Students' Readiness and Perception Toward Smartphone-Based CBT in English Final Exams: A Case Study at MTs Darussalam Impa-Impa

Faridah[1*], Mathla'ul Fajriyani P[2], Zulfah[3], Ambo Dalle[4], Magdahalena[5]

[1] MTs Darussalam Impa-Impa, Indonesia
[2,3,4,5] IAIN Parepare, Indonesia

.

*Corresponding E-mail: faarida81@gmail.com

Abstract

Background: The integration of Computer-Based Testing (CBT) in education has grown significantly as a means to improve efficiency, reduce exam malpractice, and streamline assessment logistics. However, in semi-rural Islamic schools (madrasah/pesantren) in Indonesia, students are often restricted from using smartphones during the academic year and are only allowed to use them during final exams. This creates a unique challenge in evaluating both the technical and emotional readiness of students who encounter CBT with minimal digital exposure.

Research Objectives: This study aims to examine the readiness and perception of Grade 9 students toward smartphone-based CBT in English final examinations at MTs Darussalam Impa-Impa. The study specifically investigates how students' limited and episodic use of digital devices influences their technical ability and emotional responses, such as stress, confidence, and willingness to use CBT in the future.

Methods: Using a descriptive quantitative design, the study collected data from 25 Grade 9 students through a structured Likert-scale questionnaire adapted from prior validated instruments. The questionnaire measured two dimensions: digital readiness and perception. Descriptive statistical analysis was used to interpret the findings, including mean scores, standard deviation, and visual representation.

Results: The results show that students demonstrated moderate technical readiness (M = 3.6–3.9) but low emotional comfort, particularly in areas related to stress (M = 2.8) and willingness to adopt CBT in future exams (M = 2.6). These findings support the hypothesis that irregular digital exposure leads to reduced cognitive and emotional preparedness for CBT.

Conclusions: This study highlights the need for context-sensitive CBT implementation in low-tech religious schools. Future research should explore training modules or simulations to enhance digital familiarity and emotional resilience among students with limited exposure.

Keywords: assessment anxiety, CBT perception; digital readiness; pesantren education ; smartphone-based testing

Introduction

In the digital era, the shift from traditional paper-based assessments to Computer-Based Testing (CBT) has become a significant transformation in educational systems worldwide (Lynch, 2022; Mudi et al., 2024). In Indonesia, this shift is increasingly evident, particularly during national and institutional examinations where CBT is promoted as a tool to enhance efficiency, minimize malpractice, and streamline assessment logistics (Kingsley et al., 2022; Ndema, 2025). However, a crucial issue emerges in semi-rural and religious educational institutions—such as *madrasah* and *pesantren*—where students are restricted from using digital devices during regular instruction but are suddenly required to engage with smartphone-based CBT during final exams (Choudhury et al., 2023; Nazneen & Shelton, 2023). This discontinuity presents a social and academic dilemma: how can equitable assessment be ensured when digital exposure is episodic and often limited to examination periods only? (Leyens et al., 2024). Practically, this raises concerns about readiness, fairness, and digital literacy; academically, it highlights the need to re-evaluate the universality of CBT implementation in diverse educational settings.

Several studies have explored the perceptions and experiences of students in CBT environments. Enebechi, Okoye, and Arisokwu found that students in Nigerian universities generally perceive CBT as efficient, easy to use, and credible—findings echoed by Chukwuma- Nosike and Chukwuma in their evaluation of CBT's role in curriculum innovation (Chukwuma- Nosike & Chukwuma, 2023; Okoye et al., 2023). These studies, however, are situated in urban or technologically well-supported contexts where students are digitally literate and have consistent access to ICT infrastructure. Little research has focused on students in religious schools with limited access to smartphones and computers outside of exam periods (Karakostantaki & Stavrianos, 2021; Larson, 2024). Thus, the emotional and cognitive readiness of these students—particularly in high-stakes English testing—remains underexplored (Au, 2022; Estrada, 2022). This presents a research gap in the literature that needs urgent academic attention, especially given the growing national agenda for digital transformation in education.

