



Students' Perceptions of Using Computer Based-Test (CBT) for Summative Assessment in *Mata Kuliah Umum (MKU) Bahasa Inggris* Course at Universitas Negeri Padang

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Abstract

This research aims to review and explore students' perceptions of the use of computer-based test (CBT) in the final examination of *Mata Kuliah Umum (MKU) Bahasa Inggris* at Universitas Negeri Padang. For this research, an online questionnaire comprising 15 statements which adapted from Sauti (2020) were utilized. Also, an interview with consisting of 5 questions were constructed by the researcher. The participants were 97 students from the different study programs and faculties at UNP. The findings from the data analysis show that most students positively perceive the use of CBT in their final exams. The positive was revealed by indicating its perceived usefulness, academic benefits, pleasantness, and efficiency compared to PBT methods. On the other side, there were some obstacles that students faced when using CBT that revealed by indicating the need for extra time of familiarity with operating devices, the internet connection, technical issues, potential health concerns, and the test schedules. The findings of this research are expected to serve as guidance for educators in appraising future assessments, as well as a source of reference for subsequent researchers conducting more advanced investigations.

Keywords:

Perception, Obstacle, CBT, MKU Bahasa Inggris, Final Examination

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INTRODUCTION

Assessment plays an important role in education, serving as a compass that guides both educators and learners toward the successful navigation in decision-making throughout the teaching and the learning journey. According to Refnaldi et al (2017), state that assessment empowers educators to gauge their success in imparting knowledge to learners. In this context, assessment becomes a tool that gives educators insight into the effectiveness of teaching methods and students' understanding of the material. Understanding its significance, it is essential to

explore various types of assessment that contribute to a comprehensive evaluation of students' progress and academic achievement.

Assessment in the educational context has various aspects that include various types of evaluation, including final examinations. Final semester exams are an important form of evaluation in assessing students' understanding and achievement in a subject. According to Brown (2004), there are four types of assessments that have been developed; formal and informal assessment, formative assessment, summative assessment. In the exploration of assessment methods, one prominent approach involves various types of assessments, one of which is a test. Brown (2004), stated that there are five types of test; first is aptitude test, proficiency test, placement test, diagnostic test, and the last is achievement test.

Some of these test embrace the technology-driven approach of Computer-Based Test (CBT), while others are the traditional method known as Paper-Based Test (PBT). Students choose CBT or PBT depending on their individual preferences and needs. Some students may prefer CBT because they feel more comfortable with technology or because they believe that is CBT is more efficient. On the other hand, other students may choose PBT because they are more accustomed to traditional exam methods or because they feel more focused when using paper and pencil. According to Priscari and Danielson (2017), state that CBT also provides a unique test-taking experience. Unlike the usual paper tests, CBT can have multimedia like videos or pictures, making the test more like real-life situations where students can interact with the content. In addition, factors such as internet speed, technology accessibility and personal preferences can also influence students' choice between CBT and PBT.

The implementation CBT alongside PBT reflects the diverse assessment methods utilized by Universitas Negeri Padang to evaluate student learning. This approach aligns with UNP's commitment to enhance students' technological literacy and optimizing their examination experiences. According to Nofrion (2024) as the head of *MKU* in UNP, states that *MKU* online learning at UNP encourages the development of CBT exam applications as part of efforts to improve student technological literacy. This step is in line with UNP's vision to enrich the learning experience of students who are accustomed to use internet and computer technology. Therefore, it is necessary to design learning activities and methods that arouse student interest in improving technological literacy.

He also states that the online learning policy of *MKU* is part of the strategy of UNP in adopting digital learning gradually. UNP plans to continue online learning with *MKU* as an example of online learning implementation at UNP. Nevertheless, in certain study programs a 50:50 policy between online and face-to-face learning is still applied. However, *MKU* in particular has switched completely to online learning with two types, namely synchronous and asynchronous. Lecturers have the flexibility to choose online learning methods that suit their preferences, either through *Zoom* or UNP *E-learning*. He also explains that the implementation of *MKU* online learning also contributes to reduce the use of paper through the implementation of paperless pattern. The use of CBT is one of the effortss to reduce dependence on paper in the learning process.

