Attractive : Innovative Education Journal
Vol. 8 No. 4, December 2026

Surveillance or Support? Rethinking Online Proctoring through Student Experience in Higher Education: A Pilot Study

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ARTICLE INFO
Article history:
Received
August 24, 2026
Revised
October 25, 2026
Accepted
December 13, 2026

ABSTRACT

The rapid expansion of online assessment in higher education has intensified concerns about academic integrity, fairness, and student experience. Online proctoring has emerged as a widely adopted solution, yet it remains controversial due to ethical and technological challenges. This study explores postgraduate students' perceptions of online proctoring in an open and distance learning context. Using a qualitative design, data were collected through open-ended questionnaires from three students with direct experience in proctored examinations. Thematic analysis identified three major themes: academic integrity, technological barriers, and privacy considerations. The findings show that students generally perceive online proctoring as effective in maintaining fairness and preventing cheating. However, this positive perception is moderated by significant technological challenges, including unstable internet connections and multi-device requirements, which can affect performance and equity. Interestingly, participants reported comfort with surveillance, largely due to trust in institutional data practices, although this may reflect limited awareness of privacy risks. The study highlights the dual nature of online proctoring as both a necessary tool and a source of tension. It contributes to the literature by foregrounding student perspectives in a developing-country, distance education context and underscores the need for balanced, transparent, and context-sensitive assessment practices.

Keywords: Academic Integrity, Distance Education, Higher Education, Online Proctoring, Perception

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INTRODUCTION

The rapid shift to online and remote assessment during the COVID-19 pandemic fundamentally changed higher education assessment practices and intensified debate about how validity and reliability can be maintained in digital environments (Babbar & Gupta, 2021; Gasmalla et al., 2022; Vijayan, 2021; Ye, 2022). Across disciplines, institutions were forced to replace or redesign conventional examinations with online quizzes, open-book tasks, asynchronous submissions, and other remote formats to preserve learning continuity (Babbar & Gupta, 2021; Gasmalla et al., 2022; Looi, 2023). This sudden transformation was not merely technical; it also reshaped what counted as legitimate evidence of learning, especially when assessment conditions varied widely across students' homes, devices, and internet access (Fuchs & Karrila, 2021; Gasmalla et al., 2022; Hartnett et al., 2023; Sato et al., 2023). As a result, assessment in higher education became inseparable from broader questions of equity, access, and institutional trust (Babbar & Gupta, 2021; Ye, 2022).

Within this changing landscape, online proctoring emerged as one of the most visible responses to concerns about academic integrity in remote assessment (Gribbins & Bonk, 2023;

Han et al., 2023; Langenfeld, 2020). Proctoring systems were designed to authenticate identity, monitor student behavior, and secure the testing environment through live invigilation, recorded review, or automated AI-based surveillance (Han et al., 2023; Hilliger et al., 2022; Nurpeisova et al., 2023; Patael et al., 2022). Institutions adopted these systems because they were seen as a practical way to deter impersonation, unauthorized collaboration, and other forms of cheating when face-to-face supervision was no longer possible (Gamage et al., 2020; Gribbins & Bonk, 2023; Noorbehbahani et al., 2022; Woldeab & Brothen, 2024). In this sense, online proctoring is often presented as a technological safeguard that supports the credibility of assessment outcomes in digitally mediated learning environments (Han et al., 2023; Kuleva & Miladinov, 2024; Muchemwa, 2023).

At the same time, the expansion of proctoring has raised persistent concerns about privacy, surveillance, fairness, and student well-being (Coghlan et al., 2021; Henry & Oliver, 2021; Khalil et al., 2022; Marano et al., 2024). Many systems collect audio, video, screen activity, biometric traces, and environmental data, which means that examination is no longer simply an assessment event but also a data-intensive monitoring process (Han et al., 2023; Langenfeld, 2020; Portugal et al., 2023). Such monitoring can produce anxiety, discomfort, and fear of being wrongly accused, particularly when algorithmic detection systems are not transparent or accurate enough to account for differences in lighting, disability, ethnicity, technical conditions, or home environments (Henry & Oliver, 2021; Khalil et al., 2022; Marano et al., 2024; Tweissi et al., 2022). Thus, online proctoring creates a central contradiction in contemporary assessment: it is intended to secure integrity, yet it may also generate new forms of inequity and mistrust (Coghlan et al., 2021; Hébert, 2021; Selwyn et al., 2021).

