

Online Assessments to Uphold Quality and Academic Integrity-Lessons from Covid-19 Pandemic

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Abstract

The outbreak of Coronavirus (Covid-19) and the associated government containment measures to address the problem forced many universities across the globe to adopt or deepen their online teaching and learning activities. As a result, assessments that ordinarily follow pedagogical approaches of face-to-face classroom-based practices and procedures, moved to online variants -- a novel practice for many academics across disciplines. Expectedly, such shifts have ignited debates among scholars about assessments quality and academic integrity. From both academic and students' perspectives, the aim of this paper is to review systematically, and critically evaluate and understand the relationship between online assessments and performance outcomes in safeguarding quality and academic integrity. Applying a qualitative approach, data were collected through a Systematic Literature Review (SLR) framework, from Experiential Research Method (ERM) and from Informal Shared Conversations (ISC) with postgraduate students. It is hoped that the findings of the study will contribute positively towards efforts to strengthen existing ethical values in policy and practice within the academia.

Keywords

Academic Integrity, Covid-19 Pandemic, Online Assessment, Online Assessment Quality, Universities

1. Introduction

The outbreak of coronavirus (Covid-19) disease in 2020 caused an unprecedented global disruption of the day-to-day running of previously routine activities of educational institutions. The immediate impact of the pandemic was the related lockdown and social (physical) distancing restrictions, which ensured the closure of primary, post-primary and tertiary institutions of learning. With whole families marooned unexpectedly and indefinitely at home, the continuation of educational activities became one of the top priorities in most countries – thus, the sudden shift from the traditional classroom face-to-face pedagogy to alternative modes of digitally enhanced virtual teaching and learning, and assessments. The South African government's request that learning institutions should shut down as a precautionary measure and move to online delivery of services resulted in universities initiating adjustments of course plans, course contents, and assessment design and implementation, but also on other pertinent matters such as course delivery method. The Department of Higher Education urged institutions nationwide to activate digital platforms to ensure continuation of teaching and learning. According to Landa et al., (2021), universities in South Africa employed a

variety of learning management system (LMS) and course management systems (CMS) to alleviate the chances of shutting down institutions, vis-à-vis education in general. Some examples of such technologically empowered learning platforms being used across the universities are Moodle, MS Teams, Aspire Blackboard, Zoom, Google Classroom.

It is worth emphasizing also that the transition to online teaching and learning posed not only its own technological concerns (Cooper and Tschobotko 2020), but also infrastructural availability and accessibility issues, and knowledge and expertise challenges for both the academics and students. Although the changing context catalyzed innovation in the delivery of service via technology, it exacerbated pre-existing pressures on the South African higher education institutions, which were often struggling with various challenges prior to the pandemic. Those challenges notwithstanding, many universities were able to move on largely unruffled with their educational activities for the already planned academic year. With Covid-19 induced adjustments, however, the superimposed assessment challenge had lacked a comprehensive online design history. For instance, tasks such as tests/ examinations and laboratory activities, which normally required physical presence and strict invigilation became more challenging under Covid-19. Indeed, Guangul et al., (2020), acknowledge that assessing students in an online remote setting is a major challenge posed by the Covid-19 pandemic.

According to Capsim (2020), the purpose of assessment is to support learning, show accountability and provide certification. In supporting learning, Guangul et al., (2020) note that assessments take a diagnostic approach by determining the competences, gaps, and progress that students have made towards learning. Measuring these elements becomes challenging in a remote setting arrangement as the reliability of online assessments (Verhoef and Coetser 2021) gains interest within the academic space. Many research studies have questioned this in relation to promoting learning -- especially with the online assessment practices conducted during Covid-19 lockdown (Janke et al., 2021; Ngqondi et al., 2021; Elsalem et al. 2021; Nwosu and Chukwuere 2020; Bilen and Matros 2020; Elzainy et al., 2020; Miller 2020; Quality Assurance Agency, 2020). This brings to the limelight the issues of quality and integrity in online assessments, which gained prominence during the Covid-19 pandemic lockdown. Despite trainings on various learning management systems (LMS) adopted by universities at the time, evidence in the literature point to a dearth of scholarly engagements on concerns over academic dishonesty in online assessments practices in the South African context. Again, finding a balance between positive learning and maintaining quality to uphold academic integrity became a more challenging task within the academic community.

