TRANSITIONING TO REMOTE PROCTORED EXAMINATIONS IN PROFESSIONAL ACCOUNTING EDUCATION: EXPERIENCES FROM ICAG'S PIONEERING IMPLEMENTATION IN AFRICA

ICAG AND WACAR RESEARCH REPORT, 2025

About ICAG

ICAG (Institute of Chartered Accountants, Ghana), established in 1963, is the premier national organization dedicated to advancing the accountancy profession and serving the public interest in Ghana.

With over 10,000 members and 16,000 aspiring professionals, ICAG represents a vibrant community of accounting and finance experts committed to the highest standards of integrity, professionalism, and excellence.

ICAG equips professionals across Ghana and the Sub-Region for rewarding careers in accountancy, finance, and management. Through our top-tier educational programs and professional development initiatives, we cultivate our members' financial expertise, business acumen, and digital skills, preparing them to thrive in a dynamic global environment.

Our members, employed across diverse industries, drive economic growth and social progress. ICAG firmly believes that the accountancy profession is a pillar of society, fostering the growth and prosperity of Ghana's economy, businesses, and citizens. By upholding robust financial management practices, combating fraud, promoting ethical leadership, and championing sustainable development, our members lead positive transformation.

ICAG drives accountancy innovation through rigorous research and thought leadership. Our studies address current challenges and anticipate trends, maintaining our position at the forefront of the field. This research-driven, non-profit approach allows us to focus on long-term sector needs, making ICAG a key catalyst for evidence-based progress in Ghana's financial landscape and beyond.

Find out more at: https://www.icagh.org/

About the WACAR

The West African Centre for Accountancy Research (WACAR), established in Ghana in April 2023 by the Institute of Chartered Accountants, Ghana (ICAG), stands as the premier hub for financial research in West Africa. WACAR's mission is to revolutionize public financial management, governance, and accountability across the region through rigorous, data-driven inquiry.

WACAR's multidisciplinary team employs advanced methodologies to produce authoritative, evidence-based recommendations in financial reporting, auditing, governance, and tax policy. These high-caliber insights directly inform policy decisions, enhance standards, and foster sustainable economic growth tailored to West Africa's unique socioeconomic landscape.

Guided by principles of integrity, collaboration, innovation, and measurable impact, WACAR stands at the forefront of accounting research. The Centre's commitment to academic excellence and practical application positions it as an emerging global thought leader, driving transformative change in financial governance.

WACAR's outputs are poised to make significant, quantifiable contributions to West African financial ecosystems. By addressing critical challenges, WACAR's work promises to strengthen institutional frameworks, enhance transparency, and ultimately improve economic outcomes for millions across the region.

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ACKNOWLEDGEMENT

The authors of this report would like to express our profound gratitude to the Members of the Examination Department for their support in this study.

EXECUTIVE SUMMARY

Purpose

This study evaluated candidates' experiences with ICAG's pioneering remote proctoring system for Level 1 professional accounting examinations. In March 2025, ICAG became the first professional accounting body in Africa to implement remote proctoring technology, with 279 candidates participating. The research aimed to assess the effectiveness of this digital transformation and identify areas for improvement.

Methodology

A quantitative survey design was employed with all 279 candidates invited to complete a structured post-examination questionnaire. The instrument gathered data across six dimensions: mock examination preparation, technical infrastructure, platform usability, proctoring effectiveness, support systems, and overall perceptions. Data was analyzed using descriptive statistics through SPSS software, achieving a 46.2% response rate (129 respondents).

Key Findings

Demographics: Candidates were predominantly young adults (87.6% under 35), with varied online examination experience. Most (65.9%) took examinations from home.

Technical Performance: While 62.8% reported good connectivity, 37.2% experienced suboptimal connections. Technical difficulties affected over half of the candidates, particularly login issues (26.6%) and network disruptions (21.4%).

Platform Interface: Generally positive evaluations with timer functionality (81.4% positive) and interface clarity (73.6% positive) performing well. However, calculator functionality was severely problematic (47.3% of negative ratings)—a critical issue for accounting examinations.

Proctoring Experience: Higher comfort with screen recording (62.0%) versus webcam monitoring (58.9%). Most candidates (81.4%) received warnings, primarily for issues related to camera positioning and face detection.

Support Systems: Examination instructions were clear (96.9% positive), but technical support was inconsistent. Only 42.7% received prompt assistance for technical issues.

Overall Assessment: Despite challenges, 65.1% preferred online format over traditional examinations, and 81.4% wanted continued online examinations with improvements.

Recommendations

Immediate Priorities:

- **Calculator Overhaul:** Implement advanced scientific/financial calculator with percentage functions
- **Technical Stability:** Enhance server capacity, optimize bandwidth requirements, implement pre-examination compatibility checks
- **Proctoring Refinement:** Reduce false warnings while maintaining integrity

Infrastructure Enhancement:

- Establish dedicated technical support channels during examinations
- Develop contingency protocols for technical failures
- Consider designated examination centers for equity

User Experience:

- Integrate digital workspace for calculations and rough work
- Implement clear submission confirmations
- Establish live chat with invigilators

Support Improvements:

- Enhance mock examination technical support
- Provide comprehensive pre-examination guidance
- Create ongoing feedback mechanisms

These recommendations address critical pain points while building on the positive reception. Implementation would enhance technical performance, improve user experience, and ensure equitable access across diverse technological contexts in Ghana and Africa.

STATEMENT FROM OUR PRESIDENT

Dear Esteemed Members and Stakeholders,

On behalf of the Council of the Institute of Chartered Accountants Ghana (ICAG), I am pleased to introduce this significant report, which documents our Institute's transition to remote proctored examinations for our professional qualification program.

This milestone achievement marks ICAG's commitment to innovation and excellence in professional accounting education across Africa. As the first professional accounting body on the continent to implement remote proctoring for professional examinations, we recognize both the responsibility and opportunity this pioneering position represents.

The comprehensive analysis presented in this report reflects our dedication to evidence-based improvement and transparency in our educational processes. The feedback from our candidates has provided valuable insights that will shape the future development of our digital assessment systems.

I am particularly encouraged by the strong preference expressed by our candidates for continued online examinations, albeit with enhancements. This affirms our strategic direction while acknowledging the work that remains to be done. The Council is committed to addressing the technical challenges identified and investing in the necessary infrastructure to ensure a robust, reliable, and equitable examination experience for all candidates.

This successful implementation would not have been possible without the support of our partners, including the Institute of Chartered Accountants in England and Wales (ICAEW), the Pan African Federation of Accountants (PAFA), and their funding partners. Their contribution to our digitalization journey has been invaluable.

As we continue to refine our remote proctoring system, we remain focused on our core mission: developing highly qualified accounting professionals who meet international standards while addressing Ghana's specific needs. This digital transformation represents not just an advancement in examination methodology but a step toward greater accessibility and relevance in professional accounting education.

Sincerely,

Augustine Addo, FCA

President, ICAG

STATEMENT FROM OUR CHIEF EXECUTIVE OFFICER

Dear Stakeholders

As the Chief Executive Officer of the Institute of Chartered Accountants Ghana (ICAG), I am pleased to present this comprehensive report on our pioneering implementation of remote proctored examinations for Level 1 professional accounting candidates.

In March 2025, ICAG took a bold step forward in the digitalization of professional accounting education in Africa by successfully conducting our first remote proctored examinations. This initiative represents not merely a change in assessment delivery but a fundamental transformation in how we prepare the next generation of accounting professionals in Ghana.

This report details the experiences and perceptions of the 279 candidates who participated in this groundbreaking examination, with particular focus on the 129 candidates who provided feedback through our comprehensive survey. Their insights have been invaluable in helping us understand both the successes and challenges of this digital transition.

While we celebrate the overall positive reception of the remote proctoring system, we also acknowledge the areas requiring improvement. The technical challenges, particularly regarding calculator functionality and platform stability, have been clearly identified and will be prioritized in our enhancement efforts. We are committed to refining this system to ensure it serves all candidates equitably and effectively.

The findings presented in this report will guide our continuous improvement process as we work to establish ICAG as a leader in digital professional accounting education. We remain committed to upholding the highest standards of assessment integrity while embracing innovations that enhance accessibility and modernize the qualification process.

I extend my sincere gratitude to our candidates, technical team, and all stakeholders who contributed to the successful implementation of this initiative and the production of this insightful report.

Respectfully,

P. Kwasi Agyemang, FCA

Chief Executive Officer, ICAG

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ABBREVIATIONS AND ACRONYMS

ICAG	Institute of Chartered Accountants, Ghana
ICAEW	Institute of Chartered Accountants in England and Wales
PAFA	Pan African Federation of Accountants
SPSS	Statistical Package for Social Sciences

1.0 Introduction

1.1 Background of the Study

The Institute of Chartered Accountants, Ghana (ICAG) has recently achieved a significant milestone by implementing remote proctoring for its Level 1 professional accounting examination. In March 2025, 279 candidates participated in this pioneering initiative, making ICAG the first professional accounting body in Africa to utilize remote proctoring technology for professional accounting examinations. This innovation emerged from a comprehensive digitalization project initiated in September 2023 through partnerships with the Institute of Chartered Accountants in England and Wales (ICAEW) and the Pan African Federation of Accountants (PAFA).

The transition aimed to modernize the qualification process by enhancing accessibility, efficiency, and alignment with global standards in accounting education assessment. A key driver for adopting remote proctoring technology has been the growing concern over examination integrity in the digital age. The advent of sophisticated artificial intelligence tools and their potential misuse for academic dishonesty has created new challenges for examination bodies globally.[1] As AI-powered applications become increasingly accessible, they present unprecedented opportunities for examination malpractice, necessitating more robust monitoring solutions. With its capabilities for continuous monitoring, identity verification, and behavioural analysis, remote proctoring technology offers a promising countermeasure to these emerging threats to examination integrity.[2]

While digital assessment technologies offer numerous potential benefits, their implementation represents a substantial change for candidates accustomed to traditional examination formats. Remote proctoring technologies can expand educational access while addressing examination security concerns, but they also introduce new challenges for users. [3] Understanding candidate reactions to these technologies is essential for successful implementation and continuous improvement. The African context presents unique considerations for implementing remote proctoring technology, given the varying levels of technological infrastructure and digital literacy. [4] The institute acknowledges that some candidates may have experienced challenges, including connectivity issues, during the inaugural examination period. These practical realities highlight the importance of thoroughly evaluating candidates' experiences to ensure the system meets the needs of all stakeholders while maintaining examination integrity. This study, therefore, seeks to systematically investigate candidates' perceptions and experiences regarding the newly implemented remote proctoring system for ICAG's professional accounting examinations.

1.2 Research Objectives

The study aims to achieve the following objectives:

1. To evaluate the effectiveness of pre-examination preparation resources, particularly mock examinations, in preparing candidates for the remote proctored accounting examination

2. To assess the adequacy of technical infrastructure and platform usability for candidates participating in remote proctored examinations
3. To identify and analyze the technical, psychological, and procedural challenges candidates encountered during the remote proctored examination
4. To analyze candidates' experiences with remote proctoring monitoring features and their psychological comfort levels during the examination process
5. To evaluate the quality and responsiveness of technical support provided throughout the examination experience
6. To compare candidates' overall perceptions of remote proctored examinations versus traditional paper-based methodologies, identifying specific aspects requiring enhancement

1.3 Significance of the Study

This study is of significant importance to multiple stakeholders in professional accounting education and assessment. First, for ICAG, this research provides critical feedback on their pioneering implementation of remote proctoring technology, enabling evidence-based refinements to improve future examination cycles. The findings will inform strategic decisions regarding technology investments, support systems, and candidate preparation resources. From a broader perspective, this study contributes valuable insights to the growing body of knowledge on remote proctoring implementation within professional certification contexts, particularly in developing economies where such technologies are still emerging. As the first comprehensive evaluation of remote proctored professional accounting examinations in Africa, this research addresses a significant gap in the literature on digital assessment technologies in non-Western contexts.

For other professional accounting bodies in Africa and similar regions considering digital transformation of their assessment processes, this study offers practical lessons and empirical evidence to guide implementation strategies. By identifying both the challenges and opportunities presented by remote proctoring technology in the Ghanaian context, the research provides a valuable reference point for adapting such systems to environments with varying technological infrastructure. Additionally, this research has pedagogical significance by exploring how the transition to remote proctoring affects candidates' examination preparation approaches and experiences. Understanding these dynamics can inform the development of more effective preparation resources and support systems tailored to the unique demands of remote proctoring environments.

Finally, from a technological development perspective, this study provides insights into user experience with remote proctoring platforms in contexts that may differ significantly from those in which the technology was originally developed. Such understanding is essential for ensuring that these technologies evolve to meet the needs of diverse global users rather than exacerbating digital divides.


*Methodology
Start
Step 1
Step 2
Step 3
?
End

2.0 Methodology

2.1 Research Design

The study adopted a quantitative research approach using a descriptive survey design. This approach was selected to systematically collect numerical data about candidates' experiences with the remote proctoring system, allowing for statistical analysis and identification of measurable patterns and trends.

2.2 Population and Sample

The target population comprised all 279 candidates who participated in ICAG's Level 1 professional accounting examination using remote proctoring in March 2025. All participants were invited to complete the post-examination questionnaire, with no sampling applied. This census approach was adopted to ensure comprehensive representation of all candidates' experiences.

2.3 Data Collection Instrument

Data was collected through a structured questionnaire administered to candidates following their participation in the remote proctored examination. The instrument focused on gathering quantifiable data across several key dimensions: mock examination preparation experiences, technical infrastructure adequacy, platform interface usability, and remote proctoring tool effectiveness. The questionnaire primarily employed closed-ended questions using Likert scales and multiple-choice options to facilitate statistical analysis and comparison of responses.

2.4 Data Collection Procedure

The questionnaire was administered electronically to all candidates immediately following the completion of their examination cycle. Participants were informed about the purpose of the study and assured of confidentiality. The questionnaire was designed to be completed within 15-20 minutes to encourage participation while collecting comprehensive feedback

2.5 Data Analysis Methods

The quantitative data was analyzed using descriptive statistics, including frequencies, percentages, means, and standard deviations, to identify patterns and trends in candidates' responses. The analysis was structured according to the research objectives, with findings presented through charts and narrative descriptions. Statistical Package for Social Sciences (SPSS) software was utilized for data analysis. Ethical considerations including informed consent, confidentiality, and anonymity of respondents were observed throughout the research process.