To address this gap, the present study investigates the readiness and perception of Grade 9 students at MTs Darussalam Impa-Impa toward smartphone-based CBT during English final examinations. Unlike prior studies that emphasize the technical and administrative efficiency of CBT, this research focuses on students' personal experiences, particularly in relation to their digital exposure, confidence, and anxiety. Using a descriptive quantitative design and a validated Likert-scale questionnaire, this study aims to measure how limited, short-term digital engagement affects students' cognitive preparedness and emotional responses during digital assessments. The study intends to contribute actionable insights for schools and policymakers to ensure that CBT implementation does not inadvertently disadvantage students in low-tech learning environments.

This study hypothesizes that limited and irregular digital exposure significantly influences students' readiness and perception toward CBT, particularly in emotionally charged, high-

stakes examinations. Specifically, the study proposes that students with minimal experience using smartphones or computers for learning will report lower levels of confidence, higher anxiety, and more negative perceptions of the CBT format compared to their digitally engaged peers. Therefore, the relationship between digital readiness and CBT perception will be examined as a basis for formulating equitable and context-sensitive assessment strategies in semi-rural Islamic educational institutions.

Literature Review

Over the past decade, the adoption of Computer-Based Testing (CBT) in various educational settings has gained momentum, with researchers increasingly focusing on the relationship between students' digital readiness, perception, and emotional responses to digital assessments. The literature reveals three major trends: (1) studies that emphasize the technological and administrative benefits of CBT, (2) studies that explore students' digital competence and environmental access, and (3) studies that examine psychological and emotional responses, such as anxiety and motivation. Although these strands offer important insights, most prior studies remain concentrated in urban or higher education contexts, often overlooking the challenges faced in semi-rural or religious school environments with limited digital access.

The first trend centers on the perceived benefits of CBT in enhancing exam security, scoring efficiency, and time management. Prahda and Priyatmojo, for instance, investigated students' perceptions toward Android-based Exam Browsers and found that 75.8% of students favored the format due to its speed and effectiveness in limiting distractions (Fegasanti & Priyatmojo, 2020). Their study highlighted positive students responses in five domains: interest, perceived usefulness, ease of use, anxiety, overall attitude. These findings align with the Technology Acceptance Model (TAM), which underscores perceived ease of use and usefulness as predictors of acceptance. Likewise, Chukwuma-Nosik and Chukwuma emphasized the administrative ease and integrity of CBT in Nigerian tertiary institutions, asserting its superiority over traditional paper-based tests (Chukwuma-Nosike & Chukwuma, 2023).

The second pattern focuses on access and competence as key determinants of CBT readiness. In a large-scale study, Ubulom and Wokocha surveyed 600 senior secondary school students across 60 urban and rural schools in Nigeria, revealing significant disparities in digital access and skills (Tijani et al., 2023). Urban students reported high levels of readiness and acceptance due to better ICT infrastructure, more frequent digital exposure, and personal access to smartphones and computers. In contrast, rural students showed moderate to low readiness and acceptance, citing limited access, minimal prior training, and environmental constraints such as irregular power supply. These findings suggest that technological access and digital competence are prerequisite conditions for equitable CBT implementation.

The third strand of literature highlights students' affective responses to CBT, particularly in relation to anxiety, test confidence, and emotional readiness. While Prahda and Priyatmojo found that most students were motivated and positively inclined toward CBT, a notable portion still expressed anxiety about potential technical issues and error-prone navigation (Fegasanti & Priyatmojo, 2020). Similarly, in Ubulom and Wokocha's study, despite general familiarity with smartphones, rural students exhibited reluctance and stress when confronted with full-scale digital exams (Ubulom & Wokocha, 2017). These responses reinforce that emotional and psychological readiness must be considered alongside technical skills when implementing CBT in high-stakes settings.

However, these studies have limitations. Most notably, they exclude religious schools or pesantren, where students are often restricted from using smartphones or digital tools during regular learning hours. In such settings, CBT is usually introduced only during final examinations, creating a disjointed experience that may affect students' perception, performance, and emotional stability (Malasowe et al., 2023). Furthermore, while previous studies have employed robust quantitative designs, few have explored the interplay of digital readiness and emotional response in environments where digital literacy is episodic and situational rather than continuous (Vissenberg et al., 2022).