As many areas of research in response to Covid-19 pandemic emerges, this article attempts an underexplored research space within a South African context, by applying a qualitative-inductive approach to examine the phenomenon of online assessments quality and explore the themes of academic integrity during Covid-19 lockdown in a South African University of Technology. Applying a time dimension (specifically, from 2020 to the first quarter of 2022), the paper reviewed current literature explicitly related to the variables in this research, online assessments and academic integrity during the pandemic. For a quick readership crucial to understanding the topic, the paper departs from introduction and presents a review of literature covering assessment quality and academic integrity. Following this section is the methodology adopted for the study, which is followed by the result and findings. The final section provides the concluding thoughts and recommendations.

1.1 Objectives

Understanding the varied and complex nature of academic integrity is vital given the increasing use of online assessments in this pandemic era. Discourses on academic integrity focuses mostly on aspects of plagiarism and other forms of cheating, but what constitutes academic misconduct is vast and cuts across disciplines. Academic integrity is an overarching commitment to the fundamental values of honesty, trust, fairness, respect, responsibility, and courage and how these values are upheld in online assessments calls for meticulous examination. Thus, the purpose of this study is twofold: (i) To review and synthesize current research and explore the extent academic integrity value principles are upheld in online assessment during Covid-19 lockdown. The value principles are honesty, trust, fairness, respect, responsibility, and courage. (ii) To understand the general perceptions on the quality of online assessments during Covid-19 lockdown. As Covid-19 (or its equivalent) seems far from ending, it is hoped that this article will aid policymakers and academics in decision-making regarding online assessments and its quality as we continue to live in the new normal.

2. Literature Review

Teaching and assessment are two inseparable processes with the latter being an important aspect in an educational system as a bedrock for ascertaining the extent to which pre-set educational goals are being met. Assessments play vital roles in student experiences in courses and their associated learning outcome (Boud 2010). In fact, observable evidence of learning determines student progress and demonstrates and provides an understanding of the curriculum (Anuradha et al., 2020). According to Mitten et al., (2017), assessment involves a process of obtaining information used in making decisions and reaching conclusions on students; and for institutional curriculum achievement, results implementation, and mapping of educational policies. The outbreak of Covid-19 pandemic in 2020 triggered a rapid increase in online academic programs with many new educational activities or practices designed to suit the context. Online assessment has served as a potential catalyst in translating conventional assessment practices during emergency responses (Whitelock and Watt 2008) such as Covid-19.

Although online assessment has been practiced prior to the pandemic, it has become prevalent across institutions and disciplines for both formative and summative purposes since the outbreak of Covid-19. According to Weleschuk et al. (2019, pp. 5), online assessment is any means used for evaluating student achievement, providing feedback, or moving the students forward in their learning process in fully online credit courses. This definition fits well in the context of this study as many universities in South Africa moved fully to online delivery during the strict covid-19 lockdown period. Online assessment entails a holistic approach, which takes several factors into account: the student, teaching, delivery, and feedback. Thus, its review of aims, objectives and outcome is essential (Anuradha et al., 2020). In compliance with the guidelines of the South African government on the transition to online teaching and learning during strict Covid-19 lockdown period, many universities adopted variable continuous online assessments policy in line with courses and disciplines. They also applied diverse innovative assessment practices.

The discipline explored in this article (within the preselected South African University of Technology field) is Business Management, which adopted a fully continuous assessment policy via online platforms -- unlike health sciences and engineering where practical assessments are required. As many institutions adopted online teaching during strict Covid-19 lockdown, concerns about developing a reliable and effective online assessment (Mukhtar et al., 2020), particularly in ensuring quality and integrity, dominated the academic space. Hence, it inspired our interest in understanding and assessing the implications for effective intervention guidelines and policies.