3.0 Results

3.1 Response Rate

Out of the 279 candidates who participated in ICAG's Level 1 professional accounting examination using remote proctoring, 129 completed and submitted the questionnaire. This represents a response rate of 46.2%, providing a substantial and representative sample for analyzing candidates' experiences with the remote proctored examination system.

3.2 Analysis of Demographic Information

3.2.1 Age Distribution

The age distribution of respondents, as shown in Figure 1, reveals that the candidate population is predominantly young, with more than half (54.3%) falling within the 18-24 years age bracket. Another third (33.3%) are between 25-34 years old, meaning that the vast majority (87.6%) of candidates are under 35 years of age. Only a small portion of candidates are in the older age categories, with 9.3% between 35-44 years and just 3.1% aged 45 and above. This age profile is consistent with typical professional accounting student demographics, where most candidates pursue their qualifications in early adulthood or as young professionals.

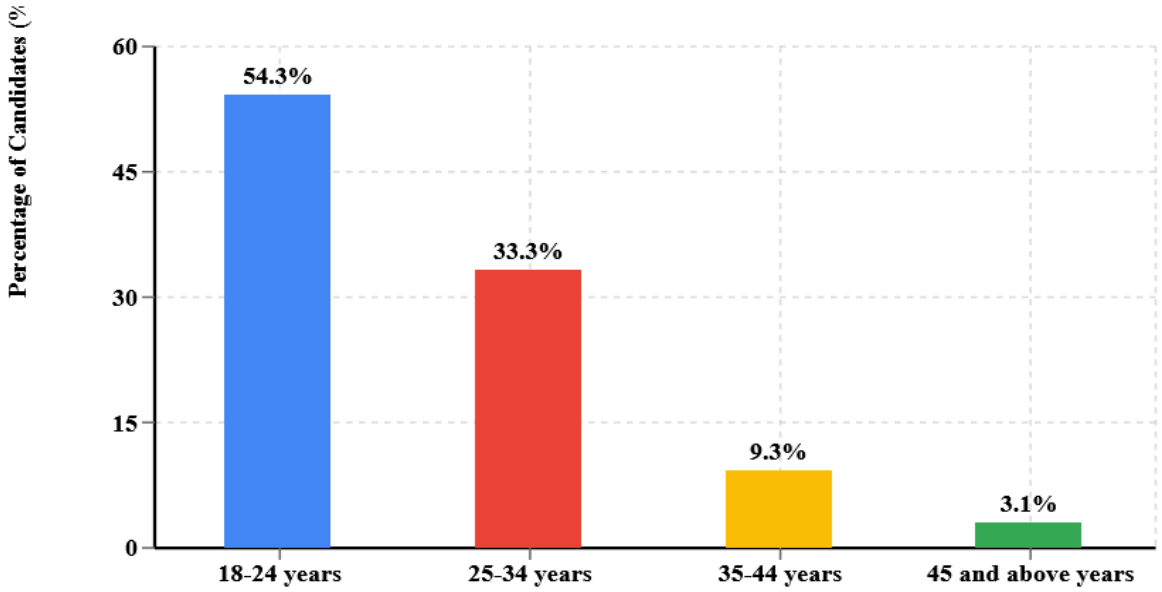

Figure 1: Age Distribution of ICAG Candidates

3.2.2 Prior Experience with Online Examinations

The data on prior experience with online examinations shows a bimodal distribution. The largest group (40.3%) has substantial experience, having taken online examinations more than 5 times previously. Conversely, the second-largest group (29.5%) had no prior experience with online examinations. The remaining candidates had moderate experience: 17.8% had taken online examinations 1-2 times, and 12.4% had taken them 3-5 times. This distribution suggests that while many candidates were already

familiar with online examination formats, a significant portion was encountering this mode of assessment for the first time, which may have implications for their comfort level and performance.

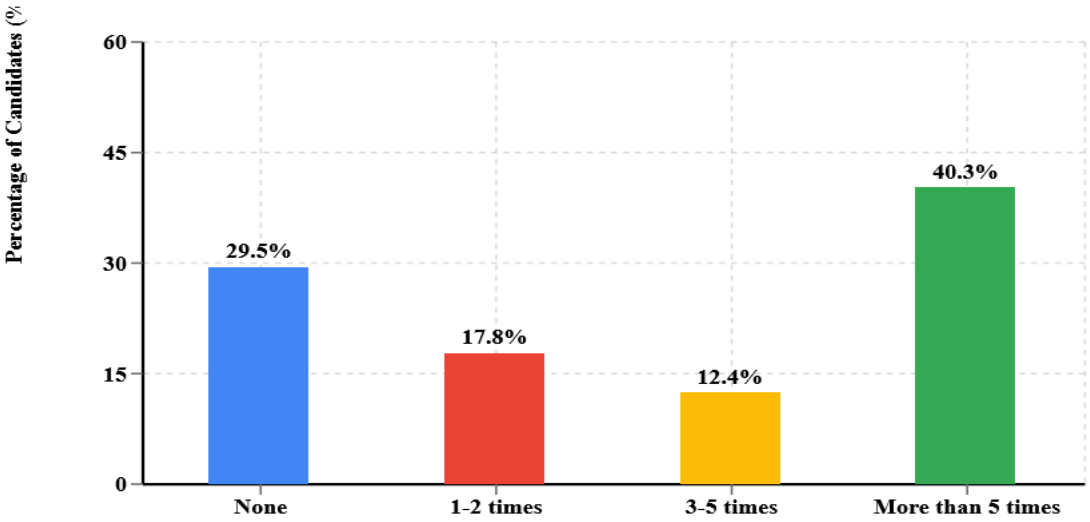

Figure 2: Prior Experience with Online Examinations

3.2.3 Examination Location

Figure 3 reveals that the majority of candidates (65.9%) took the examination from their homes, which aligns with the primary benefit of remote proctoring – the ability to take examinations from convenient locations. Educational institutions were the second most common location, with 15.5% of candidates taking the examination from school settings. Workplaces accounted for 11.6% of examination locations, while smaller percentages of candidates took the examination from hostels (3.1%), church halls (2.3%), and internet cafés (1.6%). The predominance of home as the examination location suggests that most candidates had access to suitable private spaces. However, the variety of locations indicates that candidates utilized different environments based on their circumstances and available resources.

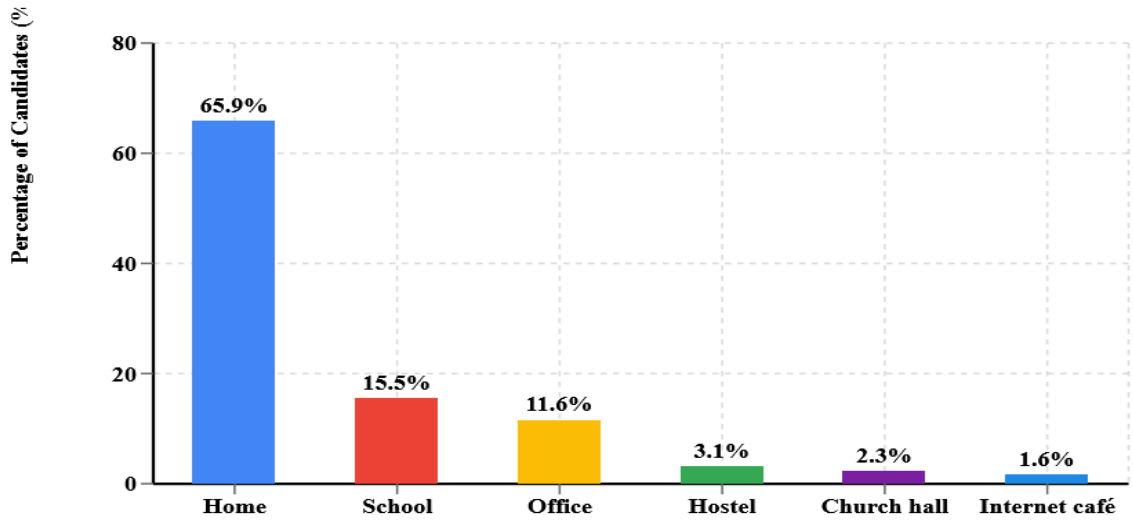

Figure 3: Examination Location Distribution

3.2.4 Analysis of Mock Examination Participation, Perceived Helpfulness, and Experience

The data provides valuable insights into specific aspects of the mock examination experience through a 5-point scale assessment: Format accuracy received positive evaluation with a mean score of 3.45, indicating that most candidates felt the mock examination effectively replicated the format they would encounter in the actual assessment. Similarly, understanding the navigation system scored highest among all aspects (mean = 3.56), suggesting the mock examination was particularly effective in familiarizing candidates with the platform's interface and navigation features. The mock examination showed moderate effectiveness in reducing candidate anxiety about the online format (mean = 3.29), though there appears to be room for improvement in this area. The timing allocation received a slightly lower assessment (mean = 3.09), indicating some candidates may have had concerns about the time provided for completing the mock examination. Most notably, technical support during the mock examination received the lowest rating (mean = 2.60), suggesting this was a significant area of weakness. This relatively low score highlights the need for enhanced technical support resources during the preparation phase.

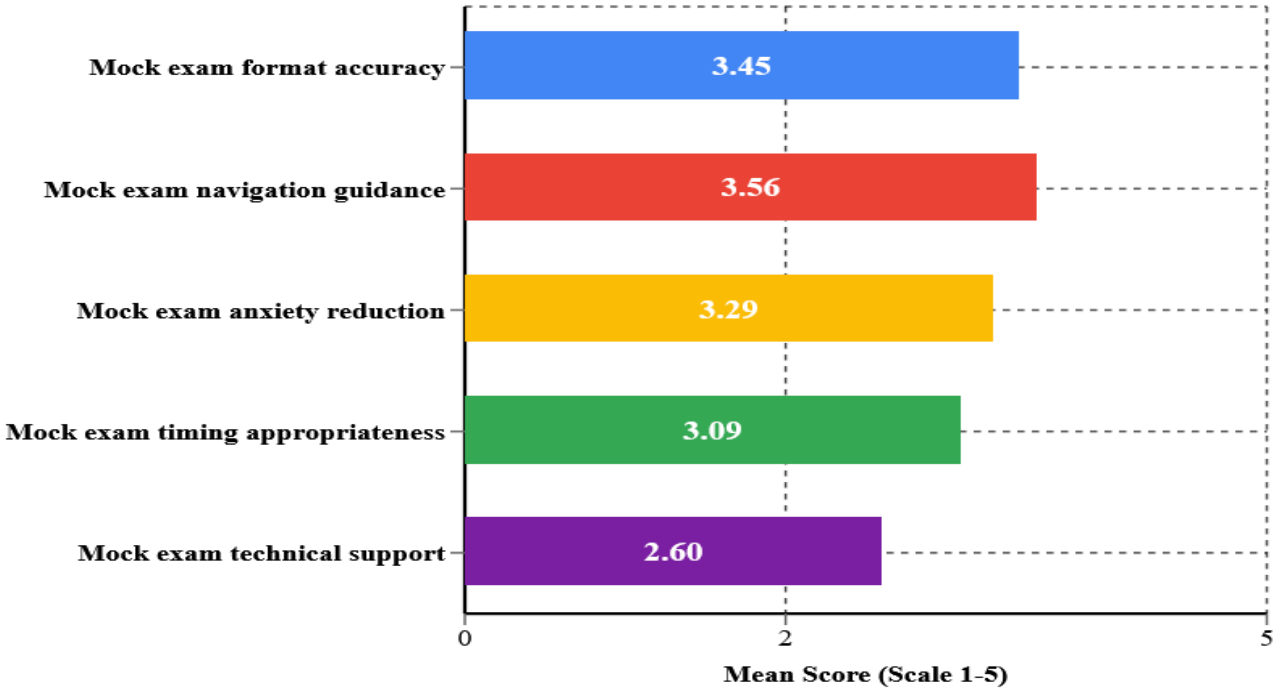

Figure 4: Mean Scores of Mock Examination Aspects

3.3 Analysis of Technical Infrastructure Findings

The technical infrastructure for the remote proctored examination revealed several important patterns across various dimensions.

3.3.1 Internet connectivity

Internet connectivity emerged as a critical factor in the examination experience. Regarding internet connectivity, a combined 62.8% of candidates reported "Good" (42.6%) or "Excellent" (20.2%) connections during their examination. However, more than a third of candidates (37.2%) experienced suboptimal connectivity, with equal portions reporting "Fair" (18.6%) or "Poor" (18.6%) connections. This substantial percentage with connectivity challenges highlights a significant potential barrier to equitable examination experiences.