The problem becomes more pronounced in contexts where students do not have equal access to devices, bandwidth, quiet spaces, and stable technical support (Chiang et al., 2022; Hartnett et al., 2023; Ifante-Moro et al., 2022; Langenfeld, 2020). Research indicates that inequities in internet access and home learning conditions can distort student performance and compromise the fairness of remote examinations (Babbar & Gupta, 2021; Fuchs & Karrila, 2021; Gasmalla et al., 2022; Hartnett et al., 2023). In low-resource or developing-country settings, these challenges are often intensified by weaker infrastructure, uneven digital literacy, and limited institutional capacity to provide robust support (Felsinger et al., 2023; Jacobs & Mncube, 2023; Ifante-Moro et al., 2022). As a consequence, online proctoring may unintentionally reproduce the very inequities it is supposed to manage, because students with fewer resources are more likely to experience unstable connectivity, interrupted exams, and heightened stress (Fuchs & Karrila, 2021; Hartnett et al., 2023; Marano et al., 2024; Selwyn et al., 2021).

Existing studies nevertheless show that the value of online proctoring cannot be reduced to a simple binary of success or failure. Some research suggests that proctoring can reduce certain forms of cheating and contribute to institutional confidence in assessment results (Gribbins & Bonk, 2023; Woldeab & Brothen, 2024; Patael et al., 2022). Other studies report that students and academics sometimes accept online proctoring when it is embedded in clear procedures, supported by communication, and combined with thoughtful assessment design (Jiang et al., 2023; Khan et al., 2022; Lam et al., 2022). There is also growing recognition that assessment integrity should not depend only on surveillance technologies, but also on pedagogical redesign, authentic assessment, and a culture of integrity that addresses motivations for cheating rather than merely detecting it (Gamage et al., 2020; Silverman et al., 2021; Selwyn et al., 2021). This means that the literature increasingly treats proctoring as one element within a broader assessment ecosystem rather than as a standalone solution (Han et al., 2023; Hilliger et al., 2022; Kuleva & Miladinov, 2024).

However, the literature also reveals an unresolved debate about whether proctoring primarily protects fairness or primarily extends surveillance (Coghlan et al., 2021; Henry & Oliver, 2021; Khalil et al., 2022). Scholars note that students may experience proctoring as a sign of institutional distrust, especially when data practices are opaque and when monitoring is more punitive than supportive (Hébert, 2021; Johri & Hingle, 2023; Marano et al., 2024). At the same time, institutions argue that without some form of supervision, high-stakes online assessment may lose legitimacy, especially in contexts where contract cheating and collusion

are difficult to control (Noorbehbahani et al., 2022; Woldeab & Brothen, 2024). This tension suggests that the meaning of online proctoring is context-dependent: the same technology may be viewed as protective, intrusive, efficient, or unfair depending on students' resources, institutional communication, and local assessment culture (Jiang et al., 2023; Langenfeld, 2020; Marano et al., 2024). The debate therefore concerns not only the technical performance of proctoring systems, but also their ethical and pedagogical consequences (Henry & Oliver, 2021; Khalil et al., 2022; Selwyn et al., 2021).