Quality in Online Assessment

The concept of quality has been widely researched. Although its meaning differs based on personal and institutional values and cultural norms, various HEI stakeholders (students, lecturers, parents, institution management, and society) appreciate that quality serves different purposes and can be applied across various educational activities such as teaching and learning, course design and development, assessments, and research. Also the idea of quality can be used for institutional ranking and reputation, graduate attributes analysis, measuring students' competency levels and employability skills, industry referrals, international gold standards (Padayachee and Matimolane 2021; CHE, 2020). In acknowledgement, the South African Council on Higher Education has identified ten pertinent institutional quality areas (CHE, 2020). Hence, quality is fully accepted as a critical factor in the education landscape. For assessment, quality is applied in its design, development, and implementation. The factors that define quality in assessment is well captured in the South African Quality Assurance Framework (QAF), which regards assessment as a promoter of student learning (CHE 2021). The factors are along the following lines: validity and reliability of the content; relevance and clarity; fairness; and engagement. On the validity, the content of the assessment should be well organized in accordance with the module (Ainslee 2018) and able to evaluate the achievement of the learning objectives (Hsiao & Watering, 2020). Reliability means the assessment should be accurately measured with an outcome (Ainslee 2018) and free from cheating and fraud (Guangul et al., 2020). Relevance in assessment means making future reference (Ainslee 2018), which requires tools for comparison and analysis of data. Clarity posits that assessment procedures and expectations should be clearly stated (Guangul et al., 2020) and the content simple, clear, and easy for students to understand (Singh 2019). On student engagement, Ainslee (2018) notes that assessments should be objective -- that is, explicit and creative to motivate students.

Thus, quality in assessment entails the degree to which these factors are achieved. These principles hold for both traditional face-to-face and online assessments in higher education. In fact, the CHE (2020) Covid-19 assessment guidelines for emergency remote teaching and learning notes that ensuring quality requires assessment activities that are valid, reliable, and authentic with explicit plan and effective communication. Expectedly, the extent to which these principles were upheld in online assessments during Covid-19 lockdown attracted much attention. Online teaching

and learning platforms are believed to facilitate access to quality education and enabling the expansion of access to knowledge (de Moura et al., 2021). As such, online teaching and learning have great potential for the development and application of a wide range of assessment activities. Unfortunately, this was not the case during the Covid-19 pandemic period as many research studies raised concerns over quality in online assessments (Padayachee and Matimolane 2021; Thambusamy and Singh 2021; Sharadgah and Sa'di 2020). Therefore, this highlights the importance of quality in online assessments for achieving educational goals.

Understanding Academic integrity in Covid-19 online assessments

Academic integrity is a complex phenomenon, and its conceptualization differs across disciplines. An understanding of academic integrity alludes to academic misconduct drawing from ethical and moral points of view. Bosch and Cavallotti (2016) outlined four elements of integrity, namely: justice, coherence, ethical principles, and motivation. Thus, bringing these elements together, Guerrero-Dib et al. (2020) defined academic integrity within the context of education as a habit of studying and carrying out academic work with justice and coherence, seeking to learn and get motivated from the service such learning provides for others. From a similar perspective, the International Center for Academic Integrity (ICAI 2021) defines academic integrity as a commitment to six fundamental values in academic practice, namely: honesty, trust, fairness, respect, responsibility, and courage. Verhoef and Coetser (2021) assert that evidence of academic integrity is the cornerstone of quality in academic activity for both students and lecturers. Demonstrating honesty reflects truthfulness, keeping promises with evidence, and efforts towards objectivity (ICAI 2021). Honesty is the foundation for the rest of the values: trust, fairness, respect, and responsibility. For instance, honesty sets the tone for trust to be developed. The ICAI (2021), further asserts that trust relies on truth and represents a bedrock for academic pursuit and academic work. In academia, all stakeholders are obliged to work with trust; for example, students promote trust in their academic activities, such as assessments and research, by not falsifying information and neglecting ethical values. Trust is displayed when university management sets clear standards that uphold fairness and honesty. Demonstration of trust shows how clearly expectations are stated, transparency promoted, and credence accorded for a genuine act. ICAI (2021) defines fairness as impartial treatment with a firm hold of ethics, which reinforces the importance of truth, ideas, logic, and rationality. Therefore, fairness is rooted in elements of predictability, transparency and clearly reasonable expectations. Students can show fairness by not compromising their academic work by opening their original work easily to any form of academic dishonesty such as cheating or plagiarism. Demonstration of fairness shows the extent to which an individual consistently adheres to rules and policies, ensures equitable engagement while keeping an open mind, takes responsibility for one's actions and ensures objectivity (ICAI, 2021). Respect is a two-way act that acknowledges respect for each other. Respect can be demonstrated by active listening, open communication and show of empathy, and the acceptance of differences and individual thoughts. Responsibility is an individual duty and a shared concern, which requires every member of the academic community to be accountable for his/her actions (ICAI, 2021; Anuradha et al., 2020). Embracing and acting along these values by all stakeholders (students, staff, and institutions) show the extent academic integrity is maintained.