He continued with elaborate that *MKU* online learning policy is a decision of the university's rector, while the implementation of CBT is an initiative of the *Pusat Pendidikan, Pembelajaran, dan Merdeka Belajar* in UNP. All students who take *MKU* are required to take the final examination using CBT, with socialization to lecturers and students through guidelines, training, and trials and video tutorials. Thus, the implementation of CBT has been supported by facilities and infrastructure that facilitate students success in taking the exam.

In summary, the researcher seeks to explore students' perceptions of the implementation of CBT for their final exams. This study is expected to bring new contributions to the field of education. Additionally, adopting CBT optimize conventional examination procedures. By employing a questionnaire, the research aims to examine students' perceptions of CBT implementation for final exams. Based on the provided details, the researcher is interested in analyzing the following title "Students' Perceptions of Using Computer Based-Test (CBT) for Summative Assessment in *Mata Kuliah Umum (MKU) Bahasa Inggris* Course at Universitas Negeri Padang"

RESEARCH METHOD

In this study, the researcher employed a descriptive-quantitative method because the research explained by phenomena and the collected data numerically analyzed. The approach involves gathering numerical data and employing analytical methods. The findings are then presented in more simple way that enhances reader comprehension. Ninety-seven from the students of UNP, from the different study programs and faculties, have participated in this study. Questionnaires and Interviews were part of the instruments employed in this research.

RESULT AND DISCUSSION

Research Finding

1. Students' Perceptions of Using CBT related to their Self-Concept

Table 1. The Result of Students' Responses on the Questionnaire

Questionnaire Item	Total Score	Percentage	Category
Item 1	338	87%	Very Strong
Item 2	306	78%	Strong
Item 3	319	82%	Very Strong

Based on the table above, the first item receives the category of very strong with the total score of 338 and the percentage of 87%. The second item receives the category of strong with the total score of 306 and the percentage of 78%. The third item receives the category of very strong with the total score of 319 and the percentage of 82%. In that means, students felt that CBT was very useful, and helps them to increase their grade academic. The last, it was a pleasant experience for them.

2. Students' Perceptions of Using CBT related to their Positive Attribution

Table 2. The Result of Students' Responses on the Questionnaire

Questionnaire Item	Total Score	Percentage	Category
Item 4	307	79%	Strong
Item 5	324	83%	Very Strong
Item 6	329	84%	Very Strong

The fourth item receives the category of strong with the total score of 307 and the percentage of 79%. The fifth item receives the category of very strong with the total score of 324 and the percentage of 83%. The sixth item receives the category of very strong with the total score 329 and the percentage of 84%. In conclusions, students felt that they prefer using CBT because they able to know the result directly. Also they felt that CBT is more efficient, and easier to read than PBT.

3.

Students' Perceptions of Using CBT related to their Self-Efficacy

Table 3. The Result of Students' Responses on the Questionnaire

Questionnaire Item	Total Score	Percentage	Category
Item 7	316	81%	Very Strong
Item 8	334	86%	Very Strong
Item 9	336	86%	Very Strong

The seventh item receives the category of very strong with the total score of 316 and the percentage of 86%. The ninth item receives the category of very strong with the total score of 336 and the percentage of 86%. From these result, we can say that students felt that marking the answer is more accurate when using CBT. Also they prefer using CBT because it was easy and practical. The last is the students felt that the test using CBT is more saving time.

4. Students' Perceptions of Using CBT related to their Problem-solving Skills

Table 3. The Result of Students' Responses on the Questionnaire

Questionnaire Item	Total Score	Percentage	Category
Item 10	288	74%	Strong
Item 11	297	76%	Strong
Item 12	309	79%	Strong

The tenth item receives the category of strong with the total score of 288 and the percentage of 74%. The eleventh item receives the category of strong with the total score of 297 and the percentage of 76%. The twelfth item receives the category of strong with the total score of 309 and the percentage of 79%. It can be concluded that the students felt more confident to get high score, and also they can understand the questions easily when using CBT. The last is the students felt that they believe by using CBT will enhance their reading skills when answering questions using technology.