A key gap in the literature is that many studies focus on system implementation, technical accuracy, or general acceptance, while fewer examine students' lived experiences in specific open and distance education settings (Felsinger et al., 2023; Marano et al., 2024; Ifante-Moro et al., 2022). Although recent reviews have synthesized broad trends, they also show that student voice remains underrepresented, especially in relation to privacy, emotional discomfort, and perceptions of fairness under surveillance (Blackmon & Major, 2023; Marano et al., 2024; Johri & Hingle, 2023). Even when student perspectives are included, they are often aggregated across diverse contexts, making it difficult to understand how online proctoring is experienced in institutions with distinctive missions and infrastructures, such as open universities (Jacobs & Mncube, 2023; Ifante-Moro et al., 2022). This limitation matters because context shapes not only access to technology but also how students interpret the legitimacy of monitoring practices (Hartnett et al., 2023; Selwyn et al., 2021).

The present study addresses this gap by examining postgraduate students' perceptions of online proctoring in an open and distance learning context, with attention to the interplay between academic integrity, fairness, technological barriers, and privacy concerns. Its novelty lies in centering student experience while also reading those experiences through the broader debate on assessment validity, equity, and surveillance in digital higher education (Coghlan et al., 2021; Han et al., 2023; Marano et al., 2024). By focusing on a developing-country setting and an open university context, the study offers evidence that may extend current discussions beyond high-income and mainstream campus-based institutions (Felsinger et al., 2023; Ifante-Moro et al., 2022; Selwyn et al., 2021). In doing so, it aims to contribute a more contextualized understanding of when online proctoring functions as a helpful tool for integrity and when it becomes a source of strain, mistrust, and inequity (Henry & Oliver, 2021; Khalil et al., 2022; Langenfeld, 2020).

METHOD

The research methodology section describes in detail how the study was conducted. A complete description of the methods used enables the reader to evaluate the appropriateness of the research methodology. You must describe exactly what you did: what and how experiments were run, what, how much, where, when, and why equipment and materials were used. The main consideration is to ensure that enough detail is provided to verify your findings and to enable the replication of the research.

This study adopts a qualitative research design grounded in an interpretive paradigm to explore students' perceptions of online proctoring in higher education. Qualitative inquiry is particularly appropriate for examining lived experiences, meanings, and subjective interpretations of complex socio-technical phenomena such as online assessment and surveillance (Denzin & Lincoln, 2005). In the context of online proctoring, where perceptions of fairness, privacy, and technological constraints are deeply contextual and experiential, qualitative methods enable a nuanced understanding that cannot be captured through purely quantitative approaches (Johri & Hingle, 2023; Marano et al., 2024).

The study is situated within an open and distance learning (ODL) context in Indonesia, which represents a large-scale implementation of distance education supported by digital technologies. ODL environments are particularly relevant for this investigation because they rely heavily on online assessment systems and are therefore more likely to implement online proctoring as part of their assessment strategies (Hussein et al., 2020; Jacobs & Mncube, 2023). The research design is exploratory in nature, aiming to generate in-depth insights rather than generalizable findings, and is informed by prior studies that emphasize the importance of

understanding student experience in digitally mediated assessment contexts (Blackmon & Major, 2023; Marano et al., 2024).

The study employs open-ended questionnaires as the primary data collection method. This approach allows participants to express their perspectives freely and in their own words, thereby capturing the richness and diversity of their experiences (Reja et al., 2003). Open-ended instruments are particularly useful in exploratory studies where the goal is to uncover themes, patterns, and meanings rather than test predefined hypotheses (Denzin & Lincoln, 2005). The design is therefore aligned with a naturalistic approach that prioritizes depth of understanding over breadth of coverage.

Data Sources and Participants

The participants in this study consist of three postgraduate students enrolled in a Master of English Education program at Universitas Terbuka. All participants have prior experience with online proctored examinations, making them well-positioned to provide informed perspectives on the phenomenon under investigation. The sample includes two female participants (Septi and Raka) and one male participant (Rudi), reflecting a small but diverse group in terms of gender.

