supplementary resources or seek support, leading to self-imposed isolation. However, limited access to personal devices and inadequate internet connectivity may hinder students from engaging in additional learning support, particularly those from disadvantaged backgrounds. Such constraints, coupled with the propensity to externalise responsibility, create an environment where moral standards may be compromised, contributing to the normalisation of cheating within social contexts (Bandura, 1999). Tackling these challenges necessitates multifaceted approaches encompassing evaluating, updating and implementing academic integrity policies, alongside the provision of academic and emotional support, language assistance, and the cultivation of a culture of academic integrity. The next section aims to understand the contributing factors that lead students to cheat.

Contributing Factors to Cheating in Online Assessment

In responding to the second research question, which focuses on the contributing factors to cheating in online assessment, external markers from both modules shared their experiences through open-ended evaluation questions. One marker from ENG153, Lucas, mentioned that "Although lecturers give students a month or two to complete a single assessment, the time is never sufficient as they always ask for extensions. When we mark, we come across incomplete assignments; many blatantly plagiarise and submit" (Lucas, ENG154 evaluation questions). Lucas's response indicates a concern that although students are given plenty of time to complete assignments, students still submit incomplete assignments. Another marker from ENG153, Maggie, shared that

> "The pressure of being a first-year student at university is real. Many students are not ready for online distance education, and they are unprepared for university. Students do not know how to submit their assignments on the LMS system. Many of our students can't construct a basic sentence and they submit plagiarised work which sometimes doesn't even address the topic- it shows a complete lack of understanding" (Maggie, ENG153 evaluation questions).

Both markers reported that students did not complete their writing, which may indicate that students do not plan well and struggle with time management skills. The findings suggest a potential connection between the theory of moral disengagement and student behaviour. The observation that students did not complete their writing assignments could indicate a lack of planning and poor time management skills. This lack of effective planning, combined with the pressures experienced by first-year students and their potential underpreparedness, may create fertile ground for moral disengagement. The theory of moral disengagement posits that individuals can rationalise unethical behaviour by disengaging from their moral

standards (Bandura, 1999). In this context, students may resort to cheating to cope with the perceived academic demands and pressures of online assessment. According to Benny (ENG153, evaluation questions),

> "Students are struggling with balancing work and studies, which can lead to copying from their peers or the internet. Others may experience stress, anxiety, and depression due to repeating this module. Additionally, the availability of information on the internet can be tempting to our students who speak English as a second language, leading some students to copy and paste verbatim information."

Conny similarly stated, "it is probably hard being an employee and a student at the same time and this could be contributing to students copying their friends or from the internet" (Conny, ENG154 evaluation questions). In addition, Sky believes that "some students could be suffering from stress, anxiety, and depression due to repeating modules. I guess that can highly contribute to cheating in some cases" (Sky, ENG153 evaluation questions). According to Joyce (ENG153, evaluation questions), "I feel that the level of questions asked do not match the cognitive levels of our students- it is no wonder they cheat".

Benny, Conny, Sky, and Joyce suggest that students may resort to cheating due to the pressure of balancing work and studies, the temptation of readily available information on the internet, and the mismatch between assessment questions and students' cognitive levels. These stressors and challenges can lead students to disengage from their moral standards, justifying cheating as a coping mechanism. Moreover, the prevalence of generative AI technologies, such as ChatGPT poses a significant challenge (Elkhatat et al., 2023), potentially further enabling moral disengagement and unethical behaviours. Researchers Barber et al. (2021), Cotton et al. (2023), and Zawacki-Richter et al. (2019) highlight how accessibility to information through these technologies can tempt students to cheat. If lecturers fail to adapt their assessment practices, question techniques and maintain high cognitive demands without adequate support (Naidu & Sevnarayan, 2023), this may lead to a lack of critical thinking and regurgitation of inauthentic content knowledge (Locquiao & Ives, 2020). Additionally, language barriers and mental health issues, as noted by Novick et al. (2022), can add to the reasons why students might rationalise cheating. It is imperative that lecturers create a proactive and supportive learning environment that fosters academic integrity and emotional well-being while also adapting to the challenges posed by technological advancements.

According to Lucas (ENG154, evaluation questions), "students are free. No one is checking students. Only a few markers check whether students cheat or not, even during exams. Therefore, there is too much freedom in online modules." For Maggie (ENG153, evaluation questions),

> "Students cheat because it doesn't look like there are workable policies or some scary formal paper in place to hold students accountable for cheating. If we come across plagiarism, we do penalise these students, but nothing further is done. It is ironic because they submit their answers with a signed plagiarism declaration."