To fill this gap, the present study investigates Grade 9 students at MTs Darussalam Impa-Impa—a semi-rural Islamic junior high school where smartphone-based CBT is applied only during final English exams. Using a descriptive quantitative method and a questionnaire adapted from Prahda and Priyatmojo, the study examines student readiness, perception, and emotional responses. It contributes to an under-represented segment of CBT literature by addressing the challenges faced in religious schools with restricted technology exposure, providing a comparative lens against more digitally equipped environments.

This study posits that students with limited and inconsistent digital exposure are more likely to experience cognitive strain, emotional discomfort, and negative perceptions during smartphone-based CBT. It hypothesizes a causal relationship between digital readiness and perception of CBT, particularly in high-stakes English testing scenarios. By integrating insights from technological, psychological, and contextual perspectives, this research seeks to inform more inclusive assessment policies that are sensitive to the digital divides that persist within religious and rural educational systems.

Methods

The unit of analysis in this study is individual students enrolled in Grade 9 at MTs Darussalam Impa-Impa, an Islamic junior high school located in a semi-rural area of Indonesia. The focus of this research is on each student's cognitive and emotional readiness as well as their perception of smartphone-based Computer-Based Testing (CBT) during English final examinations. This study is centered on individual experiences within an institutional setting, specifically how students respond to digital assessment when they have limited prior exposure to technology throughout the academic year. This contextual emphasis is important because the school enforces strict restrictions on smartphone use during the academic year, which creates a unique testing environment that affects digital skill acquisition.

This study employed a quantitative descriptive research design. The orientation of the research is non-experimental, focusing on the measurement of students' perceptions and readiness levels without manipulating any variables. A quantitative approach was selected to obtain objective and generalizable data from a target population, allowing for the analysis of trends and averages across a structured set of indicators. The research adopts a survey method to quantify responses, which were later interpreted statistically to understand the patterns of digital readiness and CBT acceptance. This design is appropriate because descriptive surveys allow researchers to measure naturally occurring variations in readiness and perception without intervention (Creswell & Creswell, 2018).

The data in this research were collected from primary sources, specifically from student respondents who directly experienced the CBT implementation at the school. A total of 25 students from Grade 9 were selected using total sampling, as they represented the full population of students allowed to use smartphones during the English examination period. All participants were exposed to the same CBT environment, making their feedback relevant

for measuring both perceived preparedness and acceptance. Data were collected immediately after the English CBT session in December 2024 to ensure that responses reflected fresh experiences.

Data collection was conducted through a structured questionnaire adapted from the instrument developed by Prahda & Priyatmojo (2020) and Ubulom & Wokocha (2017). The questionnaire consisted of two main dimensions: readiness and perception, and was distributed using a digital form via Google Forms, allowing students to respond directly through their smartphones during the exam period. The Likert-scale format ranged from 1 (Strongly Disagree) to 5 (Strongly Agree), and the questionnaire included both technical (e.g., device use, internet stability) and emotional (e.g., anxiety, preference) indicators. Prior to distribution, the questionnaire was validated by two education technology experts and piloted for clarity and reliability. The pilot test involved five students from a different class level, and the results were used solely for instrument refinement and not included in the main analysis. Ethical approval was obtained from the school administration prior to data collection. Students were informed that participation was voluntary, responses were anonymous, and their answers would not affect their examination scores. Consent was obtained verbally, and no identifiable personal data were collected to ensure confidentiality.

The collected data were analyzed using descriptive statistical analysis. The analysis process involved organizing the responses into Microsoft Excel, calculating mean, standard deviation, minimum, and maximum values for each item. The overall trends in students' readiness and perception were examined to identify the most common challenges and supportive factors. Bar charts and pie graphs were also generated to visualize the distribution of responses. In addition, reliability analysis using Cronbach's Alpha was conducted to ensure the internal consistency of the questionnaire items. Cronbach's Alpha coefficients were interpreted following the standards by Fraenkel & Wallen (2015), where values above 0.70 indicate acceptable reliability.