According to Holden et al. (2021), the values of academic integrity define ethical academic behavior, which creates a community dedicated to learning and producing innovative ideas. In support, Bertram-Gallant (2016) considers academic integrity as a goal for every institution and a quality required in all academic endeavors for achieving the highest standards of excellence. The behavioral characteristics of students' academic integrity in online assessment settings addresses how students uphold ethical behaviors and scholarship. For example, this entails how students complied with the rules and procedures regarding assignments and tests, ensuring that class activities are an individual's own effort, avoiding collusions such as including names of students in a project they did not contribute to, not referencing scholarly work appropriately, and students allowing someone to complete assignments on their behalf. With many universities adopting online assessments during Covid-19 lockdown restrictions, adhering to the above has remained challenging. Therefore, Verhoef and Coetser (2021) asserted the possibility of dishonesty and cheating increasing with online assessments. Many extant literature question the integrity of online assessments because of increased academic dishonesty and misconduct. According to Sforza (2021), cases of academic integrity has increased and Newton (2020) noted that many universities reported widespread cheating in online assessments during Covid-19 lockdown. The same goes for Eaton (2020) who found a lot of file sharing and cheating amongst students in Covid-19 era online assessments. A similar view was shared by other scholars (Verhoef and Coetser 2021;

Meccawy et al., 2021; Ghanbari and Nowroozi 2021; Gamage, et al., 2020; Guangul et al., 2020; Mukhtar et al., 2020). These studies show growth of concerns over quality in online assessments during Covid-19 pandemic lockdown.

3. Methods

Using a qualitative-inductive research approach, data were collected in two-folds: first, by applying a Systematic Literature Review (SLR); and, second, by using Experiential Research Method (ERM). As cited in Vu-Ngoc et al. (2018, p. 2), a systematic review is a form of literature review that assembles and analyses existing studies relevant to a specific research question with the aim to synthesize findings. The researchers examined existing peer-reviewed current research studies focusing on the academic integrity and its value principles in online assessments during Covid-19 lockdown. Search engine activity data on academic integrity in online assessments was conducted via selected reputable databases and citation indexes (including JSTOR, DOAJ, EBSCO, SABINET, ProQuest, and Science Direct). Specifically, the researchers applied a cross-sectional time dimension method in which data was collected only once from 2020 to 2022 publications (until this write-up). The application of SLR helped the researchers to understand the extent academic integrity molded a global discourse on Covid-19 pandemic online assessments. The study adopted a Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework as shown in Figure 1.