5. Students' Perceptions of Using CBT related to their Background

Table 4. The Result of Students' Responses on the Questionnaire

Questionnaire Item	Total Score	Percentage	Category
Item 13	291	75%	Strong
Item 14	292	75%	Strong
Item 15	304	78%	Strong

The thirteenth item receives the category of strong with the total score of 291 and the percentage of 75%. The fourteenth item receives the category of strong with the total score of 292 and the percentage of 75%. The last item receives the category of strong with the total score of 304 and the percentage of 78%. Thus, we can say that many students used to do exercises and doing homework by using computer at home. The last, the students do not feel nervous when they do test using CBT.

6. The Obstacles that Students Faced when using CBT in their Final Exam

The aim of this part is to review and explore students' obstacles when using CBT in their *MKU Bahasa Inggris* final exam. The result data was obtained from the interview with ten students. The interview questions are divided into five parts as stated as Jamiludin et al (2017) theory of students' obstacles when using CBT; first is need for extra time, internet connection, technical issues, potential health issues, and the schedules.

a) Need for Extra Time

The questions are; Have you experienced any obstacles/difficulties in becoming familiar with operating devices during CBT? How do you feel about the time required to adapt to use CBT? Can you share any specific instances where using CBT was confusing for you with require more time?

"Yes. I had difficulty with the login process, which delayed my start time. I found it distracting having to learn the system during the actual exam. The screen froze during my test, and I was not sure what to do, which wasted a lot of time" – (Student 1)

"Absolutely. It took me some time to get used to the layout of the test screen. It was frustrating because the adaptation period feels like it was cutting into my exam time. In one test, I misunderstood how to save my progress and feared I would lose my work." – (Student 2)

"Yes. I was not sure how to go back to previous questions. I find it overwhelming to learn the system and focus on the exam content simultaneously. I could not locate the help menu when I needed it, which was very frustrating for me." – (Student 3)

"Yes, I have. The system lagged occasionally, making it hard to follow through with the question smoothly. It was quite overwhelming and makes me anxious. I once spent several minutes trying to wait the lagged system to back normally." – (Student 4)

"Definetely. I was unfamiliar with this CBT software system. It was my first time to use this type system. It was stressful because I worry about not having enough time to complete the test. I mistakenly thought I needed to finish each question in order before moving on." – (Student 5)

“Yes. I found it challenging to get used the system at first because I am not very tech-savvy. I feel it was a disadvantage, especially for those who are not tech-savvy. I misunderstood the instructions on how to save my progress, causing some stress.” – (Student 6)

“Yes. I struggled a bit with the login process and wasted a few minutes there. I felt rushed trying to get used to the system while also focusing on answering questions. There was a moment when I could not find the submit button and panicked, thinking I would run out of time.” – (Student 7)

“Yes, of course. It took me a while to figure out how to navigate through the test. It adds unnecessary stress to the exam process. There was a moment when the screen went blank, and I panicked.” – (Student 8)

“Yes, I have. I had trouble adjusting to the new system because I am more used to PBT. It was make me anxious because I had to balance adapting to the CBT and answering the questions quickly. There was a moment when the bluescreen, and I did not know if I should refresh or wait. So I ended up spending extra time on each question.” – (Student 9)

“Of course. There was a moment when the system lagged, and I was not sure if my answers were being recorded properly. I feel rushed, which makes it hard to concentrate on the test itself. I misunderstood how to submit my answers at the end, and I had to seek help, which took up valuable time.” – (Student 10)

The results of the interviews with the respondents show a new invention about the students faced the challenges using CBT during their English exams, especially in needing of extra time. Common issues included difficulties with the login process, navigating the system, and dealing with technical problems like screen freezes and system lags. These obstacles caused stress, wasted time, and distracted them from focusing on the exam content.

b) Internet Connection

The questions are; Have you ever faced unexpected slowdowns or disruptions in your exam due to the internet? How has the reliability of the internet connection affected your experience with CBT?