Results

1. Students' Technical Readiness Toward Smartphone-Based CBT

The analysis of questionnaire data indicated that students at MTs Darussalam Impa- Impa showed moderate levels of technical readiness. Most students reported being familiar with using smartphones and were able to navigate CBT platforms without major technical issues. However, only a small number had previously used their smartphones for academic assessments. The mean score for items related to operating devices and accessing stable internet ranged between 3.5 and 3.9, indicating general capability. These findings suggest that although students are not fully immersed in digital learning environments, their basic technical proficiency is sufficient to engage with CBT.

2. Students' Emotional and Cognitive Perception of CBT

Despite technical readiness, students expressed mixed emotional responses toward CBT. While several agreed that CBT is fast and practical, many also admitted to feeling anxious and uncertain during the exam. The lowest mean scores appeared in statements related to stress and willingness to continue using CBT in future exams. This supports the hypothesis that inconsistent exposure to digital tools—particularly in exam-only contexts— negatively impacts emotional comfort and confidence. Students appeared

more comfortable using smartphones for informal or entertainment purposes than for high-stakes assessments.

3. Comparison with Previous Research

To contextualize the findings, a comparison with previous literature was made (see Table 1). The current study's results align with those of Prahda & Priyatmojo (2020), who also reported high technical acceptance but moderate emotional hesitation. Likewise, the findings resonate with Ubulom & Wokocha (2017), where urban students showed higher readiness than their rural counterparts—mirroring how pesantren students with restricted access demonstrate caution. Meanwhile, Chukwuma-Nosike & Chukwuma (2020) affirmed the system-level efficiency of CBT, while this study contributes a student-centered perspective from a unique institutional setting.

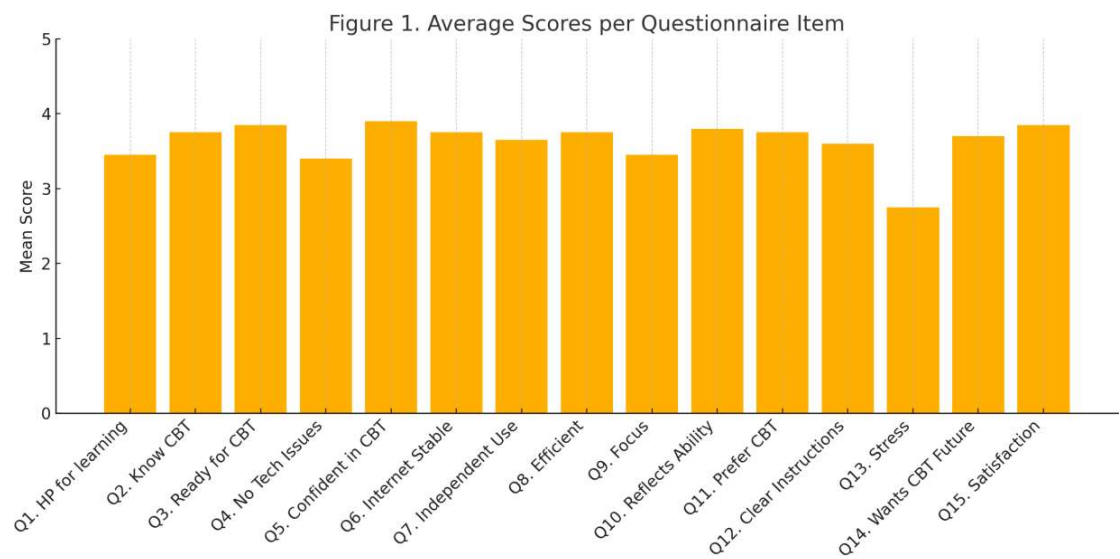**Table 1.** Comparison of Study Findings with Previous Research