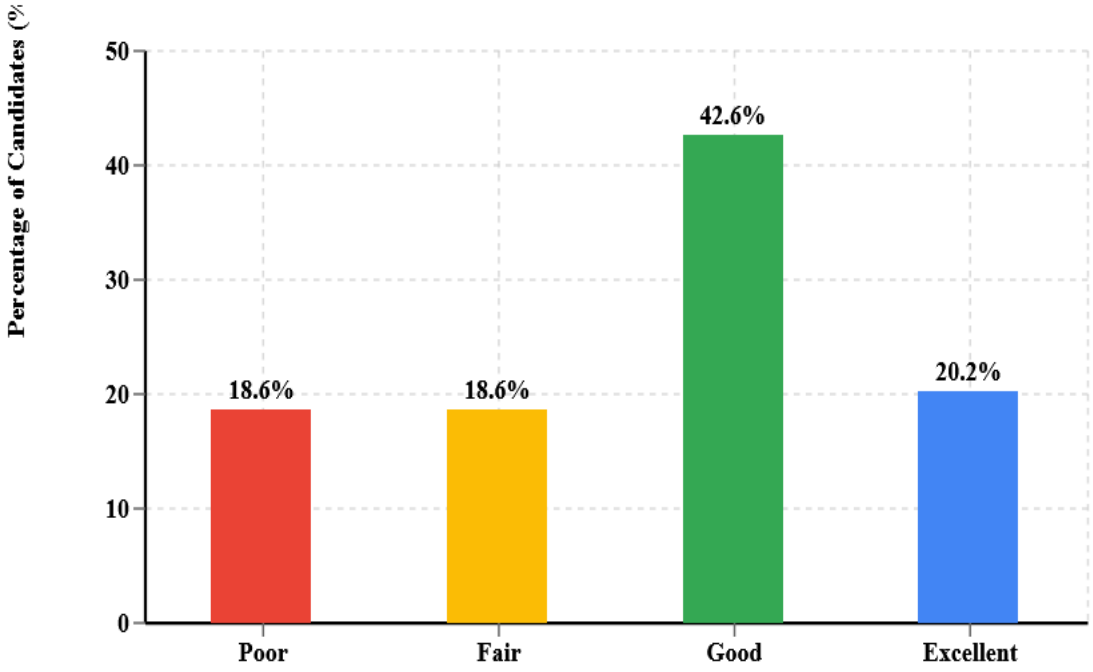

Figure 5: Internet Connectivity during Examination

3.3.2 Device availability and type

This also played an important role in how candidates accessed the examination. The device usage data shows strong access to appropriate computing hardware, with three-quarters (76.0%) of candidates using their personal laptops. However, the reliance on borrowed devices by nearly one-fifth of candidates (19.4%) suggests limited personal technology access for a notable subset. The minimal use of desktop computers (0.8%), mobile phones (0.8%), and work laptops (3.1%) indicates a clear preference for personal portable devices when available.

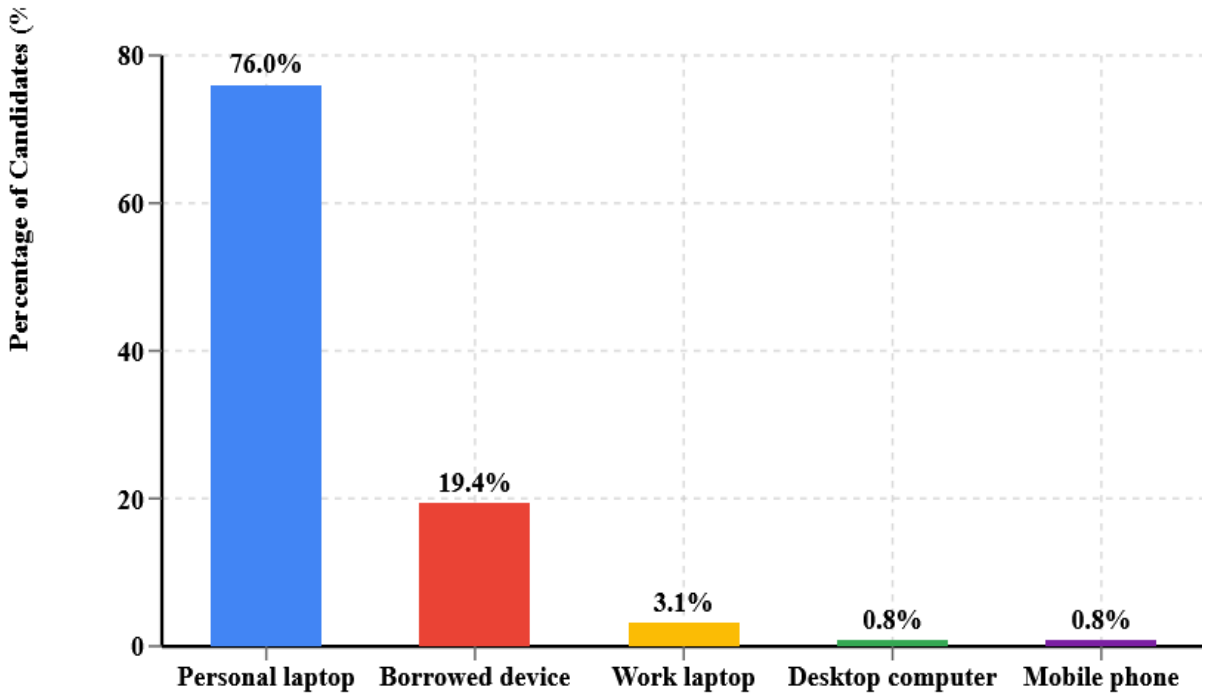

Figure 6: Device Used for Examination

3.3.3 Technical difficulties

Technical difficulties during the examination presented challenges for many participants. Hardware issues were prevalent, with only 48.2% of respondents reporting no technical problems during the examination. The most common challenges were login difficulties (26.6%), unexpected network disruptions (21.4%), and system crashes (8.0%), while webcam (6.3%) and microphone problems (2.7%) were less common but still present. These technical disruptions potentially affected candidates' ability to complete the examination under optimal conditions.

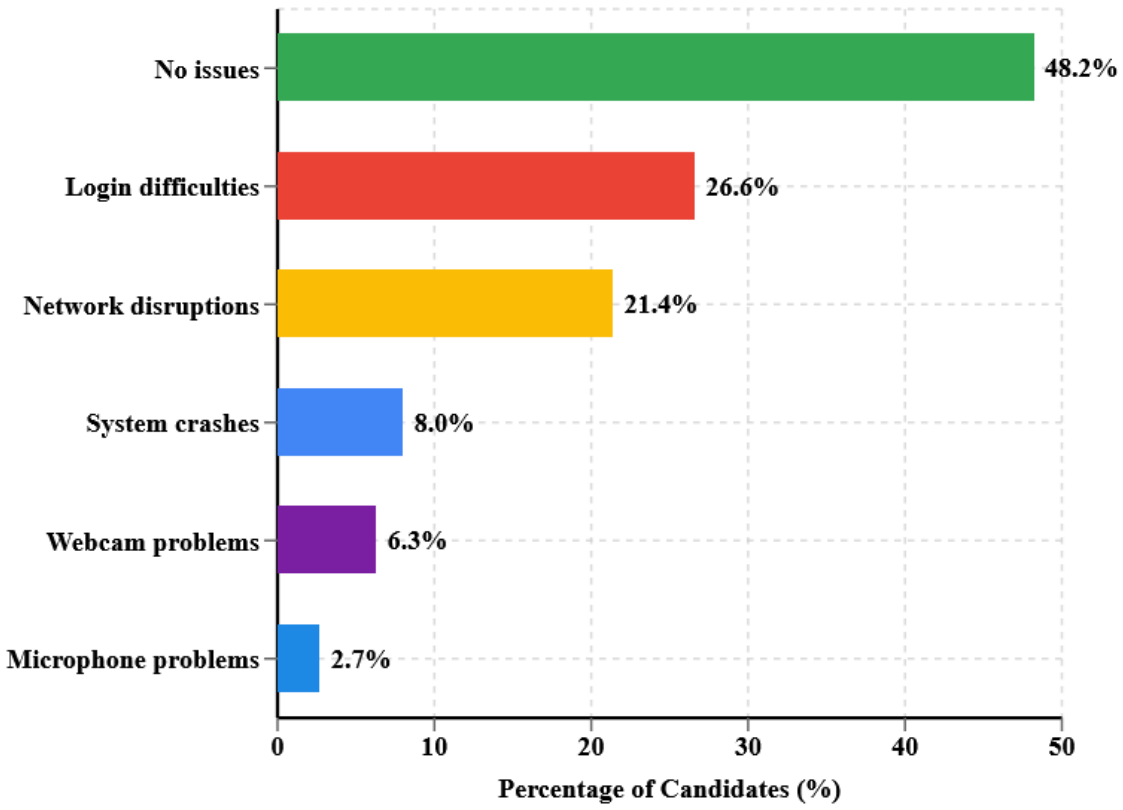

Figure 7: Hardware Issues during Examination

3.3.4 Setup duration

Setup duration varied considerably among candidates, potentially affecting their examination preparation. System setup time was relatively efficient for most candidates, with 76.8% completing their setup in 30 minutes or less (47.3% in under 15 minutes, 29.5% in 15-30 minutes). However, nearly a quarter required more time, with 14.7% needing 30-60 minutes and 8.5% taking over an hour. These extended setup periods could potentially create additional stress and reduce available examination time, underscoring the importance of streamlining the technical onboarding process. Thus while the majority of candidates had adequate technical resources and experiences, the significant minority who faced challenges highlights the need for continued improvement in the remote proctoring infrastructure to ensure equitable examination conditions for all candidates.

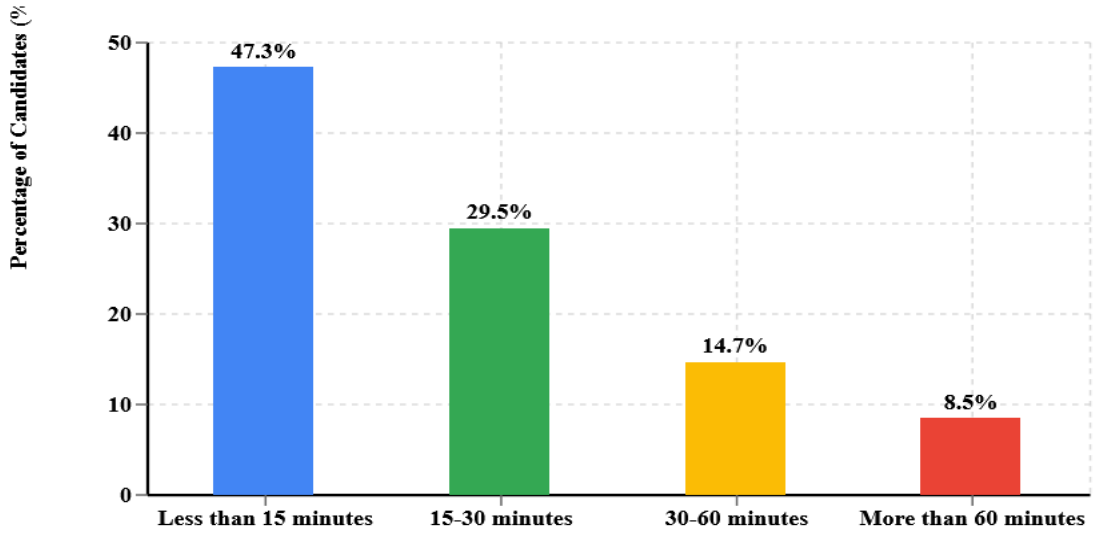

Figure 8: Time to Complete System Check and Setup

3.4 Analysis of Examination Platform User Experience

The data reveal varying levels of satisfaction with different aspects of the examination platform interface, highlighting both strengths and areas that require improvement.

3.4.1 Interface Clarity

Interface clarity emerged as a strong point in the examination platform. The clarity of the examination interface received predominantly positive evaluations, with 73.6% of candidates rating it as either "Good" (55.0%) or "Very good" (18.6%). Nearly a quarter of respondents (24.0%) found the interface clarity to be "Average," while only a minimal percentage (2.4%) rated it negatively. This suggests that most candidates could effectively understand and interpret the examination interface.

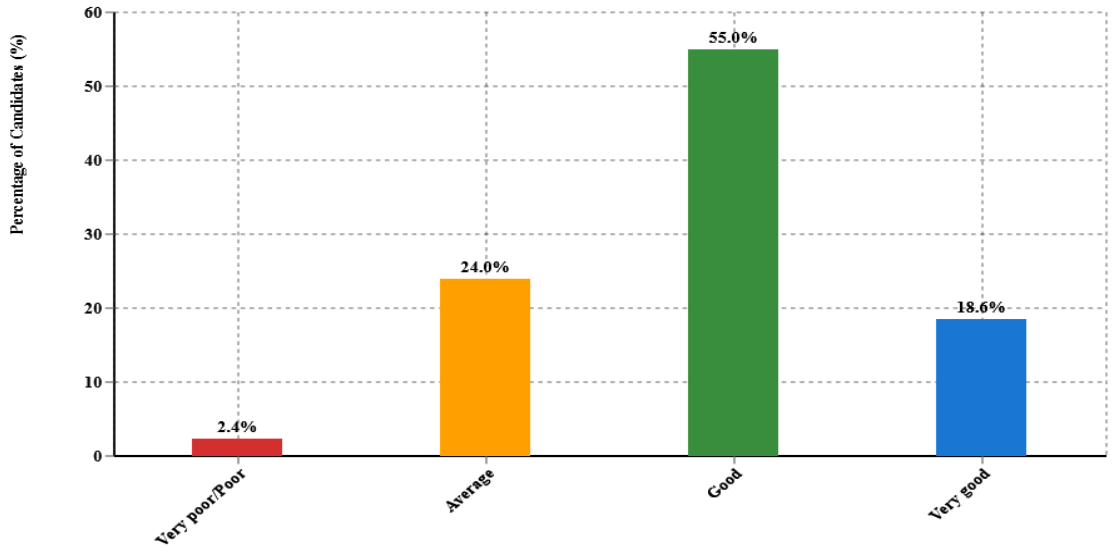

Figure 9: Interface Clarity Ratings

3.4.2 Navigation Functionality

Navigation functionality was similarly well-received by candidates. Navigation between questions earned positive ratings from 67.5% of respondents, with 41.1% rating it as "Good" and 26.4% as "Very good." While 27.1% considered the navigation to be "Average," only 5.4% gave negative ratings. This indicates that the majority of candidates could move between questions without significant difficulties, though there remains room for improvement.