“Yes, the internet lagged right in the middle of my exam, which made me anxious. I kept thinking about how much time I was losing. Everytime the internet slowed down, it made me anxious. It was not easy to stay focused and calm.” – (Student 1)

“During the exam, the internet disruption was so bad that I had to move to another room with a better connection. It was quite distracting. Unstable internet made me anxious. I found myself rushing through the questions out of fear of losing connection.” – (Student 2)

“Yes, the internet cut out briefly, and I panicked because I was not sure if my answers were saved. The lost connection made me very anxious, as I was constantly worried about losing my progress.” – (Student 3)

“Yes, I have. The slow connection made it difficult to submit my answers, and I was worried I might run out of time. I had to spend extra time waiting

for questions to load, which reduced the time I had to answer them.” – (Student 4)

“Of course, there was a disruption in the internet connection, and it took a while to reconnect and continue the exam. It disrupted my concentration, making it hard to focus on the questions.” – (Student 5)

“Absolutely. I experienced a brief disconnection, which caused me to lose focus and become anxious about finishing on time. Having a good internet connection helps me complete the exam without unnecessary interruptions.” – (Student 6)

“I experienced some lag during my exam, which made it difficult to select answer quickly. A stable connection ensures that I can navigate through the questions quickly and efficiently.” – (Student 7)

“Once, the internet issue was so bad that I had to borrow my friend’s device. With a reliable internet connection, the CBT process is much smoother and less frustrating.” – (Student 8)

“I faced several interruptions due to internet connectivity, which really disrupted my focus. Stable internet helped me to stay calm and focused throughout the test.” – (Student 9)

“Definitely. The internet was so slow that I could not move to the next question. When the internet was stable, I felt more confident and focused.” – (Student 10)

The results of the interviews with the respondents show a new invention about the students faced the challenges using CBT during their English exams. Students faced significant challenges with internet connectivity during CBT leading to anxiety, lost time, and difficulty maintaining focus. Frequent lag, disruptions, and slowdowns caused frustration and rushed responses. A stable and reliable internet connection was essential for a smooth testing experience, enabling students to remain calm and focused. This highlights the critical need for dependable internet to ensure effective CBT system.

c) Technical Issues

The questions are; have you ever experienced power outages or technical glitches during the CBT exam? How did such technical issues impact your exam performance and concentration?

“Yes, the power went out once and the device shut down unexpectedly. I lost valuable time and felt rushed to finish the test.” – (Student 1)

“Yes, my screen froze and I had to restart the device. It made me nervous about whether I would lose my progress.” – (Student 2)

“Yes, of course. My device crashed and I lost some of my answers. I felt anxious and worried about not being able to complete the exam.” – (Student 3)

“I experienced a technical glitch where the screen went blank. I had to spend extra time figuring out the problem, which was stressful.” – (Student 4)

“I have not had a power outage, but I have had some minor glitches. I had to spend extra time checking if my answers were saved, which was frustrating.” – (Student 5)

“The software stopped responding during my exam. The software issues made me nervous and I could not think clearly.” – (Student 6)

“Yes, I experienced a power outage once during my exam. The power outage made me really anxious and I lost my focus.” – (Student 7)

“I had a technical glitch where the screen froze for a few minutes. When the screen froze, I panicked and it took me a while to get back on track.” – (Student 8)

“There was a time when the system logged me out unexpectedly. The unexpected log-out disrupted my flow and I could not remember where I left off.” – (Student 9)

“Yes, I experienced a sudden reboot of my computer device. I was worried about the glitches happening again, which distracted me.” – (Student 10)

In summary, the students’ statements reveal the disruptive impact of technical issues during CBT. Power outages, device shutdowns, screen freezes, and software glitches led to anxiety, frustration, and loss of focus. Even minor disruptions like unexpected log-outs or system reboots caused panic and hindered performance.

d) Potential Health Concerns

The questions are; have experienced any discomfort or health issues due to prolonged device usage during exams? How do you feel about prolonged use of devices during exams in terms of its impact on your health?

“Yes, my eyes often feel strained after staring at the screen for too long. I am concerned about the long-term effects on my eyesight and overall health.” – (Student 1)

“Sometimes, I get headaches from looking at the screen for extended periods. It worries me that prolonged device usage might lead to more health issues in the future.” – (Student 2)

“Sometimes, I feel my neck and shoulders becoming stiff from sitting in front of computer. It was challenging to balance the need to complete the exam with taking care of my health.” – (Student 3)

“Not really, but I do feel a bit tired after a long session of using the computer for exams. I try not to think about it too much and focus on completing the exam.” – (Student 4)

“I have had some back pain from sitting in the same position for too long during exams. It was something I have become accustomed to, but I do try to be mindful of taking breaks.” – (Student 5)