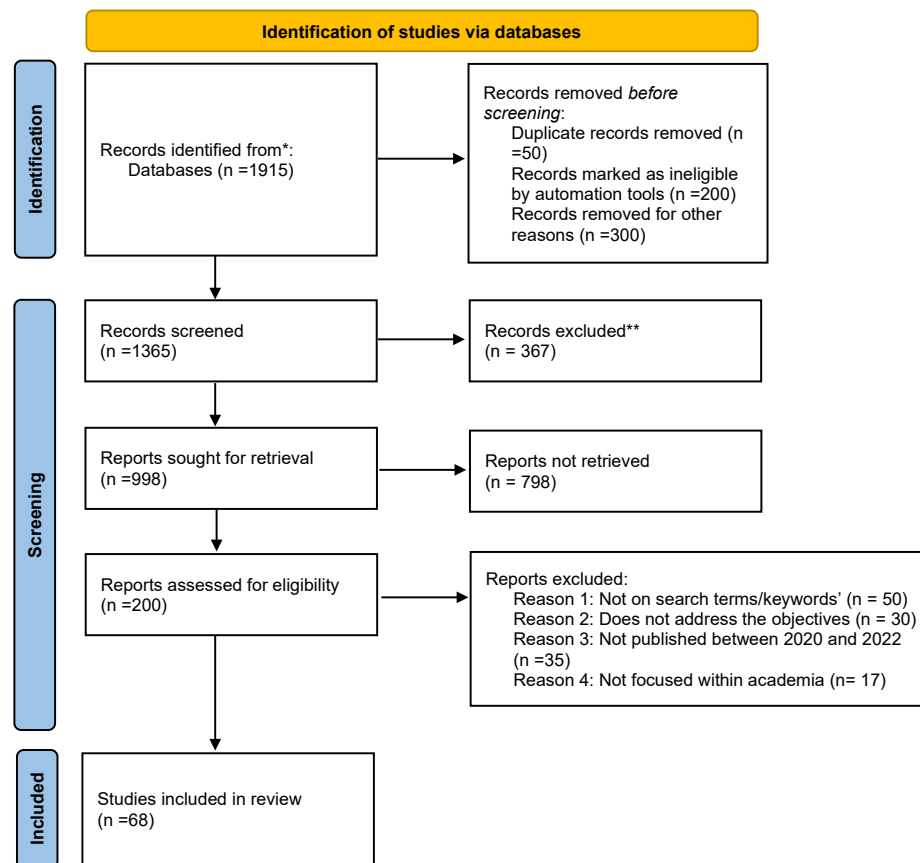


Figure 1: A SLR framework adopted from Page et al., (2021).

As per Figure 1, the initial search string yielded close to 2000 publications and the researchers reviewed the article titles, abstracts and the full texts. By setting up an inclusion and exclusion criteria, the result was refined by including only articles where: (i) online assessment quality; (ii) academic integrity; and (iii) online assessments during Covid-19 pandemic, formed the study's central topic as presented in Figure 2.