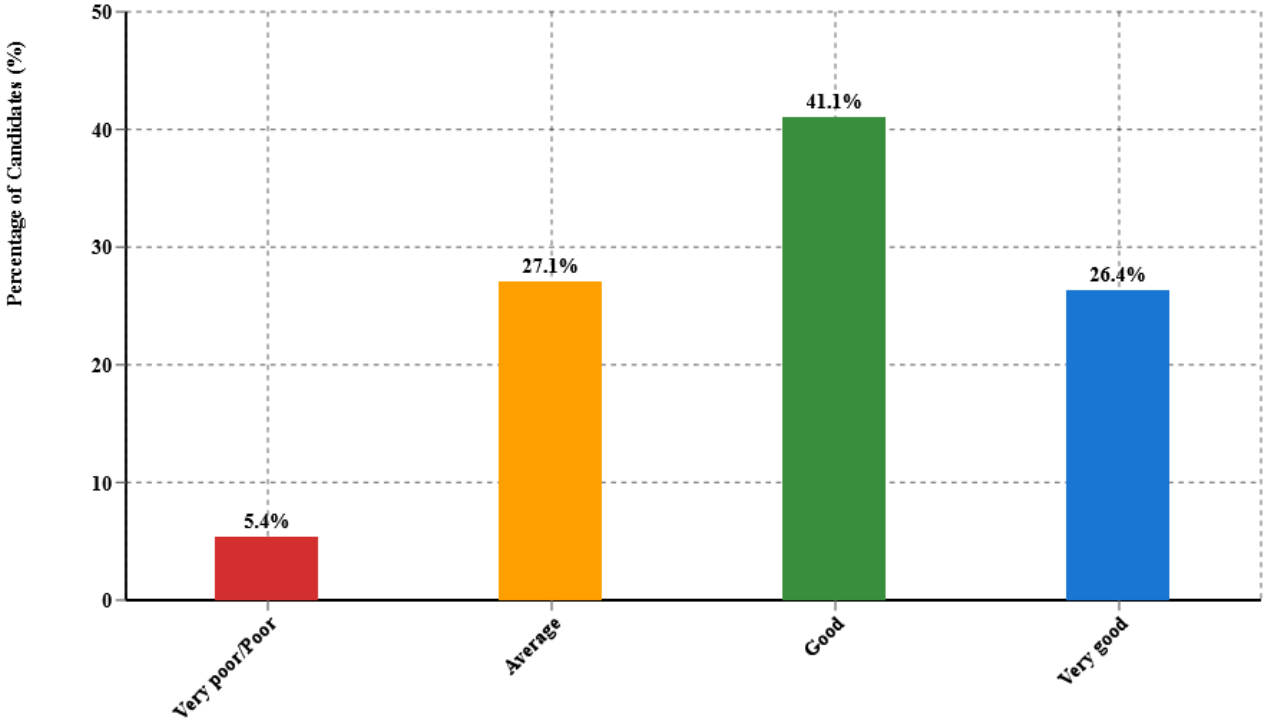

Figure 10: Functionality Ratings

3.4.3 Timer Functionality

Timer functionality received the most favorable assessments among all interface elements. Timer visibility and management were rated positively by a strong majority (81.4%) of candidates, with 39.5% rating it "Good" and 41.9% rating it "Very good." Only 14.7% considered it "Average," and a mere 3.9% rated it negatively. This suggests that the time management features of the platform were particularly effective, helping candidates track their progress during the examination.

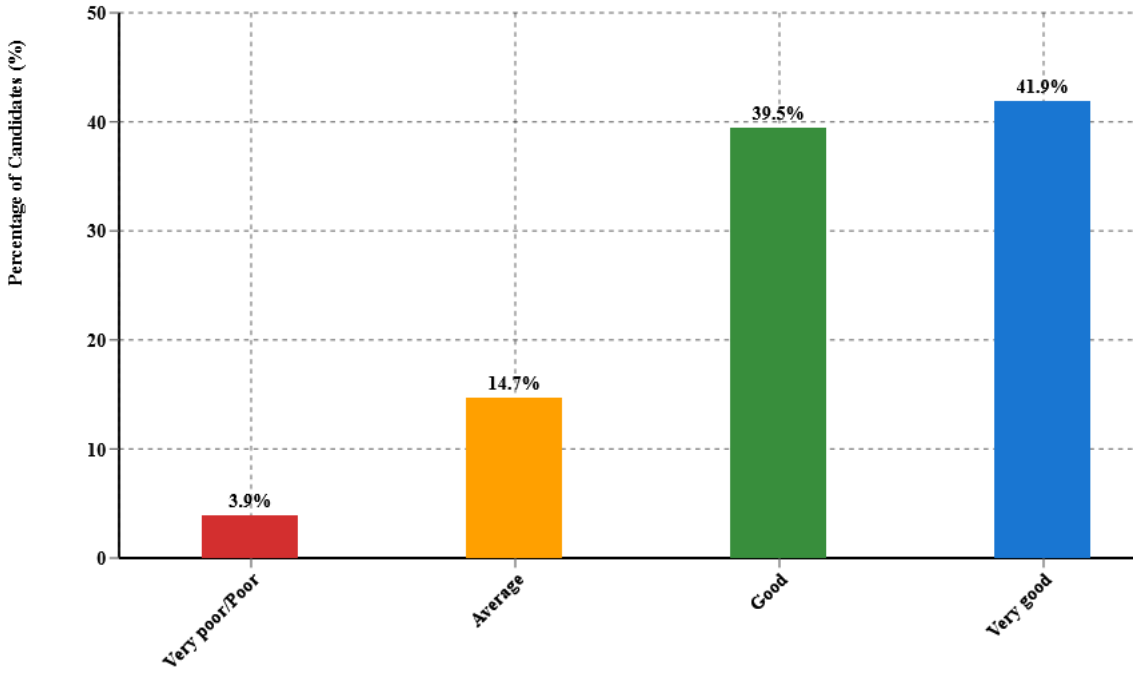

Figure 11: Timer Functionality Ratings

3.4.4 Response Submission

Response submission was generally well-regarded but showed more mixed results. The response submission process was rated positively by 59.7% of candidates (39.5% "Good" and 20.2% "Very good"), while 30.2% found it "Average." However, 10.1% of candidates rated it negatively, indicating that some experienced difficulties with submitting their answers. This represents an area where refinements could enhance the user experience.

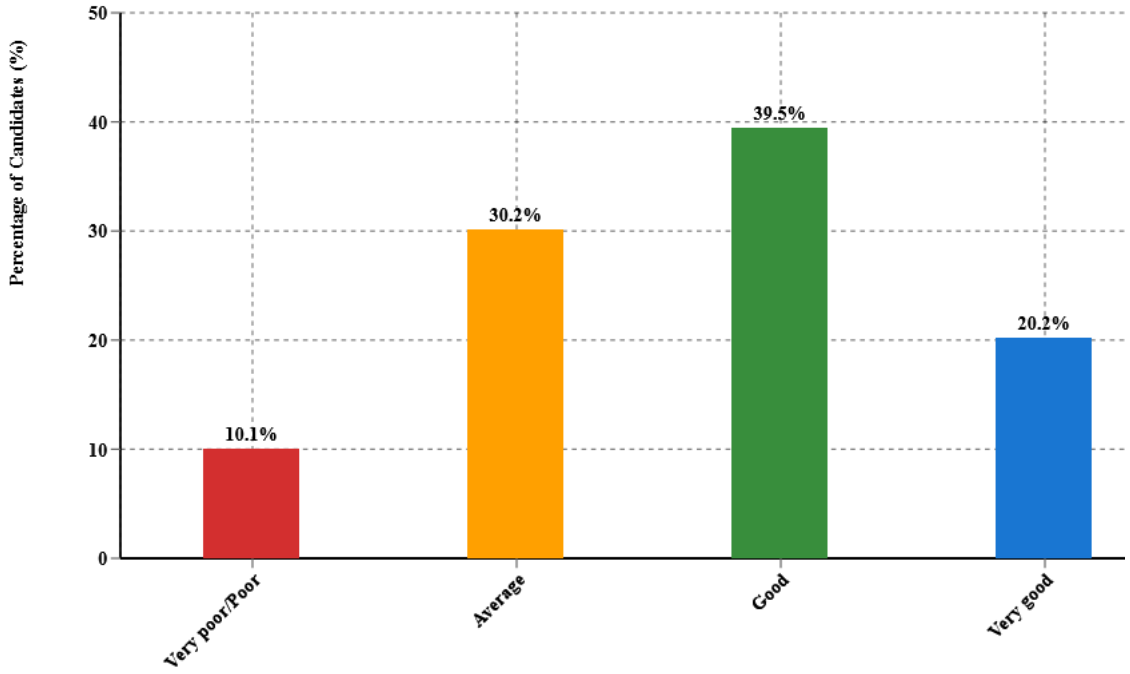

Figure 12: Response Submission

3.4.5 Calculator Functionality

Calculator functionality stood out as the most problematic aspect of the examination platform. In stark contrast to the other interface elements, the calculator functionality received predominantly negative assessments, with 47.3% of candidates rating it negatively (25.6% "Very poor" and 21.7% "Poor"). While 36.4% found it "Average," only 16.3% gave positive ratings. This represents a significant deficiency in the platform that likely impacted candidates' ability to perform calculations efficiently, particularly problematic for an accounting examination.

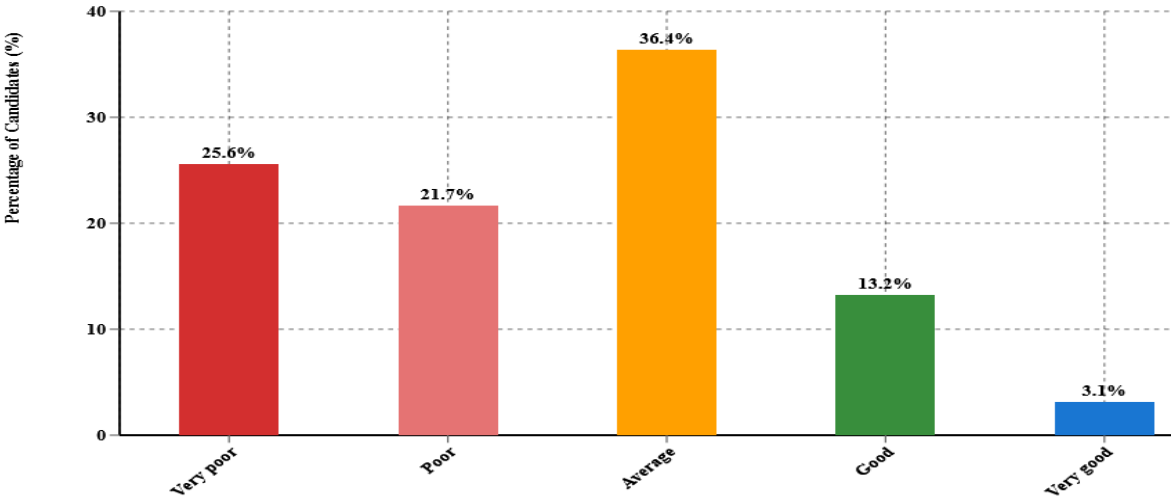

Figure 13: Calculator Functionality

While most aspects of the examination platform interface performed adequately, with timer visibility being particularly strong, the calculator functionality represents a critical area requiring substantial improvement. Addressing this deficiency should be prioritized in future iterations of the remote proctoring system to enhance candidates' examination experience and ensure that the technical tools support rather than hinder their performance.

3.5 Features of the Examination Platform Found Most Helpful

Results indicate a clear hierarchy of preferred functionality with varying patterns between those who selected single features and those who preferred combinations of tools.

3.5.1 Single Feature Selections

Time management tools were selected by 19.0% of respondents as the most valuable single feature. Progress tracker functionality was preferred by 11.2% of users when choosing one feature only. Question bookmarking was identified by 10.3% of participants as their single most helpful feature. Notably, 8.6% of respondents specifically appreciated that there was no formula sheet access. Around 5.2% of users found none of the features helpful, while just 1.7% valued formula sheet access as a standalone feature. A small fraction (0.9%) provided an unspecified response marked only as "S".

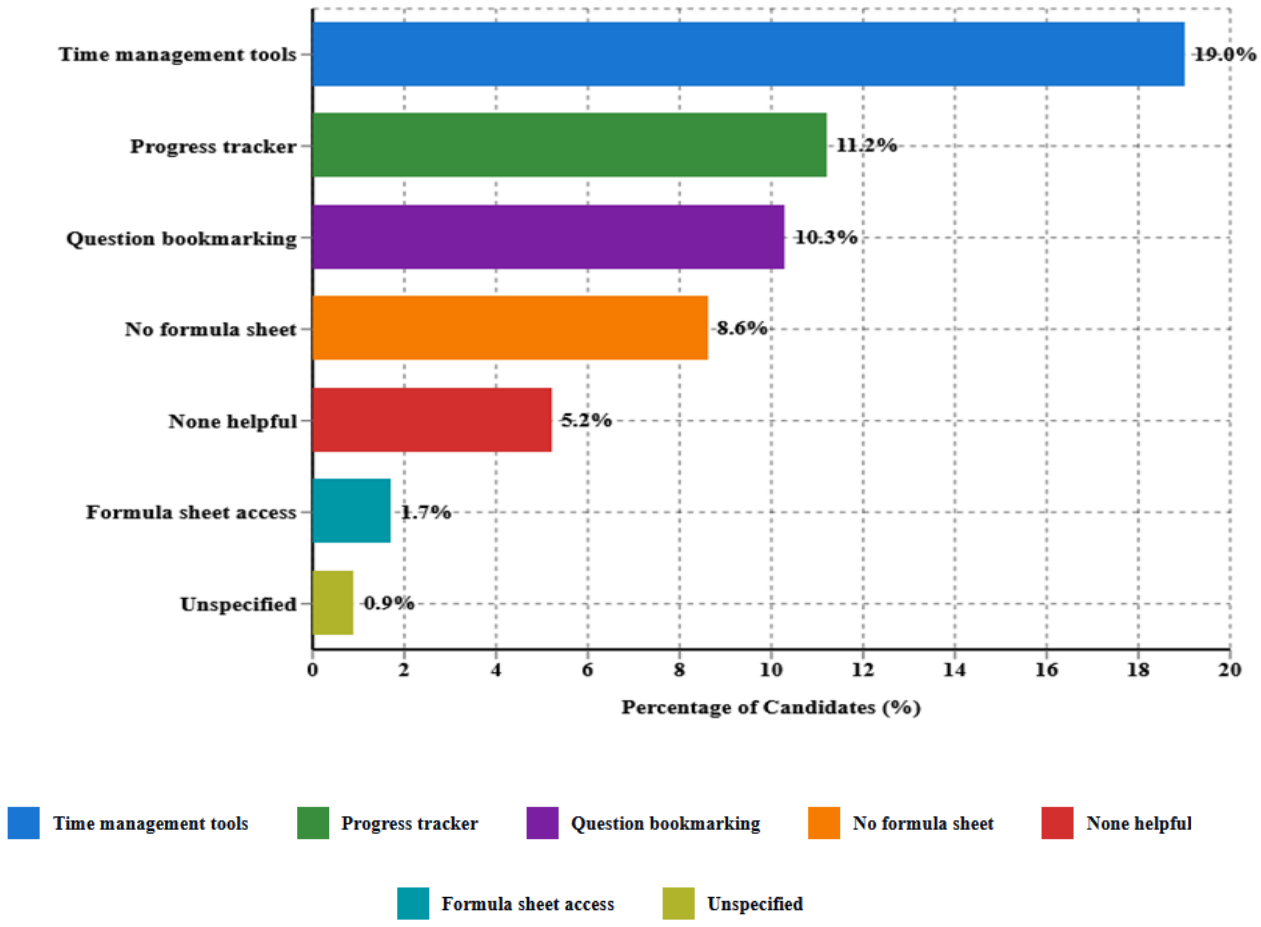

Figure 14: Single Feature Selections

3.5.2 Multiple Feature Selections

The combination of progress tracker and time management tools was chosen by 12.1% of respondents as their most helpful feature set. An equal percentage (12.1%) selected the three-feature combination of question bookmarking, progress tracker, and time management tools as most beneficial to their testing experience. Question bookmarking paired with time management tools was preferred by 5.2% of users as their optimal combination. The combination of question bookmarking with progress tracker was selected by 4.3% of participants as most helpful. The comprehensive four-feature selection of question bookmarking, progress tracking, time management tools, and acknowledgment of no formula sheet access was chosen by 4.3% of respondents as their most valuable configuration. Three combinations each received 1.7% of selections as most helpful features: question bookmarking with no formula sheet access, progress tracker with no formula sheet access, and the combination of question bookmarking, progress tracker, time management tools, and formula sheet access.