A purposive sampling strategy was employed to select participants who meet specific criteria relevant to the research objectives, namely prior exposure to online proctoring systems. Purposive sampling is widely used in qualitative research to ensure that participants possess the knowledge and experience necessary to contribute meaningful insights (Denzin & Lincoln, 2005). While the sample size is limited (n = 3), it is considered adequate for exploratory qualitative research focused on depth rather than statistical representation (Marano et al., 2024).

The researcher has an existing academic relationship with the participants as a lecturer, which facilitates access and communication but also introduces potential bias. To mitigate this risk, ethical procedures such as anonymization and voluntary participation were strictly followed, and participants were encouraged to provide honest and critical responses without fear of academic consequences.

Data Collection Procedures

Data were collected through an online open-ended questionnaire distributed via Google Forms. The questionnaire was designed to elicit participants' perceptions of online proctoring across three key dimensions: (1) perceived effectiveness in ensuring academic integrity, (2) technological challenges encountered during proctored examinations, and (3) perceptions of privacy and surveillance.

The use of an online platform for data collection is consistent with the digital context of the study and allows participants to respond at their convenience, thereby reducing time pressure and enabling more reflective responses (Reja et al., 2003). Participants were provided with clear instructions and informed consent statements prior to completing the questionnaire. They were assured that their responses would be anonymized and used solely for research purposes.

Ethical considerations were central to the data collection process. Participation was voluntary, and participants had the right to withdraw at any time. Pseudonyms were used to protect participants' identities, and all data were stored securely to ensure confidentiality. These procedures align with established ethical standards for research involving human subjects (Denzin & Lincoln, 2005).

Data Analysis

The data were analyzed using thematic analysis, following the six-phase framework proposed by Braun and Clarke (2014). Thematic analysis is a flexible and widely used method for identifying, analyzing, and reporting patterns within qualitative data, making it well-suited for exploratory studies of perceptions and experiences. The analysis was conducted manually to allow for close engagement with the data and to preserve the richness of participants' expressions. Three major themes were identified: (1) academic integrity and fairness, (2) technological barriers, and (3) privacy and comfort in surveillance. These themes form the basis of the findings presented in the subsequent section.

RESULT AND DISCUSSION

Academic Integrity and Perceived Fairness

The findings indicate that all participants (n = 3) perceive online proctoring as an important mechanism for maintaining academic integrity in online assessments. Participants consistently emphasized that proctoring contributes to fairness by ensuring that students complete examinations independently and under monitored conditions. This perception aligns with prior research suggesting that proctoring can deter dishonest practices and reinforce trust in assessment outcomes (Gribbins & Bonk, 2023; Woldeab & Brothen, 2024).

Rudi explicitly noted that the presence of webcam monitoring increases accountability, stating that such monitoring ensures that "each student is responsible for their own work." This reflects a perception of proctoring as a tool for individual-level control, where fairness is associated with the ability to observe each test-taker directly. Similarly, Septi emphasized that online proctoring allows for focused monitoring of individuals, suggesting that it may even provide advantages over traditional in-person supervision in certain contexts.

However, the data also reveal nuanced differences in how fairness is conceptualized. While Septi and Rudi viewed individual monitoring as sufficient, Raka expressed a preference for traditional proctoring, arguing that face-to-face supervision allows for a more holistic observation of the testing environment. This highlights a tension between two models of fairness: one based on individualized digital surveillance and another based on contextual, human judgment.

Despite these differences, all participants (3/3, 100%) agreed that online proctoring contributes positively to academic integrity. This uniform agreement suggests a strong perceived legitimacy of proctoring as a fairness mechanism, even when concerns about other aspects are present.

Technological Barrier and Infrastructure Challenges

Technological barriers emerged as a dominant theme across all participants (3/3, 100%), indicating that infrastructure plays a critical role in shaping the effectiveness of online proctoring. Participants reported several recurring issues, including unstable internet connections, limited bandwidth, and frequent disruptions during examinations. These challenges are consistent with previous studies highlighting the impact of digital inequality on online assessment experiences (Hartnett et al., 2023; Felsinger et al., 2023).