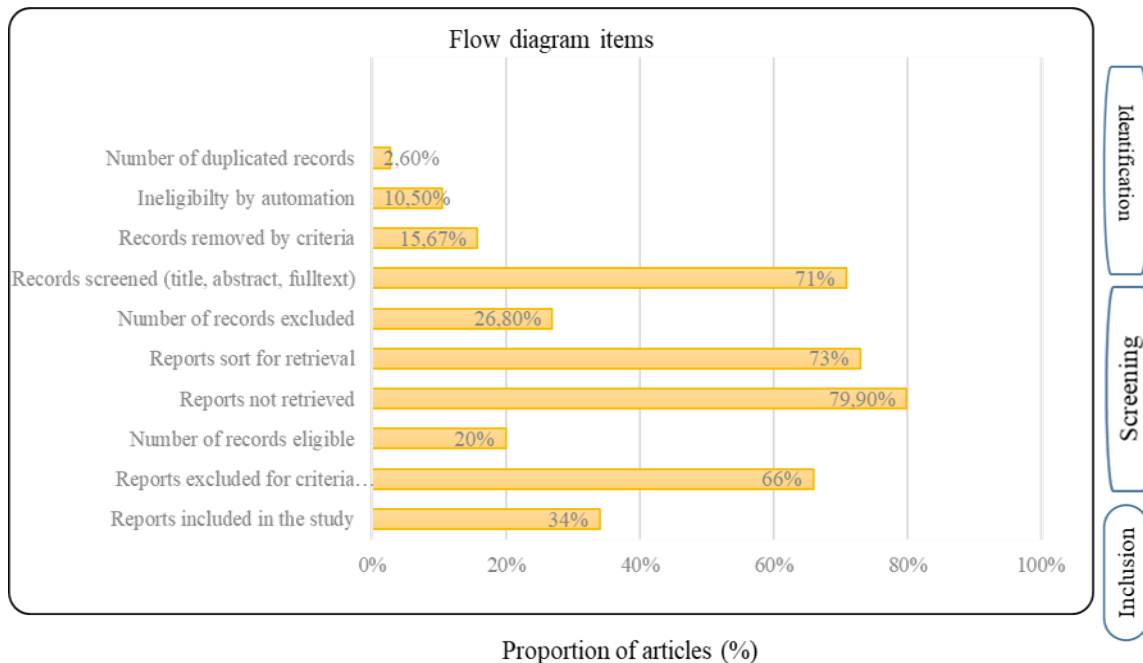


Figure 2: A percentage representation of all items in the flow diagram.

In Figure 2, the percentage of all items sourced are presented under 3-categories; 'identification' (2.6, 10.5, 15.67 and 71); applying various criteria, percentage of 'screened' items are (26.8, 73, 79.9, 20 and 66) and 34% represents items included in the study.

Applying a qualitative approach, these authors reflected on their experiences and shared conversations on the general perceptions of quality and academic integrity in relation to online assessments during Covid-19 pandemic. Data were collected via:

- Use of Experiential Research Method (ERM) noted by Grant et al. (2001) as an acceptable source of data in qualitative research. One of the authors narrated a personal reflection conducting online assessments for 102 Human Resource Management students at 2nd year level in a South African university.
- An Informal Shared Conversations (ISC) promoted by scholars (Swain and King 2022; Swain and Spire, 2020) to produce natural data. Shared information emerging from informal discussion with 10 students who enrolled in a postgraduate study from a university in Nigeria. Data collected was thematically analyzed.

4. Results and Discussion

This section answers the first research objective of the study:

RQ1: To review and synthesize the current research and explore the extent academic integrity value principles are (were) upheld in online assessments during Covid-19 lockdown.

To address this, the authors reviewed current research studies as presented in Table 1.

Table 1: Sample selected articles for the review

Author	Title	Country/Region	Methodology	Focus/Findings
Hosseini et al., (2021)	Online assessment in a business studies department during COVID-19: Challenges and practices	Canada	Quantitative	Using a complex design to maintain academic integrity in online assessment.

Comas-Forgas et al., (2021)	Exam cheating and academic integrity breaches during the COVID-19 pandemic: An analysis of internet search activity in Spain.	Spain	Quantitative	Increased requests for information on cheating on Covid-19 online exams
Hill, et al., (2021)	Contract cheating: an increasing challenge for global academic community arising from COVID-19.	Global	Desktop	Academic integrity, plagiarism, and contract cheating
Verhoef and Coetser (2021)	Academic integrity of university students during emergency remote online assessment: An exploration of student voices	South Africa	Qualitative	Academic Dishonesty
Bjelobaba (2021)	Deterring cheating using a complex assessment design: A case study	Bosnia	Qualitative and quantitative	Use of complex assessment design to promote academic integrity
Guangul et al., 2020	Challenges of remote assessment in higher education in the context of Covid-19: a case study of Middle East College	Middle East- Oman	Quantitative	Academic dishonesty as a major challenge in remote assessment
Jenkins et al., 2022	When Opportunity Knocks: College Students' Cheating Amid the COVID-19 Pandemic	Sri Lanka	Desktop	COVID-19 pandemic increased cheating in online assessment
Gamage, et al., 2020	Online delivery and assessment during COVID-19: Safeguarding academic integrity	Sri Lanka	Desktop	Assessment security in safeguarding online assessment
Lancaster and Cotarlan (2021)	Contract cheating by STEM students through a file sharing website: a	Online Website	Desktop	Online contract Cheating