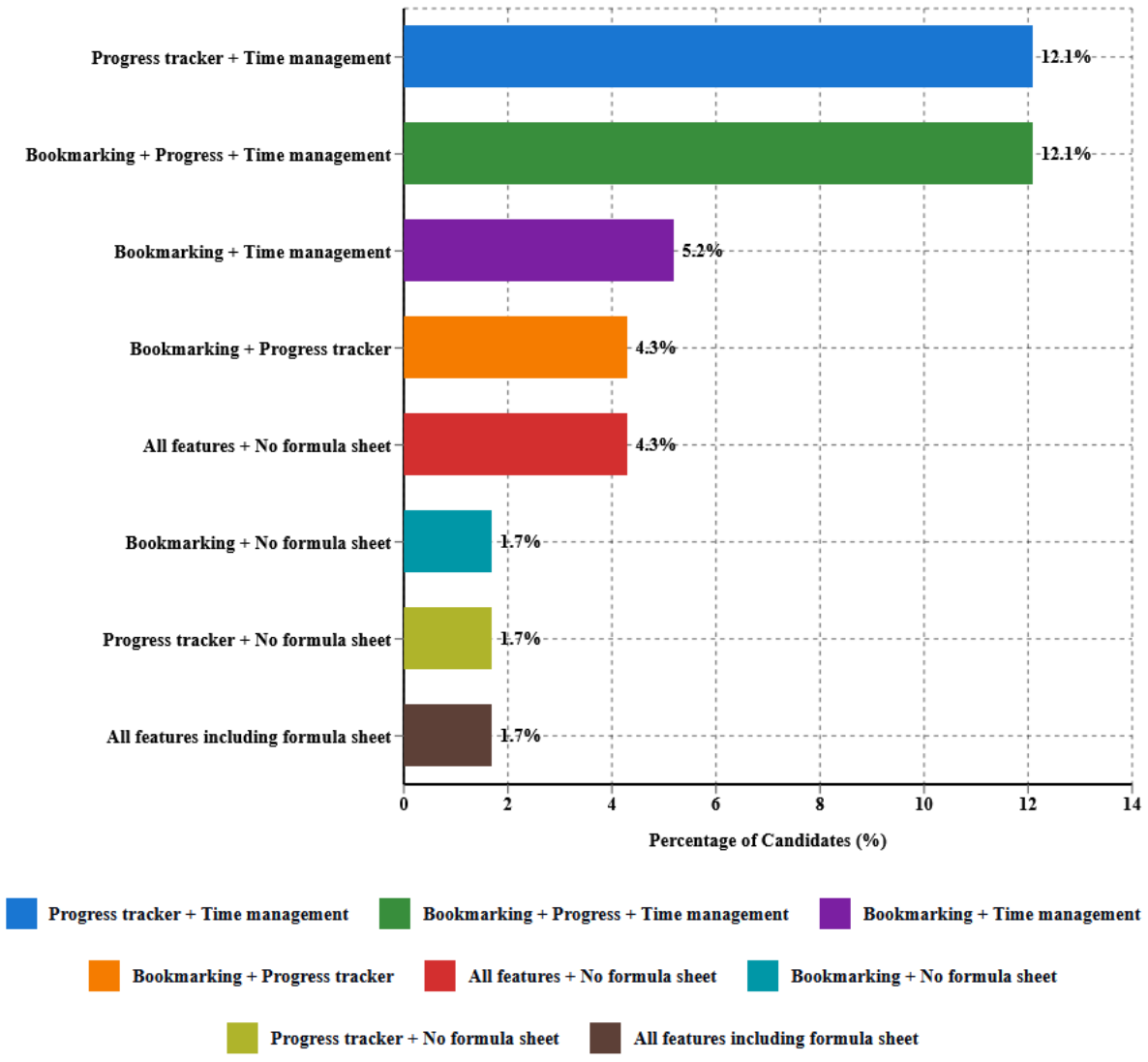

Figure 15: Multiple Feature Selections

3.5.3 Key Insights

Time management functionality proved overwhelmingly important, with 63% of respondents valuing these tools alone or in combination with other features, establishing them as the most essential platform functionality. Users significantly valued integrated functionality, with 24.2% of respondents selecting combinations of all three major features (bookmarking, progress tracking, and time management). The formula sheet presents an interesting paradox: 16.3% of respondents explicitly noted the absence of a formula sheet as helpful, suggesting some examinees prefer testing without reference materials, while only 3.4% considered formula sheet access beneficial. The data clearly distinguishes two primary user groups—those valuing single tools for specific needs (55.2%) and those prefer feature combinations for a more integrated experience (44.8%). A small but notable segment of users (5.2%) found no features helpful, highlighting room for platform improvement or better feature introduction to enhance the user experience. The strong preference for time management capabilities and progress tracking suggests users particularly value features that help them navigate exam constraints efficiently and maintain awareness of their progress throughout the assessment.

3.6 Warnings Received During Examination

Analysis of examination warning data reveals significant insights into the monitoring system's behavior and the challenges examinees faced during testing.

3.6.1 Single Warning Types

The most prevalent single warning, received by 25.5% of respondents, instructed examinees to "Make sure the camera captures your face," suggesting widespread issues with camera positioning. Looking away from the screen was reported by 10.9% of respondents as their sole warning type. Face detection problems were experienced by 10.0% of users as their only warning. Technical issues constituted the sole warning for 6.4% of examinees. Background noise warnings were the only alert for 3.6% of participants. Environmental concerns comprised the only warning for 2.7% of users. Notably, 3.6% of respondents explicitly reported receiving no warnings whatsoever during their examination experience.

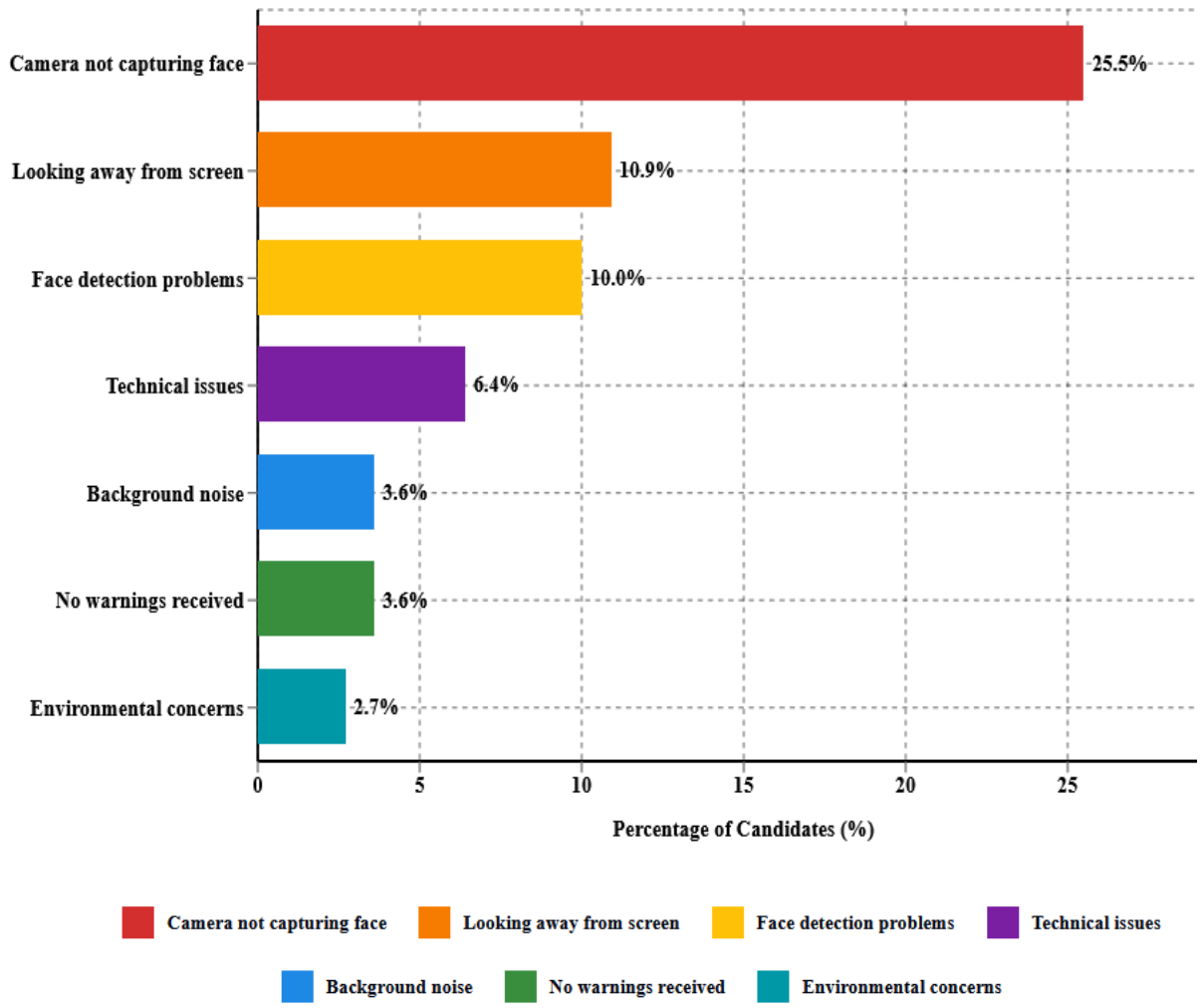

Figure 16: Single Warning Types

3.6.2 Multiple Warning Combinations

The combination of "Make sure the camera captures your face" with face detection problems was experienced by 6.4% of respondents during their examination. The pairing of "Looking away from the screen" with "Make sure the camera captures your face" was reported by 3.6% of users. An equal percentage (3.6%) received warnings about camera capture alongside the specific message "can't detect face when too close to the screen." Technical issues combined with face detection problems affected 2.7% of examinees. Similarly, 2.7% encountered a combination of technical issues with camera capture warnings. Looking away from the screen, combined with environmental concerns, was reported by 1.8% of participants. Face detection problems paired with "Always gave warning when resting head in hands" impacted 1.8% of users. The combination of looking away from the screen, technical issues, and camera capture warnings affected 1.8% of examinees. A single respondent (0.9%) experienced the combination of looking away from the screen with technical issues. More complex combinations involving three or more warning types were reported by 11.8% of respondents, reflecting a challenging testing environment for these users.