Study/Author	Year	Main Findings	Comparison with Current Study	Key Differences/Similarities
Prahda & Priyatmojo	2020	Students perceived Android-based CBT positively, though some expressed anxiety and uncertainty.	Similar perception patterns; our study also found positive perception mixed with anxiety.	Both measure student attitudes; current study adds pesantren context.
Ubulom & Wokocha	2017	Urban students showed higher CBT readiness than rural students, influenced by access and skills.	Findings align with the difference in readiness due to digital exposure and school context.	Both examine rural vs. urban gap; current study focuses on religious schools.
Chukwuma-Nosike & Chukwuma	2020	CBT offers administrative efficiency and reduces exam fraud in university-level settings.	Focus differs: ours is student-centered, theirs administrative. Both confirm CBT's efficiency.	Study at tertiary level; our study extends findings to junior secondary context.
Current Study	2025	Students with limited digital exposure felt technically capable but emotionally unprepared.	N/A	Current study emphasizes emotional factors in limited-exposure environments.

(Source: Primary data, 2025)

Table 1 highlights how the findings of the current study relate to previous research, showing both points of convergence and divergence. The perception pattern observed—technical capability accompanied by emotional anxiety—aligns with Prahda & Priyatmojo

(2020), who similarly reported positive responses mixed with uncertainty. The comparison with Ubulom & Wokocha (2017) reinforces that environmental context strongly shapes CBT readiness, while the present study contributes a unique pesantren perspective that has been largely overlooked. Meanwhile, Chukwuma-Nosike & Chukwuma (2020) emphasize administrative efficiency at the university level, differing in focus but still supporting the broader conclusion that CBT systems function effectively. Overall, this study extends prior work by foregrounding emotional readiness and limited digital exposure among junior secondary students in a pesantren environment.

Figure 1. Average Scores per Questionnaire Item

Figure 1. Average Scores per Questionnaire Item

Source: Primary data, 2017

Figure 1 shows that items related to technical readiness (e.g., stable internet, no technical issues) had higher average scores, while emotional comfort and future preference for CBT scored lower

Discussion

The findings of this study reveal that students at MTs Darussalam Impa-Impa exhibit moderate levels of technical readiness but low emotional acceptance toward smartphone-based Computer-Based Testing (CBT) in English final examinations. While the majority of students were able to navigate the CBT interface and access stable internet connections, they expressed anxiety, hesitation, and reluctance to adopt CBT for future assessments. These results support the initial hypothesis, which predicted that limited and irregular digital exposure would negatively influence both readiness and perception. The findings are also consistent with previous research conducted by Prahda and Priyatmojo (2020) and Ubulom and Wokocha (2017), who highlighted similar tensions between technical competence and emotional readiness among students with varying degrees of access to digital tools. indicating that digital familiarity remains a key determinant of students' comfort with new assessment technologies.

These similarities and differences are likely due to contextual factors such as school policy, rural environment, and religious restrictions on digital device usage. Unlike studies

conducted in urban or university settings where students use digital tools regularly, the current study took place in a pesantren environment where students are only permitted to use smartphones during examinations. This limited exposure may have heightened students' stress levels and reduced their sense of control during the CBT process. Additionally, while the questionnaires used in this study were adapted from validated instruments, the cultural and institutional differences could have influenced how students interpreted items related to confidence, stress, and preference. suggesting that construct validity may be partially shaped by the students' unfamiliarity with digital testing contexts.

The synthesis of these findings with existing literature highlights both alignment and divergence. Like Prahda and Priyatmojo (2020), this study confirms that students appreciate the speed and practicality of CBT. However, unlike their study—conducted in a university context with routine digital access—this research demonstrates that students who encounter CBT only during exams tend to perceive it as stressful and less fair. This divergence underscores the role of consistent digital exposure in shaping CBT acceptance and effectiveness. Furthermore, the study expands upon the work of Chukwuma-Nosike and Chukwuma (2020) by shifting the lens from system-level benefits to student-centered experiences in under-resourced educational settings. thereby broadening the scope of CBT research to include emotionally vulnerable learner groups.