Gregory (2020)	Covid-19 pandemic perspective COVID-19 Elevating the Problem of Plagiarism: The Implied Social Contract of Academic Integrity	Global	Qualitative	Increased plagiarism in online learning
Meccawy et al., (2021)	Assessment in 'survival mode': student and faculty perceptions of online assessment practices in HE during Covid-19 pandemic	Saudi Arabia	Mixed method	Cheating and Plagiarism in online assessments
Reedy et al., (2021).	Responding to the COVID-19 emergency: student and academic staff perceptions of academic integrity in the transition to online exams at three Australian universities	Australia	Mixed method	Increased cheating in online examination

Of the 68 publications included in the SLR framework, 42 articles (61.76% of the sample) addressed integrity while 26 articles (38%) focused on quality in online assessment during Covid-19, as presented in Figure 3.

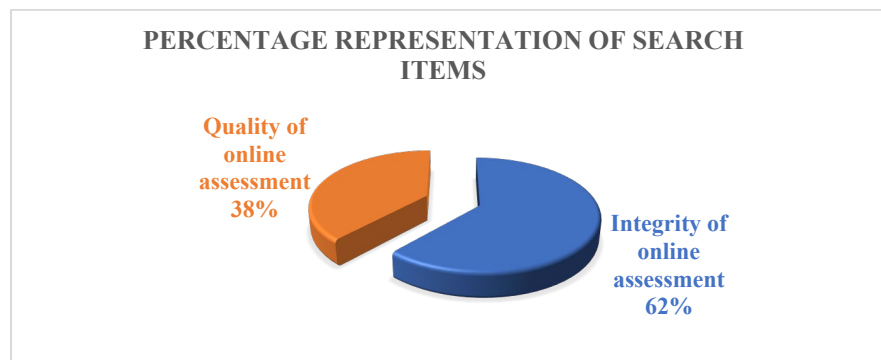


Figure 3: Pie chart depiction of the result of the search items included in the study

The authors performed a word cloud on the abstracts of the 62% of the articles' representing integrity of online assessments. The keywords of the articles were captured into Wordclouds.com software with 'repeat items' allowed to ascertain the frequency of the items in the sample, and to understand the aspects of the value principles of academic integrity that formed a global discourse in Covid-19 online assessments. The value principles of academic integrity which are, honesty, trust, fairness, respect, responsibility, and courage represent the themes under which data were coded and result presented in Figure 4.



Figure 4: Word cloud analysis of the sample

The prominent words that emerged from the word cloud analysis as shown in Figure 4 are ‘integrity’ and ‘cheating’ under the theme- ‘honesty and trust’. This suggests that the value principles of honesty and trust in online assessments during Covid-19 pandemic lockdown formed a center stage in the global discourse within the higher education community. These principles serve as framework for upholding ethical behavior in online assessments within the scholarship.

From ERM perspective, one of the authors of this article reflected on the online test conducted in winter 2021 via a learning management system adopted by the university, MS Teams. There was a total of 120 students who enrolled in the module Personnel Management III (PRNM301). The test took the form of an essay, adopted an open book structure with a restricted time window frame. With open-book structure, students were denied access to the internet but were allowed unlimited access to their notes and paper-based textbooks. The lecturer allowed a test duration with an extra 30-minute window availability (15-minutes at the start and 15-minutes at stop) to address any unforeseen technical issues. The test questions provided the students an opportunity to focus more on the application of knowledge by thinking critically, reflecting on their environment and situation at hand, and expressing their views in writing. As per the university requirement, the test script was moderated by another lecturer within the discipline to allow for fairness in terms of question structure, ensure unambiguity of questions, allow for an appropriate time, and ensure alignment with the qualification level and framework. During the marking of the scripts, the lecturer picked up 10 scripts with similarity in answers. Further interrogation with the affected students showed evidence of file sharing. Students admitted to splitting the 4 test questions into groups of 2 or 3. Each group addressing a particular question and sharing answers for the rest of the groups. This resulted in plagiarism and online contract cheating.