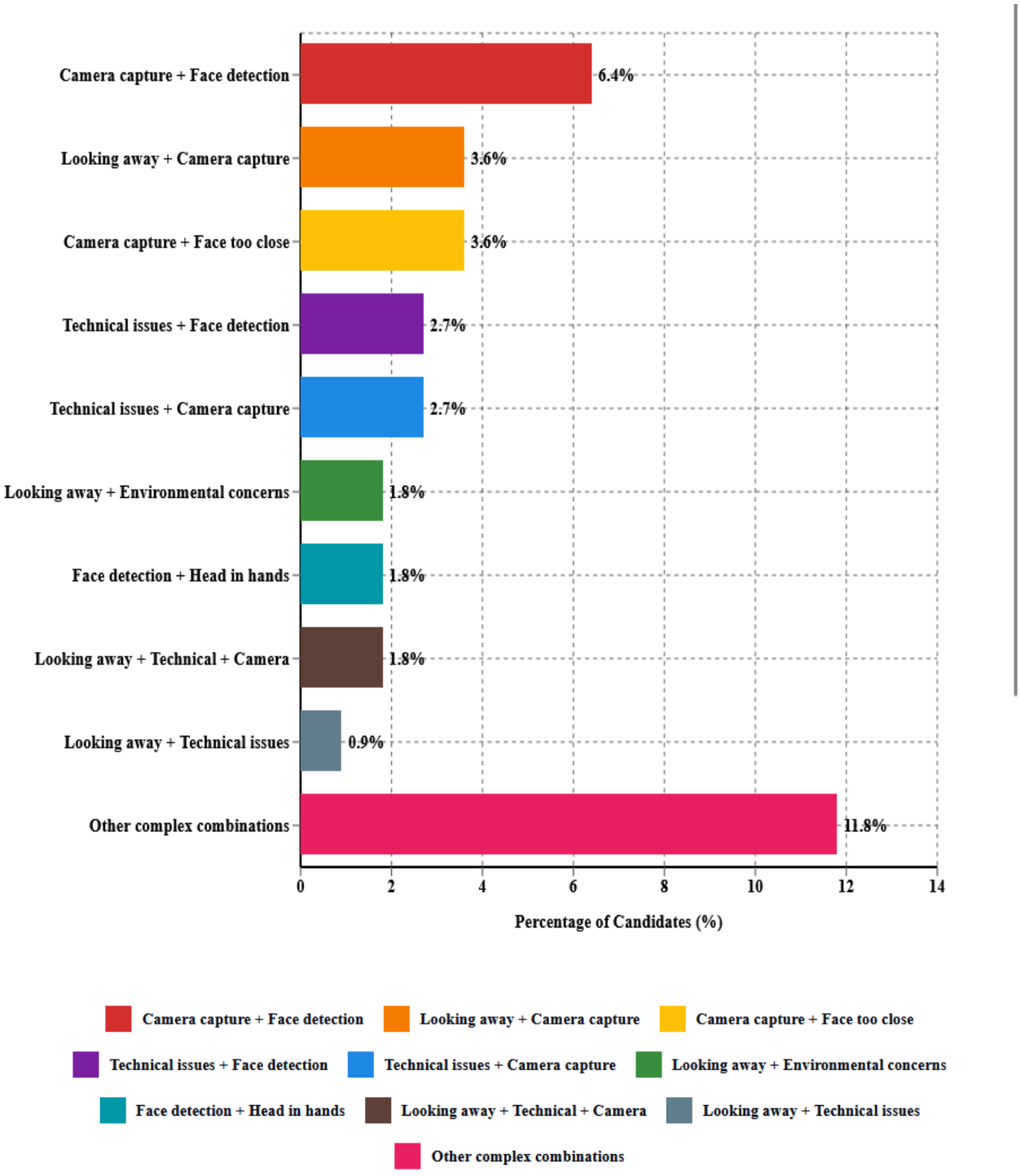

Figure 17: Multiple Warning Combinations

3.6.3 Key Insights

Camera and face detection issues dominated the warning landscape, with 45.5% of respondents receiving some form of warning related to camera positioning or face visibility. Technical challenges formed a secondary but significant category, with 14.5% of users encountering system issues that prompted warnings. Environmental factors (including background noise and physical surroundings) triggered warnings for 8.2% of examinees. The distribution between single warnings (62.7%) and multiple warning combinations (37.3%) suggests that many users experienced persistent or recurring issues rather than isolated incidents. A small but noteworthy portion of respondents (3.6%) received no warnings at all, indicating either perfect compliance or potential inconsistencies in the monitoring system's application.

The prevalence of face detection and camera positioning warnings highlights a crucial area for platform improvement, particularly as some respondents reported receiving warnings despite making efforts to comply, such as when "resting head in hands" or when positioned "too close to the screen." Additionally, reports of warnings about mobile devices or unexpected pop-ups from users who reported no such activity suggest potential false positives in the monitoring system that could unnecessarily increase examinee stress during testing.

3.6.4 User-Friendliness of Remote Proctoring Tool

The data on the remote proctoring tool's user-friendliness shows generally positive perceptions, with 85.2% of candidates rating it at least moderately user-friendly. The largest group (45.7%) found it "Moderately user-friendly," while 39.5% gave stronger positive assessments (33.3% "Very" and 6.2% "Extremely"). However, 14.7% reported negative experiences (8.5% "Slightly" and 6.2% "Not at all" user-friendly). The prevalence of moderate rather than strong positive ratings suggests that while the tool was functional for most candidates, there remains significant room for improvement in its interface and usability to enhance the examination experience for all participants.

Delving deeper into specific aspects of the platform reveals both strengths and areas of concern. The platform's visual presentation emerged as its strongest feature, with 84.5% of candidates agreeing or strongly agreeing that text and visuals were easy to read and understand. Nearly half (48.1%) of all respondents strongly endorsed this aspect, indicating that the visual design effectively supported examination content delivery.

The interface's instructional clarity and navigation also received favorable evaluations. A substantial majority (76.0%) agreed or strongly agreed that the tool provided clear instructions throughout the examination process. Similarly, 75.2% of candidates found the interface intuitive and easy to navigate, suggesting that most users could efficiently interact with the platform without significant confusion.

The login and authentication process was considered straightforward by 65.9% of respondents, though 13.2% reported difficulties with this initial interaction. The answer submission confirmation system performed comparably, with 69.0% of candidates expressing satisfaction with its clarity.

The platform's stability during the examination emerged as the most significant concern, with only 51.1% of candidates reporting consistent performance. Notably, 21.8% of respondents explicitly disagreed that the platform maintained stability throughout their examination, representing the highest negative rating across all dimensions. The substantial neutral response (27.1%) on this aspect suggests that many

candidates experienced minor interruptions that, while not severe enough to warrant negative assessment, still affected their examination experience.

These findings indicate that while the platform's design elements (visuals, navigation, instructions) performed well, technical reliability represents a critical area for enhancement to ensure a consistently positive examination experience for all candidates. This pattern aligns with the earlier findings on technical infrastructure, where issues with connectivity, login difficulties, and system stability were identified as significant challenges. The user experience data thus reinforces the need for technical improvements while acknowledging the successful aspects of the platform's interface design and visual presentation.

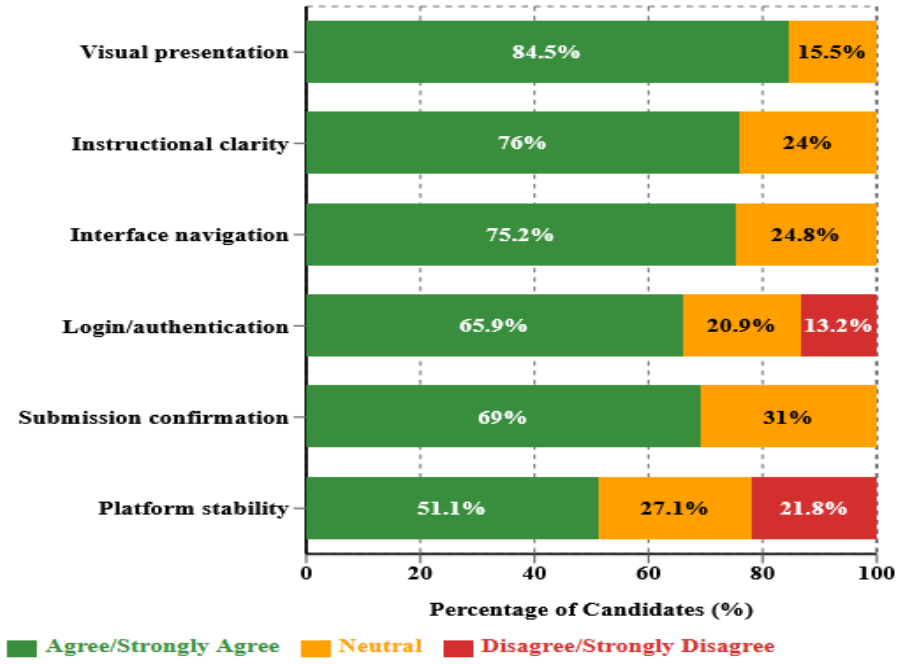

Figure 18: Remote Proctoring Tool User-Friendliness

3.7 Analysis of Proctoring Experience, Support, and Overall Assessment

3.7.1 Remote Proctoring Monitoring Experience

The data reveals interesting patterns in candidates' comfort levels with different monitoring methods. Regarding webcam monitoring, a majority of candidates (58.9%) expressed comfort with this aspect of proctoring, with 33.3% feeling "Somewhat comfortable" and 25.6% "Very comfortable." However, a notable minority (18.7%) reported discomfort with webcam surveillance, including 14.0% who were "Somewhat uncomfortable" and 4.7% who were "Very uncomfortable." Additionally, 22.5% of candidates expressed neutral feelings about webcam monitoring.

Screen recording generated higher comfort levels among candidates compared to webcam monitoring. A strong majority (62.0%) reported comfort with screen recording, with 40.3% feeling "Very comfortable"

and 21.7% "Somewhat comfortable." Only 8.5% expressed discomfort with this monitoring method (5.4% "Somewhat uncomfortable" and 3.1% "Very uncomfortable"), while 29.5% remained neutral. This higher acceptance of screen recording compared to webcam monitoring suggests that candidates were more comfortable having their work activities monitored than their physical presence.

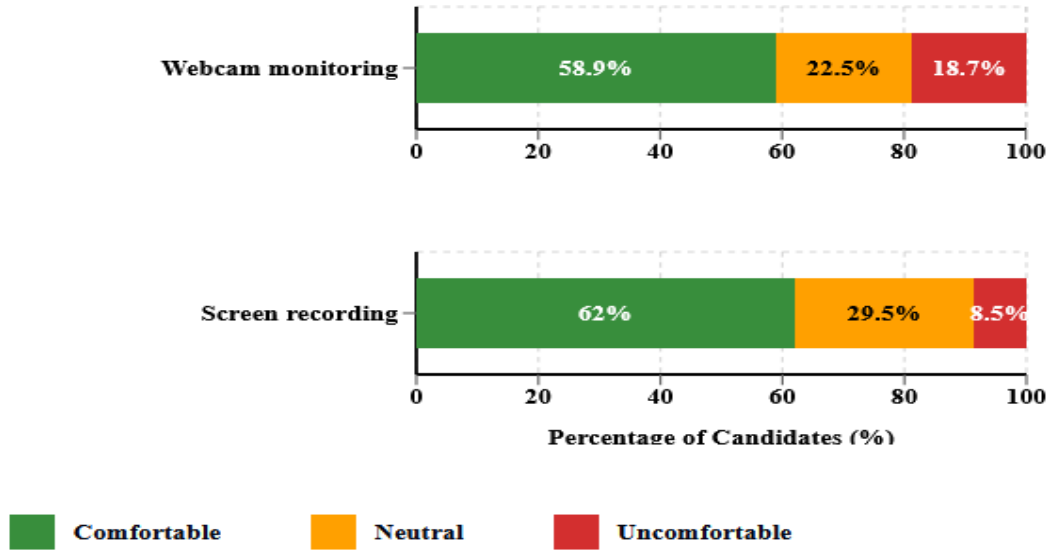

Figure 19: Comfort Levels with Monitoring Methods

The data on proctor warnings reveals that the majority of candidates (81.4%) received at least one warning during their examination. Specifically, 44.2% received 1-2 warnings, 24.8% received 3-5 warnings, and 12.4% received more than 5 warnings. Only 18.6% reported completing the examination without any warnings. This high prevalence of warnings suggests either strict monitoring standards, technical issues triggering false warnings, or genuine difficulties among candidates in adhering to examination protocols in the remote environment.

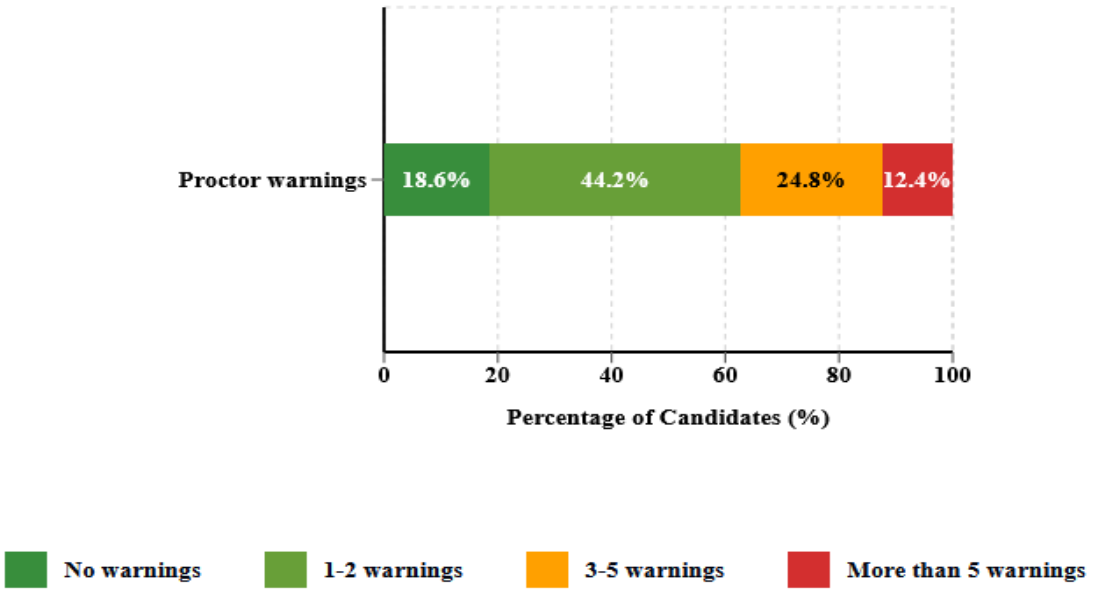

Figure 20: Proctor Warnings Received During Examination

3.7.2 Support and Communication

Pre-examination support and guidance were generally well-received, with 68.2% of candidates rating it positively (51.9% "Good" and 16.3% "Excellent"). However, nearly a third of candidates (31.8%) gave less favorable assessments, with 24.8% rating it as "Fair" and 7.0% as "Poor." This suggests that while support systems were adequate for most candidates, there remains considerable room for improvement. The resolution of technical issues during the examination showed mixed results.

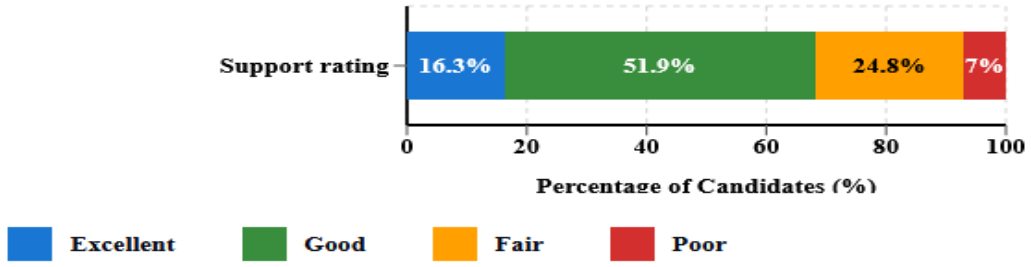

Figure 21: Pre-examination Support and Guidance

Only 20.2% of candidates reported experiencing no technical issues, highlighting the prevalence of technical challenges. Among those who faced issues, 42.7% received relatively prompt assistance (13.2% "Immediately" and 29.5% "Within 5-15 minutes"). However, 37.2% experienced delayed or no resolution, with 27.1% waiting more than 15 minutes and 10.1% reporting their issues were never resolved. These findings indicate that technical support, while available, was not consistently effective or timely.