The implications of these results contribute significantly to the development of technology-enhanced assessment theory and its application in culturally and technologically diverse contexts. Specifically, this study highlights the need for a more context-sensitive implementation framework for CBT, one that takes into account not only infrastructure readiness but also the emotional and pedagogical needs of students. By doing so, the findings support the expansion of the Technology Acceptance Model (TAM) to include socio-cultural and institutional constraints as moderating variables in students' acceptance of CBT. such as religious rules limiting device use, rural technological limitations, and students' psychological preparedness. Additionally, these findings open avenues for further research, particularly in examining the effectiveness of CBT training modules or digital simulation practices in pesantren and rural schools before high-stakes exams. Future studies could employ mixed-method designs to capture deeper insights into students' cognitive and affective responses and track changes over time through longitudinal analysis. which may help identify developmental patterns in digital confidence among low-exposure student populations. Exploring teacher readiness, parental attitudes, and institutional policies related to digital assessment in faith-based schools may also offer valuable perspectives to improve the holistic adoption of CBT in Indonesia and other similar educational ecosystems. ensuring that all stakeholders collectively support a smoother transition to technology-enhanced assessments.

Conclusion

This study examined the readiness and perception of Grade 9 students at MTs Darussalam Impa-Impa toward smartphone-based Computer-Based Testing (CBT) during English final examinations and found that, although students demonstrated adequate technical readiness, their emotional preparedness remained low due to limited digital exposure throughout the school year. These findings highlight that CBT success in semi-rural pesantren contexts depends not only on infrastructure and device familiarity but also on students' emotional adaptation, assessment culture, and institutional support. The study contributes new insight by showing that restricted and episodic digital access can heighten

anxiety and reduce confidence during high-stakes assessments, emphasizing the need for more context-sensitive implementation strategies. Future research should explore longitudinal exposure, pre-exam CBT training modules, and teacher perspectives to develop guidelines that better align digital assessment practices with the technological realities and cultural norms of religious and rural schools.

References

"Perceived challenges and improvement strategies for computer-based test in the Nursing and Midwifery Council of Nigeria final examination" (2024). *BMC Medical Education*. SpringerLink

"Smartphone Based Testing in Qur'an Hadith Education" (2024). *Indonesian Journal of Islamic Studies*.

"The digital divide in online education: Inequality in digital readiness of students and schools" (2023). *Education & Information Technologies*. PubMed

Abdulkareem, Z., & Lennon, M. (2023). Impact of digital divide on students' performance in computerized UTME in Nigeria. *Information Development*. OUCI

ACCEPTABILITY OF COMPUTER BASED TEST AMONG PRE-TERTIARY INSTITUTION

Au, W. (2022). *Unequal by design: High-stakes testing and the standardization of inequality*.

Choudhury, A., Kuehn, A., Shamszare, H., & Shahsavar, Y. (2023). Analysis of mobile app-based mental health solutions for college students: a rapid review. *Healthcare*, *11*(2), 272.

Chukwuma-Nosike, C., & Chukwuma, P. (2023). Computer-based-test (CBT) evaluation innovation: prospects in curriculum implementation in nigeria. *Journal of Agriculture and Food Sciences*, *21*(2), 331–343.

Estrada, A. (2022). *Teacher Cognitive Fatigue from State of Texas Assessment of Academic Readiness Standardized Testing Practices*. Grand Canyon University.

Fegasanti, P. A., & Priyatmojo, A. S. (2020). Students' perception on the use of android-based exam browser to assess final examination. *ELT Forum: Journal of English Language Teaching*, *9*(2), 162–170.

Hasliza Syed Hamid, S. S., & Sueb, R. B. (2025). Bridging Educational Gaps through Digital Competency: A Systematic Literature Review on Teacher Readiness and Student Self-Concept in Rural Education. *International Journal of Academic Research in Business and Social Sciences*. HRMars

Hidayati, D., Nurhikmah, N., & Kusumadewi, R. A. (20xx). Bridging the digital divide: Assessing teacher readiness for technology integration in Madrasah Ibtidaiyah. *International Journal of Education and Learning*. pubs2.ascee.org

Imanda, A. P., Apriliyani, D., & Anjani, D. A. S. P. (20xx). Challenges and solutions for the implementation of computer-based test learning evaluation at SMKN 2 Bandung. *Curricula: Journal of Curriculum Development*. E-Journal UPI

Karakostantaki, E., & Stavrianos, K. (2021). The use of ICT in teaching religious education in primary school. *Education and Information Technologies*, *26*, 3231–3250.