Additionally, Sky (ENG153, evaluation questions) mentioned that "signing the declaration forms is an indication that students acknowledge the seriousness of cheating and under-

stand the consequences". The statement by Lucas highlights the lack of monitoring and accountability, allowing students to engage in unethical behaviour with a sense of freedom. Moreover, markers identified student isolation in distance education as a contributing factor, which is supported by the literature (Malik et al., 2023; Novick et al., 2022). The insufficient monitoring of markers in online assessment and ineffective measures against plagiarism further compound the problem (Lee & Aslam, 2023; Noorbehbahani et al., 2022; Stevens et al., 2022). Despite the requirement for students to sign plagiarism declarations, Maggie's observation questions the efficacy of these measures, suggesting a lack of workable academic integrity policies and consequences. The disagreement between markers regarding students' perceptions of the seriousness of plagiarism raises concerns. These findings reveal the critical need for stronger measures, enhanced monitoring, and the development of comprehensive academic intregrity policies that truly address the issue of cheating in online contexts.

Effective Strategies for Minimising Cheating and Enhancing Integrity

This section shares responses from the ENG153 and ENG154 lecturers. When asked during one-on-one interviews what the effective strategies for minimising cheating are, one lecturer mentioned that "…cheating requires us to set clear expectations and guidelines for students. This includes clearly defining what constitutes cheating and outlining the consequences for engaging in such behaviour" (Kingsley, ENG153 one-on-one interview). Chloe (ENG154, one-on-one interview) added, "it is important to emphasise the importance of academic integrity and the value of learning for its own sake, rather than just for the sake of getting good grades." According to Kingsley, setting clear expectations, guidelines and training students about cheating can help them understand what is acceptable and not acceptable in the online learning context and the potential ramifications of cheating. To add, Chloe's response emphasises the importance of understanding academic integrity and the value of learning beyond just getting good grades. In this way, academic integrity may be seen as a personal value rather than just a set of rules to follow. One lecturer mentioned:

> "One effective strategy for addressing cheating in online learning is to conduct regular assessments with questions that call for more engagement, such as open-ended and essay questions, that require students to use their own experiences. With AI technologies such as ChatGPT, it is easy for students to answer generic essay questions. We need to be mindful of our assessment strategies to enhance academic integrity" (Molly, ENG153 one-on-one interview).

In addition, Kenny (ENG153 one-one-one interview) mentions:

> "Because of ChatGPT, we now give students the links (to academic articles) that we need them to use in assessment. We do not allow students to use external sources to cite in their essays. This allows us to limit cheating. It is sad, but we do not trust our students. They use the internet and ChatGPT irresponsibly."

Molly suggested that one effective strategy for addressing cheating is to use interactive question types that incorporate students' experiences. Kenny added that providing students with specific links to academic articles to cite in their assessments helps minimise cheating.

It must be noted that although students are sensitised to cheating in both modules, they still cheat. This finding links to Lucas, an ENG153 marker, who noted that students have too much freedom in online learning. These strategies can help reduce cheating, as the answers require more critical thinking, reasoning, problem solving, and personal understanding (Locquiao & Ives, 2020) rather than copying and pasting from AI tools such as ChatGPT (Elkhatat et al., 2023).

For Mohale (ENG154, one-on-one interview), "another strategy is for us to provide opportunities for students to collaborate and engage in discussions with their peers, as this can encourage them to take ownership of their own work". To add, Masia (ENG153, one-on-one interview) stated that "Academic writing can be a challenging task for many students in online learning. Providing opportunities for students to work in teams and exchange ideas can motivate them to believe in their own academic capabilities." According to Mohale and Masia, when students engage in collaborative learning, they are more likely to be motivated to take responsibility for their learning, as they can actively participate in the learning process, share their perspectives and ideas, and receive feedback from their peers. The responses from lecturers indicate that interacting and collaborating with others can encourage a sense of accountability, increase motivation in their own writing, and reduce the temptation to cheat. This confirms that when students isolate themselves in their learning, they tend to resort to cheating. Therefore, providing opportunities for students to work in teams and exchange ideas can be a beneficial strategy to enhance academic integrity in online assessment.

According to Masia (ENG153, one-on-one interview), "vocabulary-building exercises and activities can help [students] improve their word knowledge and increase their confidence" in their abilities to express themselves in vocabulary, writing, and communication. However, Chloe (ENG154, one-on-one interview) argues that

> "We have tried exposing them to vocabulary and language immersion exercises to build their confidence in English. This does not work. They still cheat! What we need is [text-matching] software for first-year students. Our university only pays for Turnitin for postgraduate students. Our first-year students are immature and fresh out of high school, we also don't know them personally…they need it more than our older students…and this is where the problem lies."