One of the most significant challenges identified is the requirement to use multiple devices during proctored exams. Participants reported that online proctoring often requires at least two devices—typically a computer for the exam and a secondary device (such as a smartphone) for monitoring. Rudi noted that this requirement substantially increases internet bandwidth demands, making it difficult for students with limited connectivity to participate effectively.

The consequences of these technological challenges are multifaceted. First, unstable connections can lead to interruptions that disrupt concentration and increase cognitive load during examinations. Second, the risk of disconnection creates anxiety, as students may fear being penalized for technical issues beyond their control. Third, unequal access to reliable infrastructure introduces disparities in assessment conditions, raising concerns about fairness and validity.

These findings underscore the importance of considering infrastructure readiness when implementing online proctoring systems. While proctoring may enhance integrity, its effectiveness is contingent on the availability of stable and accessible technological resources.

Privacy, Surveillance and Student Comfort

Contrary to expectations from existing literature, all participants (3/3, 100%) reported feeling comfortable with online proctoring in terms of privacy and surveillance. Participants expressed trust in their institution's ability to manage and protect personal data, suggesting that perceived data security plays a key role in shaping acceptance.

Raka stated that personal data collected during proctored exams are "well protected," while Septi noted that access to such data is limited to authorized personnel. These responses indicate a high level of institutional trust, which may mitigate concerns about surveillance. This

finding diverges from studies that report heightened anxiety and resistance among students subjected to proctoring technologies (Marano et al., 2024; Khalil et al., 2022).

However, a deeper analysis reveals that this comfort may not fully reflect an informed understanding of privacy risks. Participants did not demonstrate detailed awareness of how their data are stored, processed, or potentially reused. This suggests that acceptance may be based on assumptions rather than informed consent, raising questions about the transparency of proctoring systems.

Potential risks associated with online proctoring include data breaches, unauthorized access, and the long-term storage of sensitive information such as video recordings and biometric data. These risks are well-documented in the literature and highlight the need for clear data governance policies and communication (Coghlan et al., 2021; Henry & Oliver, 2021).

Thus, while participants reported comfort with surveillance, this finding should be interpreted cautiously. It reflects a perceived sense of security rather than a comprehensive evaluation of ethical implications.

DISCUSSION

The findings of this pilot study reveal a complex relationship between academic integrity, technological accessibility, and privacy in students' experiences of online proctoring. All three participants perceived proctoring as a mechanism for supporting academic integrity, reported technological barriers during examinations, and expressed comfort with surveillance. These findings suggest that students' perceptions of online proctoring cannot be understood solely in terms of acceptance or rejection. Rather, their experiences reflect the coexistence of perceived benefits, practical difficulties, and assumptions about institutional responsibility for data protection. In this context, online proctoring may be regarded as both a means of supporting assessment integrity and a practice that requires careful consideration of equity and privacy.

Regarding academic integrity, the participants generally viewed online proctoring positively because it encourages students to complete examinations independently and provides a means of monitoring examination activities. This finding is consistent with Gribbins and Bonk (2023), who examined instructors' perceptions of online proctoring and its value in maintaining academic integrity, and Woldeab and Brothen (2024), who investigated its relationship with cheating and course legitimacy. These studies provide a useful context for understanding why participants in the present study associated monitoring with fairness and accountability. Nevertheless, an important distinction must be made between students' perceptions of proctoring and evidence of its actual effectiveness. The present study explored students' experiences and beliefs; it did not measure cheating rates or compare examination outcomes under different supervision arrangements. Consequently, the findings indicate that participants considered proctoring a legitimate means of supporting integrity, but they do not establish that it prevented cheating or improved the validity of assessment outcomes. This distinction is important because academic integrity also depends on assessment design, institutional practices, and a broader culture of honesty. As Gamage et al. (2020) and Silverman et al. (2021) suggest, safeguarding integrity should involve considering assessment approaches beyond reliance on monitoring technologies alone.