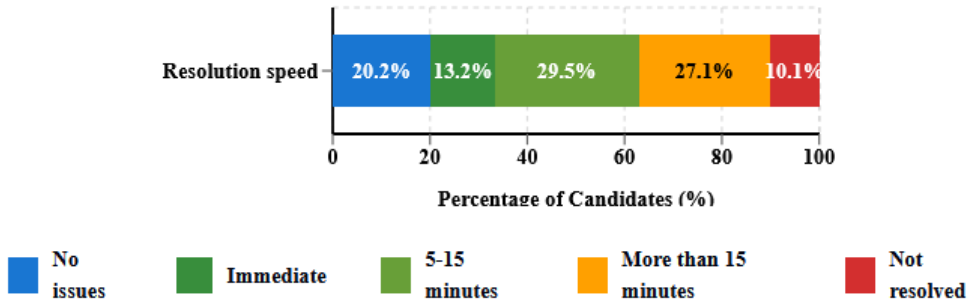

Figure 22: Technical Issue Resolution

Examination instructions were a notable strength, with an overwhelming 96.9% of candidates finding them clear (33.3% "Somewhat clear" and 63.6% "Very clear"). Only 3.2% reported unclear instructions. This strong positive assessment suggests that the communication of examination requirements and procedures was highly effective.

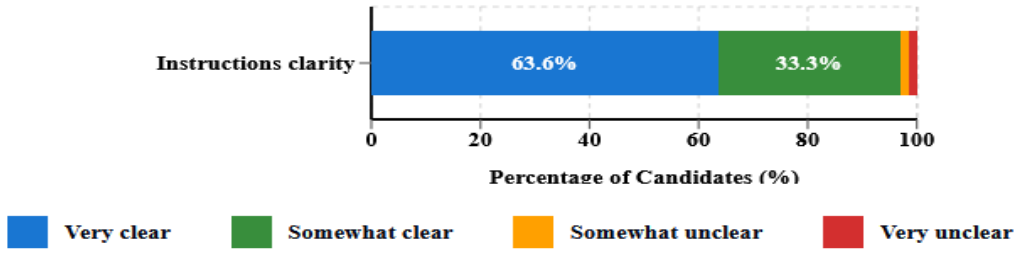

Figure 23: Examination Instructions Clarity

3.7.3 Overall Assessment and Future Preferences

Comparing the online experience to traditional paper-based examinations, nearly two-thirds of candidates (65.1%) preferred the online format (34.9% rated it "Much better" and 30.2% "Somewhat better"). About 13.2% found the experiences comparable, while 21.7% preferred the traditional format (13.2% rated online as "Somewhat worse" and 8.5% as "Much worse").

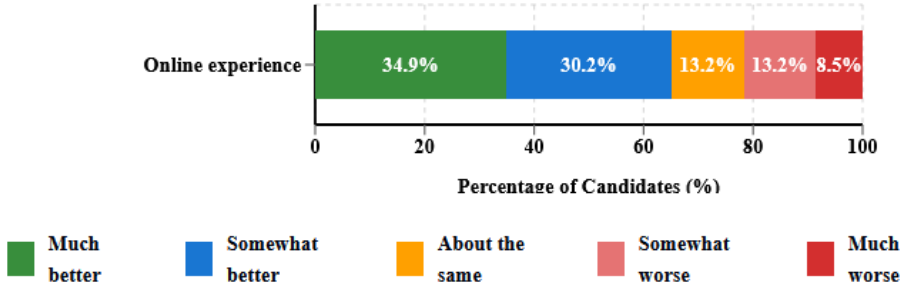

Figure 24: Comparison to Traditional Paper-Based Examinations

This positive assessment is further reflected in preferences for future examinations, with 81.4% of candidates expressing a desire for continued online examinations. However, it's notable that the majority of these respondents (55.8%) specified "Yes, with improvements," indicating recognition of areas needing enhancement. Only 25.6% were entirely satisfied with the current implementation, answering "Yes, definitely." A minority (18.6%) did not favor future online examinations, with 12.4% preferring the traditional format and 6.2% expressing no preference.

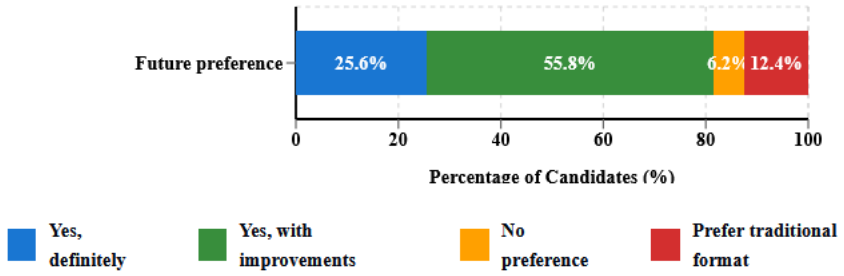

Figure 25: Preference for Future Online Examinations

These findings suggest that while the remote proctored format was generally well-received and preferred by most candidates, there is clear recognition of the need for improvements. The high percentage favoring online examinations "with improvements" aligns with the issues identified in technical support, platform stability, and proctoring experience, highlighting areas for development in future implementations.

3.8 Aspects of the Online Examination System Needing the Most Improvement

An analysis of feedback from examination participants reveals eight distinct areas requiring enhancement in the current online testing platform. From computational tools to technical stability and proctoring mechanisms, these insights offer valuable direction for system refinement to better serve future candidates.

3.8.1 Calculator Functionality

Calculator limitations emerged as the predominant concern, cited by 33.3% of respondents. Users reported significant frustrations with the built-in calculator's restricted capabilities, particularly noting the absence of a percentage function that complicated financial and statistical calculations. Performance issues were also prevalent, with many users experiencing sluggish response times that disrupted their calculation workflow. The confined digital space allocated for complex computations created obstacles for candidates working on multi-step problems. Numerous respondents expressed the need for scientific calculator functionality to handle more sophisticated mathematical operations required by their examination content.

3.8.2 Technical Performance

System reliability issues were highlighted by 20.2% of respondents as a major impediment to successful examination completion. Unexpected system logouts caused significant disruption, forcing users to restart authentication processes and potentially lose valuable examination time. Slow page loading and delayed transitions between questions created inefficiencies that compounded time pressure during the assessment. Authentication mechanisms occasionally failed, requiring multiple login attempts and causing anxiety about potential data loss. Browser compatibility issues further complicated the testing experience, with certain platforms performing suboptimally with the examination software.

3.8.3 Proctoring System

The examination monitoring mechanisms generated concerns among 16.2% of participants. Many reported receiving frequent face detection warnings despite maintaining proper positioning, creating unnecessary stress and interrupting concentration. The environmental scanning process presented difficulties for numerous candidates, particularly those in spaces that didn't easily conform to the system's expectations. Room inspection requirements proved challenging to satisfy completely, with some users receiving multiple requests to re-scan their surroundings. Several respondents described the monitoring system's sensitivity as excessive, flagging normal behaviors such as looking away momentarily or shifting position as potential violations.

3.8.4 Submission Process

Uncertainties surrounding the answer submission process affected 8.1% of respondents. The absence of clear confirmation mechanisms left many candidates unsure whether their responses had been successfully recorded. This ambiguity created considerable anxiety about whether completed work would be properly evaluated. Some users experienced significant delays during the final submission process, raising concerns about whether their answers were captured before the examination time expired.

3.8.5 Internet Connectivity

Network-related challenges impacted 7.1% of respondents during their examination experience. Intermittent internet interruptions threatened examination continuity, with some users reporting having to reconnect multiple times. Data consumption concerns were raised by candidates using metered connections, as the system's bandwidth requirements exceeded expectations. The fundamental requirement for stable, continuous internet access created inequities for those in areas with less reliable service infrastructure.

3.8.5 User Interface

The examination platform's interface design created difficulties for 6.1% of participants. Navigation between sections proved counterintuitive for some users, requiring additional time to locate specific questions or review previous answers. Question arrangement and organization received criticism for lacking clear hierarchical structure. Font size and text presentation issues were noted by several respondents, particularly those using smaller screens or those with visual acuity limitations.

3.8.6 Workspace Limitations

The lack of adequate workspace options was identified by 5.1% of respondents as a significant shortcoming. Many users expressed the need for integrated rough work capabilities, either digital or through permitted physical materials. The absence of a dedicated digital workspace for calculations and problem-solving forced candidates to rely on external methods, creating inefficiencies in the testing process.

3.8.7 Communication Channels

Communication deficiencies were highlighted by 4.0% of participants as an area requiring attention. The inability to contact examination proctors or invigilators during critical moments left candidates without recourse when facing technical or procedural questions. Limited access to technical support during the examination itself meant that users encountering system issues had few options for immediate resolution. This communication gap potentially disadvantaged candidates experiencing unique circumstances or requiring clarification on examination parameters.

The concentration of concerns around calculator functionality, technical reliability, and proctoring sensitivity suggests these areas should be prioritized in system improvements to enhance future examination experiences.

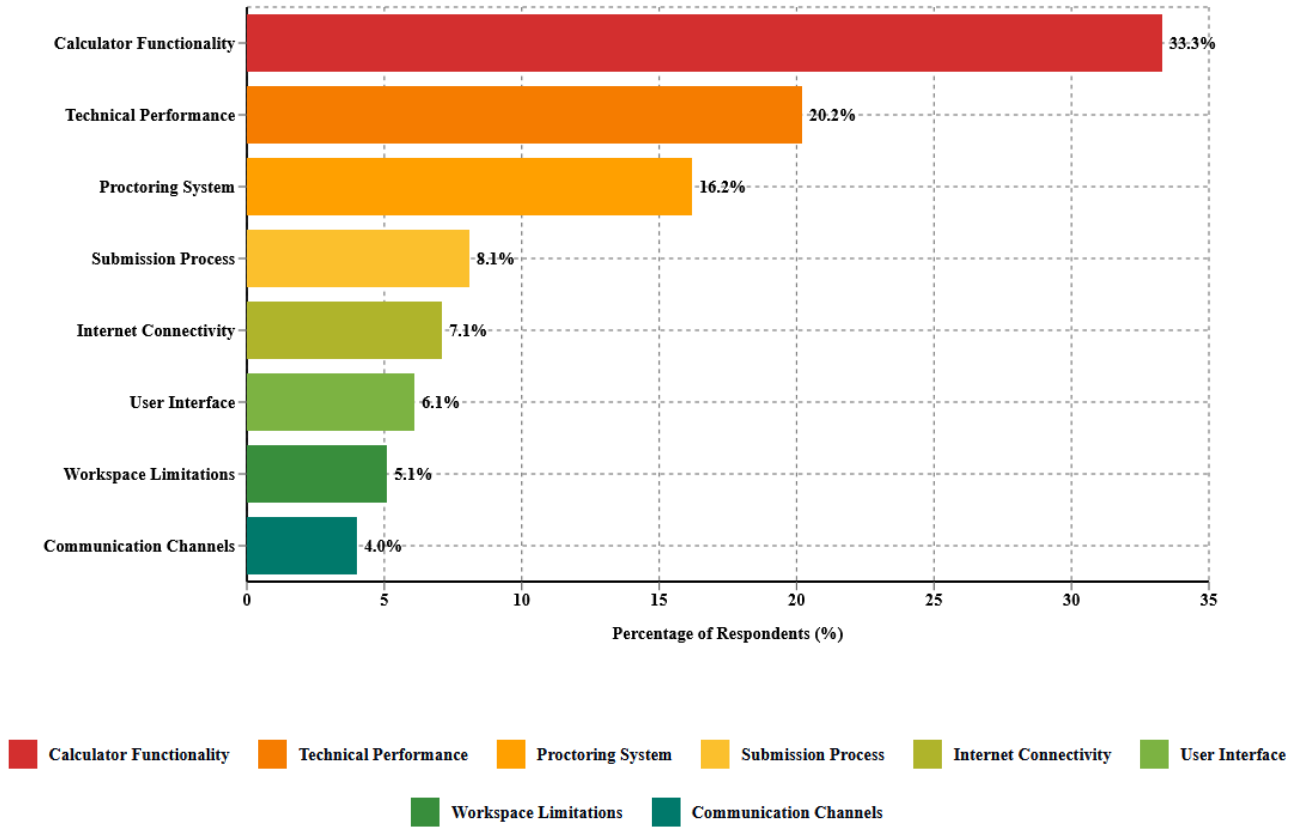

Figure 26: Aspects of the Online Examination System Needing Improvement

3.9 Recommended Additional Features or Support for Future Online Examinations

Analysis of feedback from examination participants reveals eight priority areas for enhancement in future online assessment systems. These recommendations represent targeted improvements that could significantly elevate the quality, fairness, and efficiency of digital examinations.

3.9.1 Calculator Improvements

Enhanced calculator functionality emerged as the most frequently requested improvement, representing 23.1% of all recommendations. Respondents emphasized the critical need for advanced scientific calculator capabilities to handle complex mathematical operations required in specialized subject areas. The addition of a percentage sign was specifically highlighted as necessary for financial and statistical calculations, addressing a fundamental gap in the current toolset. Users reported that calculator performance significantly impacted their ability to complete time-sensitive questions, suggesting that faster processing would directly improve examination outcomes. Several participants proposed allowing the use of physical calculators as an alternative solution, noting that familiar devices would reduce the learning curve and increase efficiency during high-pressure examination conditions.