Kingsley, O., Unegbu, P. O., Atsenokhai, B., & Patani, S. J. (2022). Administration, tertiary institutions, examinations, service delivery. *BW Academic Journal*, 10.

Larson, E. M. (2024). Smartphones and the education of religious youth in Indonesia: Highway to hell or path of righteousness? *Social Compass*, *71*(1), 119–135.

Leyens, L., Northcott, C. A., Maloney, L., McCarthy, M., Dokuzova, N., & Pfister, T. (2024). Why language matters in digital endpoint development: harmonized terminology as a key prerequisite for evidence generation. *Digital Biomarkers*, *8*(1), 1–12.

Lynch, S. (2022). Adapting Paper-Based Tests for Computer Administration: Lessons Learned from 30 Years of Mode Effects Studies in Education. *Practical Assessment, Research & Evaluation*, *27*, 22.

Malasowe, B. O., Akazue, M. I., Okpako, E. A., Aghware, F. O., Ojie, D. V., & Ojugo, A. A. (2023). Adaptive Learner-CBT with Secured Fault-Tolerant and Resumption Capability for Nigerian Universities. *International Journal of Advanced Computer Science and Applications*, *14*(8).

Marlina, S., & Supratman. (2023). The Effectiveness of the Computer-Based Test in Madrasah Ibtidaiyah Private Piladang. *Jurnal CERDAS Proklamator*. cerdas.bunghatta.ac.id

Mudi, B., Musa, E. O., & Ezekiel, L. A. (2024). THE ROLES OF COMPUTER BASED TESTING EXAMINATION ON LEARNING OUTCOMES OF UNDERGRADUATE STUDENTS OF NIGERIAN UNIVERSITIES AND CURRICULUM DELIVERY. *ALL CORRESPONDENCE TO*, 64.

Nazneen, F., & Shelton, C. (2023). *The impact of a cognitive restructuring smartphone application on the perceived stress levels of undergraduate freshman students*.

Ndema, S. C. (2025). E-ADMINISTRATION AND EDUCATIONAL DEVELOPMENT IN NIGERIA: A

Nurhikmah, H., Abdul Gani, H., Putra Pratama, M., & Wijaya, H. (20xx). Development of an Android-based Computer Based Test (CBT) in Middle School. *Journal of Education Technology*. E-Journal Undiksha

Okoye, G. N., Enebechi, R. I., & Arisokwu, E. J. (2023). *The Perceptions of Students Towards the Use of Computer Based Test (CBT) Mode of Examination in Higher Institution in Anambra State*.

Palagolla, W. W. N. C. K., & Wickramarachchi, A. P. R. (2019). Promoting effective application and management of ICT to enhance performance in secondary schools. (preprint). arXiv

Putri Saputri, I. D., et al. (2024). Implementation of Web-Based CBT Application in Al-Islam & Kemuhammadiyahan Learning. *Tadrib*. Jurnal UIN Raden Fatah (catatan: merujuk pada sumber yang sama dengan nomor 6, namun bisa dipertimbangkan jika isi berbeda)

Rodríguez, E. A. S., Vilas, A. F., & Díaz Redondo, R. P. (2023). Impact of Computer-Based Assessments on the Science's Ranks of Secondary Students. (preprint). arXiv

Routledge.

Saputri, I. D., & Inayati, N. L. (2024). Implementation of Web-Based CBT Application in AIK Learning at Muhammadiyah PK School. *Tadrib Journal*. Jurnal UIN Raden Fatah

Siregar, T. M., Armanto, D., Frisnoiry, S., & Ruslan, D. (2025). Effective Solutions for Implementing Android-Based Computer-Based Testing (CBT) in Vocational High Schools as a Digital Assessment Innovation. *Jurnal Penelitian Pendidikan IPA*, 11(1). JPPIPA Unram

STUDENTS IN SOUTHWESTERN NIGERIA. *Indonesian Journal of Educational Technology*, *2*(2), 21–31.