The positive perceptions of academic integrity must also be considered alongside the technological difficulties reported by all three participants. Unstable internet connections, limited bandwidth, and the requirement to use multiple devices were identified as practical challenges that could interrupt examinations and affect students' concentration. These experiences are consistent with Felsinger et al. (2023), who investigated the implementation of online examination proctoring in a low-resource setting, and Hartnett et al. (2023), who examined online proctored examinations in relation to digital inequalities. Both studies provide relevant context for understanding how technological conditions can shape the experience of proctored assessment. The present findings further illustrate the tension between procedural fairness and equitable participation: a system may apply the same monitoring requirements to all students while exposing them to different levels of technological difficulty. For example, requiring multiple devices may create additional demands on connectivity, equipment

availability, and the ability to manage simultaneous applications. However, because the present study involved only three participants, these findings should be interpreted as illustrations of possible barriers rather than evidence that such disadvantages affect all students at Universitas Terbuka.

Technological barriers are therefore not merely logistical concerns; they may also have implications for students' examination experiences and perceptions of fairness. Interruptions and the possibility of disconnection may distract students from examination tasks, while uncertainty about technical failures may create concern about whether they will be able to complete the examination successfully. This interpretation broadens the discussion of fairness beyond the prevention of cheating to include the conditions under which students demonstrate their knowledge. Hilliger et al. (2022), in their discussion of trustworthy remote assessment, provide a useful basis for considering pedagogical and technological strategies together rather than treating assessment security as a purely technical matter. In addition, the concerns raised by Felsinger et al. (2023) and Hartnett et al. (2023) reinforce the importance of considering digital access when implementing proctoring systems. For open and distance learning institutions, the implication is that the legitimacy of online assessment depends not only on the monitoring procedure but also on whether students have reasonable opportunities to participate under reliable and equitable conditions.

A particularly noteworthy finding concerns participants' reported comfort with surveillance. Unlike the concerns about student anxiety, privacy, and resistance discussed by Khalil et al. (2022) and Marano et al. (2024), all three participants in this study expressed trust in their institution's ability to protect personal data. This difference may reflect variation in institutional context, individual experience, or the ways students interpret the purpose of monitoring. Jiang et al. (2023) examined factors associated with students' acceptance of online proctoring, while Johri and Hingle (2023) explored students' technological ambivalence toward proctoring. These studies help situate the present finding within a broader understanding of student responses as potentially shaped by multiple considerations rather than by a uniform attitude toward surveillance. However, the present data do not establish why the participants felt comfortable, nor do they demonstrate that trust in the institution was the sole explanation for their responses.

Moreover, reported comfort should not automatically be interpreted as evidence of informed consent or a comprehensive understanding of privacy implications. Although participants believed that personal data were protected and access was restricted to authorized personnel, their responses did not demonstrate detailed knowledge of how data were stored, processed, retained, or potentially reused. This distinction is important because confidence in an institution and knowledge of its data governance practices are not equivalent. Coghlan et al. (2021) examined the ethical implications of online examination supervision technologies, while Henry and Oliver (2021) discussed the ethical and political arrangements associated with algorithmic proctoring. Their work highlights why privacy requires consideration beyond whether students express immediate discomfort. The present finding should therefore be interpreted as evidence of reported trust and comfort among these participants, not as proof that they were unaware of all privacy risks or that the institution's data practices were either adequate or inadequate. Further investigation would be needed to determine how students understand data collection, access, retention, and consent in the specific proctoring arrangements they experience.