3.9.2 Designated Examination Centers

The establishment of dedicated examination venues constituted 18.5% of improvement recommendations, reflecting concerns about testing environment equity. Respondents advocated for centralized locations equipped with reliable, high-speed internet connections to eliminate connectivity disadvantages faced by some candidates. Infrastructure considerations featured prominently in these suggestions, with many noting that purpose-built facilities would reduce technical complications and standardize the examination experience. Access equality emerged as a primary motivation, with respondents highlighting that designated centers would benefit students without personal laptops or adequate home testing environments. The professional atmosphere of dedicated examination spaces was cited as beneficial for concentration and performance, reducing distractions and environmental variables that might affect results.

3.9.3 Workspace Solutions

Digital and physical workspace enhancements represented 15.4% of recommendations, addressing a fundamental need in problem-solving examinations. The integration of a digital scratch pad or worksheet functionality was suggested as a solution for complex calculations and thought organization during the examination process. Many respondents requested permission to use blank paper for rough work, noting that physical note-taking remains essential for certain types of problem-solving approaches. Comprehensive note-taking capabilities within the examination platform were proposed to support information processing and answer development, particularly for essay-based or multi-step questions that require outline development and revision.

3.9.4 Communication Channels

Improved communication mechanisms constituted 12.3% of enhancement recommendations, highlighting the isolation many candidates experience during online assessments. Respondents suggested implementing live chat functionality with invigilators to address procedural questions and clarifications without disrupting the examination flow. The availability of technical support during the examination period was identified as crucial for resolving system issues promptly and minimizing impact on performance. Clear communication protocols and contact points for various types of examination issues were recommended to reduce uncertainty and anxiety when unexpected situations arise.

3.9.5 Submission Feedback

Enhanced confirmation and feedback systems represented 9.2% of improvement suggestions, addressing significant anxiety around answer submission. Respondents emphasized the need for clear, explicit confirmation messages upon successful submission to provide certainty that responses have been properly recorded. Some participants suggested implementing immediate results or preliminary feedback where appropriate, reducing the extended uncertainty period following examinations. Status updates throughout the submission process were recommended to provide transparency and reassurance during this critical final examination phase.

3.9.6 Time and Scheduling Flexibility

Adaptations to examination timing and scheduling comprised 7.7% of recommendations, recognizing diverse subject requirements and candidate circumstances. Extended time allowances for particularly complex or calculation-intensive subjects were suggested to better align with the realistic completion requirements of certain assessments. Scheduled breaks between consecutive examinations were proposed to prevent mental fatigue and maintain consistent performance across multiple tests. Flexible scheduling

options were recommended to accommodate candidates in different time zones or with specific personal circumstances that impact optimal testing times.

3.9.7 Technical Support Improvements

Enhanced technical preparation and support represented 7.7% of suggestions, focusing on preventative measures and contingency planning. Respondents advocated for comprehensive preparation materials specifically addressing the technical aspects of the examination platform to reduce day-of surprises. Pre-examination system checks and compatibility tests were suggested as mandatory steps to identify and resolve potential issues before the assessment begins. The provision of data packages or connectivity solutions was recommended to ensure consistent internet access throughout the examination, particularly for candidates in areas with limited infrastructure.

3.9.8 User Interface Enhancements

Interface design improvements constituted 6.2% of recommendations, emphasizing the impact of navigation efficiency on examination performance. Respondents suggested streamlining navigation elements to reduce time spent locating questions and reviewing previous answers. The option to view multiple questions per page was recommended to improve context and reduce excessive clicking between related items. Better organization of interface elements was proposed to create a more intuitive examination experience that minimizes cognitive load and allows candidates to focus primarily on content rather than platform interaction. These recommendations collectively represent systematic improvements that could address the most significant pain points in current online examination systems while enhancing overall assessment quality and accessibility.

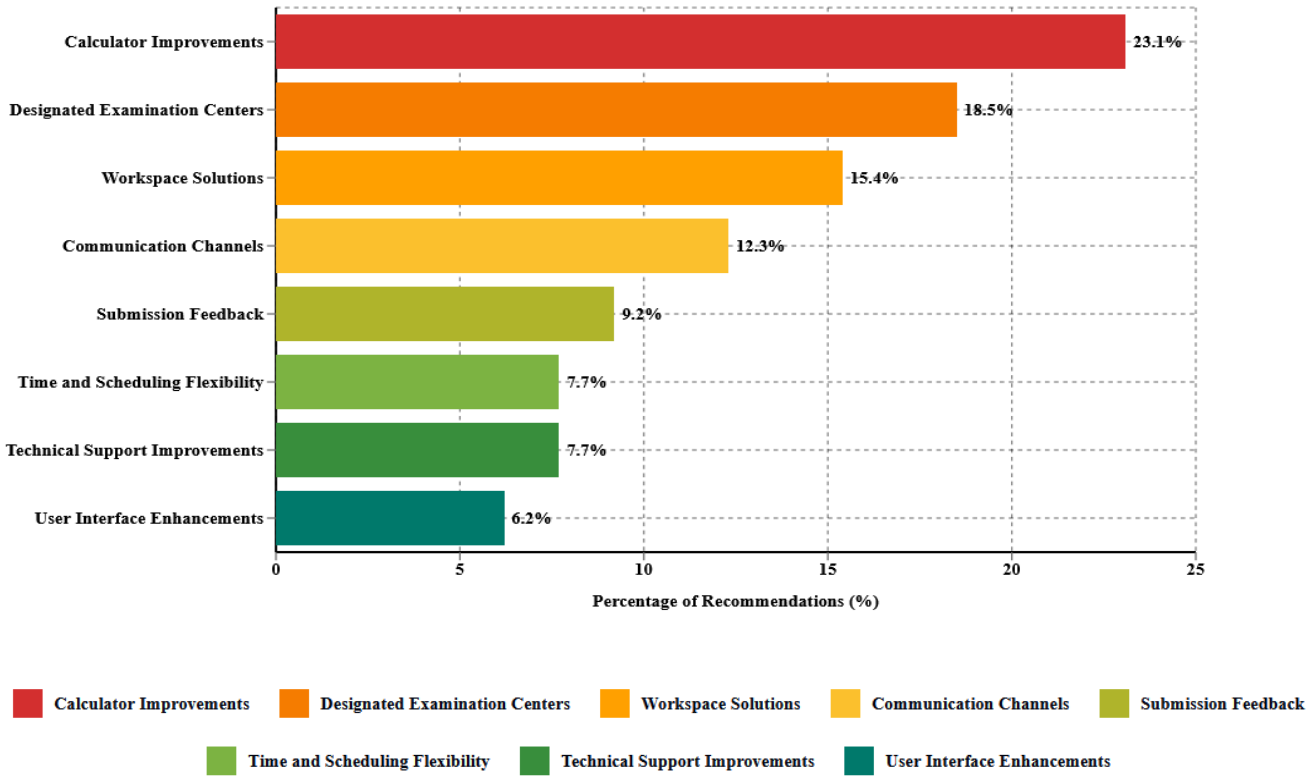

Figure 27: Additional Features or Support for Future Online Examinations

4.0 Conclusion

This study provides comprehensive insights into candidates' experiences with ICAG's pioneering implementation of remote proctored examinations for Level 1 professional accounting qualifications. The findings reveal that while the transition to remote proctoring represented a significant advancement in assessment methodology, it presented both notable successes and areas requiring enhancement.

The demographic profile of candidates, predominantly young adults with varying levels of prior online examination experience, established an important context for understanding their interactions with the remote proctoring system. The majority of candidates accessed the examination from home environments, fulfilling one of the primary benefits of remote proctoring by enabling convenient testing locations. Mock examinations proved valuable for most participants, particularly in familiarizing candidates with navigation systems and format requirements. However, the notably lower rating for technical support during mock examinations points to an area requiring significant improvement to better prepare candidates for the actual assessment.

Technical infrastructure emerged as a critical determinant of candidates' experiences. While most reported adequate internet connectivity and appropriate devices, more than a third experienced connectivity challenges, and a significant percentage relied on borrowed devices. Furthermore, technical difficulties during the examination, particularly login issues and network disruptions, affected more than half of all candidates. These findings highlight the importance of addressing technological barriers to ensure equitable examination experiences. The examination platform interface received generally positive evaluations across most features, with timer functionality emerging as particularly effective. In stark contrast, calculator functionality stood out as profoundly problematic, with nearly half of all candidates rating it negatively. This deficiency is particularly concerning for an accounting examination where calculation capabilities are essential.

The remote proctoring monitoring features revealed interesting patterns in candidates' comfort levels, with higher acceptance of screen recording compared to webcam monitoring. The high prevalence of proctoring warnings, particularly related to camera positioning and face detection, suggests the need for improved monitoring calibration and clearer guidance on proper positioning during examinations. Support and communication dimensions showed mixed results. While examination instructions were overwhelmingly rated as clear, pre-examination support and technical issue resolution during the examination revealed significant room for improvement. The delayed or absent resolution of technical issues for more than a third of affected candidates represents a substantial concern.

Despite these challenges, nearly two-thirds of candidates preferred the online format to traditional paper-based examinations, and over 80% expressed a desire for continued online examinations. However, the majority specified a need for improvements, aligning with the identified areas of concern in calculator functionality, technical performance, and proctoring systems. The recommendations for future enhancements, particularly regarding calculator improvements, designated examination centers, and workspace solutions, provide a clear roadmap for addressing the most significant pain points identified by candidates. These targeted improvements would address both technical limitations and equity concerns while maintaining the accessibility benefits of remote proctoring. In conclusion, ICAG's implementation of remote proctored examinations demonstrates substantial promise for expanding access to professional accounting qualifications while maintaining assessment integrity. The generally positive

reception by candidates, despite various challenges, suggests that with strategic enhancements to address identified shortcomings, this digital transition can successfully advance professional accounting education in Ghana and potentially serve as a model for similar implementations across Africa.

5.0 Recommendations

Based on the comprehensive findings of this study on ICAG's implementation of remote proctored examinations, the following recommendations are proposed to enhance future examinations:

- Calculator functionality requires immediate overhaul to address the most significant deficiency identified by candidates. ICAG should implement a more robust calculator with advanced scientific and financial capabilities, particularly incorporating percentage functions essential for accounting calculations. Improving calculator processing speed and expanding the digital workspace for calculations would directly enhance examination outcomes. Alternatively, ICAG could consider allowing the use of approved physical calculators under strict monitoring conditions, providing candidates with familiar tools that improve efficiency during high-pressure examination scenarios.

- The technical infrastructure requires substantial enhancement to improve stability and reliability. ICAG should implement more robust server capacity, optimize software for lower bandwidth requirements, and develop contingency protocols for technical failures. Pre-examination system compatibility checks should be mandatory to identify and resolve potential issues before the assessment day.

- Workspace solutions should be expanded to accommodate diverse problem-solving approaches. Integrating a digital scratch pad or worksheet functionality within the examination platform would facilitate complex calculations and thought organization. These workspace enhancements would directly address the inefficiencies currently faced by candidates forced to rely on external methods for calculations and rough work.

- Communication channels require significant improvement to reduce the isolation experienced during remote examinations. Implementing live chat functionality with invigilators would provide immediate clarification for procedural questions without disrupting examination flow. A dedicated technical support channel should be available throughout the examination to promptly address system issues. Clear escalation protocols should be established for different categories of problems, ensuring candidates know exactly how to seek assistance for specific issues that may arise during assessment.

- Submission processes should be enhanced to address the considerable anxiety surrounding answer recording. Clear, explicit confirmation messages should be provided upon successful submission, potentially including visual confirmations and receipt numbers. Status updates throughout the submission process would provide transparency and reassurance during this critical phase. Where appropriate, implementing immediate basic feedback on submission completion would reduce post-examination uncertainty.

- Proctoring system calibration requires refinement to reduce false warnings while maintaining integrity. The sensitivity of face detection algorithms should be optimized to better accommodate normal testing behaviors such as briefly looking away or shifting position. More comprehensive pre-examination guidance on proper camera positioning and environmental requirements would help candidates prepare appropriate testing spaces. Additionally, a warning classification system

could distinguish between minor positioning issues and more serious integrity concerns, reducing unnecessary stress for candidates receiving routine positioning prompts.

- Mock examination preparation should be strengthened by ensuring it accurately reflects all aspects of the actual assessment experience. Technical support during mock examinations requires particular improvement, as this was identified as a significant weakness. Multiple mock examination opportunities with increasing complexity could help build candidate confidence gradually. More detailed feedback on mock examination performance would help candidates identify specific areas for improvement before the actual assessment.

- Platform usability enhancements should focus on improving navigation efficiency and accessibility. Interface elements should be streamlined to reduce the time spent locating questions and reviewing previous answers. The option to view multiple questions per page would improve context and reduce excessive clicking between related items. Font size adjustability and contrast controls would address the needs of candidates with varying visual acuity, ensuring the platform is accessible to all users regardless of screen size or visual capabilities.

- Technical preparation support should be enhanced through comprehensive guidance materials addressing platform-specific requirements and potential challenges. Mandatory system checks before examination registration would identify compatibility issues early. Step-by-step visual guides for setup procedures would reduce anxiety and technical complications on examination day. Additionally, clear minimum and recommended technical specifications should be provided well in advance of registration to allow candidates adequate preparation time.

- Monitoring transparency should be improved to reduce candidate anxiety about surveillance. Clear explanations of exactly what behaviours trigger warnings would help candidates avoid unintentional violations. A brief orientation video demonstrating ideal positioning and explaining monitoring parameters would establish clear expectations. This transparency would enhance candidates' psychological comfort with monitoring methods while maintaining examination integrity.

- A continuous feedback mechanism should be implemented for ongoing platform improvement. Regular post-examination surveys should collect specific data on emerging issues and changing candidate needs. An advisory panel including recent examination candidates could provide user-centered perspectives on proposed enhancements. This commitment to continuous improvement would demonstrate ICAG's responsiveness to stakeholder feedback while ensuring the remote proctoring system evolves effectively.

By implementing these comprehensive recommendations, ICAG can address the specific challenges identified in this study while building on the generally positive reception of remote proctored examinations. These enhancements would not only improve the technical performance and user experience of the platform but also ensure greater equity and accessibility in professional accounting assessment across diverse technological and environmental contexts in Ghana and potentially throughout Africa.

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