In a similar vein, Mirriam (ENG153, one-on-one interview) added "… like last week I got an email from our student who requested the class ID for Turnitin. I had to turn that student away because first-year students do have access to this software. They submit essays, and we must be detectives and solve plagiarism cases."

The lack of access to text-detection software for first-year students presents a challenge for lecturers to effectively detect and address cheating, potentially contributing to a diffusion of responsibility. Therefore, it has been suggested that institutions employ software such as Turnitin to detect text similarities (Oravec, 2022). However, scholars such as Rogerson and McCarthy (2017) assert that students continue to effectively circumvent Turnitin's safeguards, casting doubt on the efficacy of this widely used plagiarism detection tool. Disagreements arise about the effectiveness of vocabulary-building exercises to reduce cheating. While some lecturers believe that enhancing students' vocabularies and language skills may

boost confidence and motivation in their writing, others argue that it might not be effective without a deeper understanding of students' writing abilities and personal contexts.

The literature and findings converge to emphasise the importance of multifaceted strategies in combating cheating in online assessment (Ababneh et al., 2022; Adzima, 2020). Incorporating interactive question types and providing specific links to academic articles are powerful pedagogical strategies to address cheating in online assessment. These approaches engage students with their contexts and experiences, promoting a sense of responsibility for their learning. These strategies may motivate academic integrity, cultivating a culture of honest and accountable learning. Clear policies, educational interventions, interactive assessment approaches, and access to text similarity detection tools all play significant roles in enhancing a culture of academic integrity in online assessment (Elkhatat et al., 2023). A comprehensive approach, guided by Bandura's (1999) theory, that combines pedagogical and technological measures is essential to effectively address cheating in online assessment in distance education.

Limitations

The study's primary limitation lies in the potential for sampling bias due to its qualitative approach, which included a specific group of students, markers, and lecturers. This limits the generalisability of the findings beyond the study's context. Although the inclusion of participants from two modules aimed to mitigate this bias, it may not adequately represent a diverse student population. The qualitative nature of the study also introduces subjectivity into the analysis, and the scope of variables examined may not encompass all relevant factors. In addition, temporal changes in HEIs could affect the study's relevance over time. Researchers and policymakers should apply discretion when applying these findings to different populations and contexts.

Conclusion and Recommendations

This study provides insights into the issue of cheating in online assessment, highlighting behavioural and contributing factors that influence students' cheating behaviours. Some of the findings from students revealed that they cheat due to multiple factors, such as English not being their native language, lack of access to lecturers, poor network connectivity, and colluding with other students. Markers revealed that multiple contributing factors to cheating are students' ease of access to AI tools, the pressure of being an online student and being isolated from lecturers. Lecturers suggested the use of text similarity detection software, interactive question types, and providing specific links to academic articles to reduce cheating in online assessment. The study recommends a multifaceted approach to minimise cheating and enhance academic integrity in online assessment. This includes interactive module design, lecturer training on online student support and academic integrity policies, and technological solutions such as text similarity detection software and e-proctoring. Moreover, timely feedback and effective communication between lecturers and students can also help minimise cheating. In addition, there is a need to address the language-related challenges and isolation experienced by distance learners necessitates a comprehensive enhancement of support systems and available resources. Further research is needed to explore the effectiveness of different strategies to enhance academic integrity in online assessment and their

impact on cheating. However, some may argue that simply relying on strategies, such as Turnitin and proctoring, may not be enough to eliminate cheating in online assessment. It may require a cultural shift towards valuing academic integrity and a deeper understanding of the reasons why students cheat. Nevertheless, the findings of this study serve as a crucial starting point for institutions to minimise cheating and enhance academic integrity in online assessments in distance education.

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Data Availability We do not wish to share the data as participants have been told that their interviews and data would be strictly confidential.
We look forward to you reading our submission and await your response.
Yours sincerely,
Kershnee Sevnarayan & Kgabo Bridget Maphoto.

Declarations

An explanation of any issues relating to journal policies.
There are no issues in our article relating to journal policies.
of any potential competing interests.
We declare that we have no potential competing interests.

Confirmation that all Authors have Approved the Manuscript for Submission We confirm that all authors have approved the manuscript for submission.

Confirmation that the Content of the Manuscript has not been Published, or Submitted for Publication Elsewhere We confirm that the content of the manuscript has not been published, or submitted for publication elsewhere.

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