Taken together, the findings contribute a context-sensitive perspective on the relationship between student acceptance, technological equity, and privacy in an Indonesian open and distance learning setting. The study's contribution lies not in demonstrating the effectiveness of online proctoring, but in showing how three dimensions of students' reported experiences can coexist: participants viewed proctoring as supporting academic integrity, encountered technological barriers, and expressed comfort with surveillance. This combination highlights the importance of distinguishing perceived legitimacy from demonstrated effectiveness, equal monitoring procedures from equitable assessment conditions, and institutional trust from informed understanding of data practices. Although the small sample does not permit broad

generalization, the findings offer preliminary insights into how these issues may be experienced in an open and distance learning context. They also suggest that student acceptance alone is insufficient as a measure of successful or responsible implementation.

Several practical and policy implications follow from this interpretation. First, institutions should provide accessible technical guidance and support before and during proctored examinations. Where possible, they should establish clear procedures for handling connectivity failures, interrupted sessions, and device-related problems so that students are not unfairly disadvantaged by circumstances beyond their control. Alternative arrangements may also be necessary when technical requirements cannot reasonably be met. These recommendations are consistent with the broader emphasis on academic integrity and responsible online assessment discussed by Gamage et al. (2020) and Silverman et al. (2021). Second, institutions should communicate their data governance practices clearly, including what information is collected, who can access it, how long it is retained, and for what purposes it may be used. Such communication should enable students to understand the implications of participating in proctored examinations rather than relying exclusively on general assurances of security. Third, institutions should consider whether proctoring is necessary for every assessment or whether alternative approaches, including authentic assessment, project-based tasks, and appropriately designed open-book examinations, can achieve the intended learning and assessment objectives. As Silverman et al. (2021) argue in their discussion of people-centred assessment alternatives, assessment design deserves attention alongside the use of monitoring technologies. These implications should be understood as recommendations informed by the present findings and relevant literature, rather than as interventions whose effectiveness was tested in this study.

The findings should also be interpreted in light of several limitations. The study involved only three postgraduate students from one programme at a single open and distance learning institution. Although the participants had direct experience with online proctoring, their responses cannot represent the full range of student experiences across programmes, institutions, or socioeconomic circumstances. In addition, the use of an open-ended questionnaire allowed participants to express their views in their own words, but it provided fewer opportunities for follow-up probing than individual interviews might have offered. The researcher's existing academic relationship with the participants may also have influenced how they expressed their opinions, despite efforts to protect confidentiality and encourage voluntary, honest responses. Finally, the study examined self-reported perceptions rather than objectively measuring cheating, examination performance, technical disruptions, or participants' knowledge of data protection. Future research could address these limitations by involving a larger and more diverse sample of students from different programmes and open and distance learning institutions. In-depth interviews or focus groups could explore why students accept or question proctoring, while mixed-methods research could examine relationships among technological access, perceived fairness, privacy awareness, and assessment experiences. Comparative studies of proctored examinations and alternative assessment approaches would also help establish the circumstances under which online proctoring offers educational value relative to its technological and ethical costs.

CONCLUSION

This study demonstrates that online proctoring occupies a complex position in contemporary higher education assessment. On one hand, it is perceived by students as a valuable mechanism for maintaining academic integrity and ensuring fairness in online examinations. On the other hand, its implementation introduces significant technological and ethical challenges that cannot be overlooked. The findings reveal that students' acceptance of online proctoring is largely pragmatic: they recognise its necessity in digital learning environments, yet remain aware of its limitations, particularly in relation to infrastructure and access.

A key contribution of this study is its emphasis on the role of technological inequality in shaping assessment experiences. The requirement for stable internet connectivity and multiple

devices highlight how online proctoring may inadvertently disadvantage certain groups of students, raising important questions about equity and inclusivity. Furthermore, the apparent comfort with surveillance observed among participants suggests that trust in institutions plays a crucial role in shaping perceptions, although this trust may not always be accompanied by a full understanding of data privacy risks.

The study calls for a more balanced and context-sensitive approach to online proctoring. Institutions should not rely solely on surveillance technologies, but should integrate them with pedagogical innovation, transparent data practices, and adequate infrastructural support. Such an approach is essential for ensuring that online assessment is not only secure, but also fair, ethical, and responsive to the diverse needs of students.

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