STUDY OF JAMB ADMISSION POLICIES. *Nternational Journal of Academia and Educational Research*, *8*(7), 23–53.

Tijani, O. K., Opesemowo, T., Akingbemisilu, A. A., & Otitoju, G. J. O. G. J. (2023).

Ubulom, W. J., & Wokocha, K. (2017). Readiness and acceptability of computer-based test (CBT) for post-university matriculation examinations (PUME) among urban and rural

senior secondary school students in Rivers State. *International Journal of Innovative Social & Science Education Research*, *5*(3), 51–60.

Ukwueze, C. A., & Uzoagba, O. N. (2021). ICT Literacy and Readiness for Computer Based Test Among Public Secondary School Students in Anambra State. *New Media and Mass Communication*. iiste.org

Vissenberg, J., d'Haenens, L., & Livingstone, S. (2022). Digital literacy and online resilience as facilitators of young people's well-being? *European Psychologist*.

Appendix 1: Questionnaire Items

Nama :
Kelas :
    9A
    9B
    9C
Usia:
Jenis Kelamin:

Berikan jawaban Anda dengan memberi tanda centang (✓) pada skala berikut:

1 = Sangat Tidak Setuju | 2 = Tidak Setuju | 3 = Netral | 4 = Setuju | 5 = Sangat Setuju

1. Saya terbiasa menggunakan HP untuk belajar dan mengerjakan tugas.
2. Saya mengetahui cara menggunakan aplikasi CBT di smartphone.
3. Saya merasa siap mengerjakan ujian Bahasa Inggris menggunakan CBT berbasis HP.
4. Saya tidak mengalami kesulitan teknis saat mengikuti CBT.
5. Saya merasa percaya diri saat mengikuti ujian Bahasa Inggris berbasis CBT.
6. Koneksi internet saya cukup stabil saat mengikuti ujian CBT.
7. Saya bisa mengerjakan soal CBT sendiri tanpa bantuan siapa pun.
8. CBT membuat proses ujian Bahasa Inggris menjadi lebih cepat dan efisien.
9. CBT membuat saya lebih fokus dibanding ujian kertas/manual.
10. Saya merasa hasil ujian saya mencerminkan kemampuan saya yang sebenarnya.
11. Saya lebih menyukai CBT dibanding ujian kertas untuk pelajaran Bahasa Inggris.
12. Saya merasa soal CBT mudah dipahami dan jelas instruksinya.
13. Saya mengalami stres atau tekanan saat mengikuti CBT.
14. 14.Saya ingin ujian Bahasa Inggris berikutnya tetap menggunakan CBT berbasis HP.
15. Secara keseluruhan, saya puas dengan pelaksanaan CBT dalam ujian Bahasa Inggris.

Appendix 2: Google Form Link

    The questionnaire was distributed through the following Google Form link:

https://docs.google.com/forms/d/e/1FAIpQLSfk2zu59wPRtzZ7BdZNUQyQcjc3
ZDJZXCCP8p2 OntPqtu9-Ww/viewform?usp=header

Table 2. Descriptive Statistics of Students' Readiness and Perception Toward Smartphone-Based CBT in English Examinations

Questionnaire Item	Mean	SD	Median	Min
I am accustomed to using a smartphone for studying and completing assignments.	3.90	0.91	4.00	3
I know how to use the CBT application on a smartphone.	3.75	1.02	4.00	1
I feel ready to take the English exam using smartphone-based CBT.	3.65	1.31	4.00	1
I did not experience technical difficulties during the CBT.	3.75	1.12	4.00	1
I feel confident when taking the English exam using CBT.	3.45	1.10	3.00	1
My internet connection was stable during the CBT.	3.80	0.83	4.00	3
I can complete the CBT independently without assistance.	3.75	0.97	4.00	1
CBT makes the English exam process faster and more efficient.	3.60	1.19	4.00	1
CBT helps me stay more focused compared to paper-based exams.	2.75	1.25	3.00	1
I feel that my test results reflect my actual abilities.	3.70	1.13	4.00	1
I prefer CBT over paper-based tests for English exams.	3.85	1.04	4.00	1