From an Informal Shared Conversation (ISC) point of view, one of the authors of this article attended a webinar focusing on postgraduate education in the Covid-19 pandemic. The author informally engaged the students attending the webinar seeking their views on online assessment practices. Their responses were as captured below:

RP₂: -----I noticed that during the examinations many students were together helping each other to answer the questions. I feel that marks some of the students obtained are not a true reflection of their knowledge on the module. Most of us helped each other to pass the exams.

RP₅: I did help some of my course mates to pass the exam by writing an essay part of the exam for them. I would say though that one of the negative aspects of e-learning is cheating involved in it. Such students who cheated to pass the module cannot attribute their result to hard work.

The findings show concern over academic integrity in online assessments as students attested to having been involved in various forms of academic malpractice such as plagiarism, file sharing cheating, and contract cheating. Similar studies reviewed elsewhere in the world showed similar trends (Jenkins et al., 2022; Reedy et al., 2021; Meccawy et al., 2021; Lancaster and Cotarlan 2021) – thus, raising concerns over academic integrity within the scholarship community.

RQ2: To understand the general perceptions on the quality of online assessments during Covid-19 lockdown.

Of the 68 publications included in the study, 26 (38% of the sample) indicated raised concerns on the quality of online assessments during Covid-19 lockdown. In addition, one of the authors of this article engaged students informally during a webinar which focused on ‘postgraduate education in the Covid-19 pandemic. Data emerging from the ISC showed a common consensus concerning the quality of the assessments conducted during Covid-19 pandemic. One of the participants stated thoughtfully:

RP₈: I helped some of my mates to pass by writing answers for them..... though many passed with good grades without knowledge of the module, it feels like a medical doctor with excellent results yet no knowledge to practice.

Evidence from the data also point to issues of quality in online assessments during Covid-19 pandemic lockdown, which have been emphasized by scholars (Padayachee and Matimolane 2021; Thambusamy and Singh 2021; Sharadgah and Sa’di 2020).

6. Conclusion and recommendations

This article has explored perceptions of quality issues in online assessments during Covid-19 pandemic lockdown with the aim to safeguard academic integrity and the associated credibility of graduates. Academic integrity and assessment quality are indispensable components and backbones of the higher education sector. By maintaining its key values, academic institutions are better enabled to promote and achieve learning processes that not only serve to develop personal growth and self-reliance of students, but also to develop a class of specialists in chosen fields who understand complex issues and can think analytically in pursuit of answers for challenges facing societies and nations. So, safeguarding academic integrity effectively has become necessary through time and space, as during Covid-19 pandemic lockdown when educational communities were severely challenged to address spikes in academic malpractices driven by increases in integrity loopholes. This study shows that universities were rarely prepared for transition to online teaching and learning and had little or no clear mechanism for practicing a successful online assessment aimed at maintaining academic integrity and assessment quality. The review of literature on Covid-19 pandemic online assessments revealed a dearth of information on scholars’ engagement with the discourse. The pandemic context allowed for increase in academic dishonesty, various forms of cheating and plagiarism. With the most promising technologies for detecting plagiarism and the available online assessment proctoring systems still under development, students seek opportunities to maneuver these software to engage in academic misconduct. As the ‘new normal’ in academia prevails, online assessments will play a significant role in the future of higher education, thus requiring long-term solutions. The changing view in maintaining academic integrity holds every stakeholder responsible.

The study recommends that students, lecturers, and the university management should share common culture and joint responsibility in maintaining assessment quality and academic integrity. Education and awareness within the university community is necessary to ensure integral alignment into the visions and missions of institutions. The university system needs to provide more nuanced pedagogical interventions in planning to ensure that ethical culture

and value principles of honesty and trust are imbibed in the system to uphold a valid and reliable online assessment practices. Thus, necessarily, maintaining academic integrity should be an on-going discourse within the scholarship.

An avenue for future research will look to various ways to ensure joint responsibilities of maintaining academic integrity specific to an institutional background. Future research should engage in examining possible mechanisms to support universities in planning, developing, and implementing quality online assessment practices. This study is limited to personal and shared narratives. Another limitation is the possibility of related items in the displayed word clouds (Arnaboldi, Cho & Sternberg, 2021). Therefore, the findings may not be ideal for generalization purposes.

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