“No, but I do try to take short breaks to prevent any discomfort. I wish there were some breaks during exams to reduce the strain on our bodies.” – (Student 6)

“Yes, sometimes I feel restless and find it hard to concentrate due to discomfort. It was exhausting and seems to affect my performance negatively.” – (Student 7)

“Occasionally, I experienced dry eyes from not blinking enough while focusing on the screen. I believe it was not healthy to use devices for such long periods.” – (Student 8)

"I sometimes experienced dizziness from prolonged screen time. It was uncomfortable, and I wish we had shorter screen times." – (Student 9)

"I feel more fatigued overall after a CBT exam compared to a PBT one. It makes me feel more tired and strained compared to traditional exams." – (Student 10)

The students' responses reveal significant health concerns and discomforts due to prolonged device use during CBT. Common issues include eye strain, headaches, neck and shoulder stiffness, back pain, and overall fatigue. These physical discomforts affect concentration and performance negatively. Some students also expressed a desire for breaks during exams to mitigate these effects.

e) The Schedules

The question is; have you ever felt fatigued or exhausted due to the longer-than-usual test session? If yes, please elaborate.

"Yes, I felt very tired because the test seemed to go on forever. Sitting in front of the screen for such a long time was exhausting." – (Student 1)

"Definitely, by the end of the test, I was really fatigued. It was hard to stay focused for so long without a break." – (Student 2)

"Yes, the long duration made me feel drained. I found it challenging to maintain my concentration throughout the entire test." – (Student 3)

"I did feel exhausted because the test took much longer than usual. It was difficult to stay alert and perform well until the end." – (Student 4)

"Yes, I felt quite fatigued. The length of the test made it hard to keep my energy levels up, and I struggled to focus on the questions." – (Student 5)

"I felt very tired during the test. The long hours in front of my computer made it hard to stay concentrated and alert." – (Student 6)

"Yes, I experienced a lot of fatigue. The extended time required for the test made it tough to maintain my performance." – (Student 7)

"Absolutely, I felt exhausted because the test took much longer than I expected. It was hard to stay engaged the whole time." – (Student 8)

"Yes, the lengthy test made me feel really worn out. I found it hard to stay focused and answer the questions correctly until the end." – (Student 9)

"I did feel fatigued because the extended time required to complete the test was mentally and physically tiring." – (Student 10)

The students' statements collectively highlight a common challenge experienced during CBT in their final exams. Prolonged screen time made it challenging to maintain concentration and alertness, impacting their performance in answering the questions.

Discussion

Based on the findings, it can be concluded that there are two conclusions that the researcher obtained from this research. First is most students had a positive perception of using CBT in the final *MKU Bahasa Inggris* exam. This conclusion comes from data collected through a questionnaire completed by 97 students. Many students shared their thoughts on participating in CBT during the final exam. This

finding aligns with Putri (2021) assertion that CBT is an effective evaluation system in her study.

The positive perception indicates a high level of satisfaction among the students, it can be concluded from the first-fifteenth statements that indicates; (1) the majority of students perceived CBT as highly beneficial, (2) it is apparent that many students believed CBT positively impacted their academic performance, (3) it suggests that most student found CBT to be enjoyable, (4) it is evident that a considerable portion of students favored immediate result availability through CBT, (5) the majority of students perceived CBT as easier to read, (6) it is apparent that a significant proportion of students favored the efficiency of CBT over PBT, (7) most students preferred CBT for its accuracy in marking answer, (8) it is evident that most students found CBT to be convenient, (9) CBT was perceived as a time-saving option by the majority of students, (10) it is evident that many students felt confident in their performance with CBT, (11) it is apparent that most students found CBT to facilitate better question comprehension, (12) it is evident that a significant portion of students believed CBT could improve their reading abilities, (13) many students were familiar with computer-based exercises at home, (14) most students admitted to use computers for homework at home, (15) and lastly it is evident that many students did not experience test anxiety with CBT.

The second, on the other side, a few students faced obstacles and challenges with CBT during their final exams. The difficulty might stem from their varying skills and abilities. This conclusion comes from data collected through a interview completed by 10 students. Many students shared their thoughts on participating in CBT during the final exam. This finding aligns with Jamiludin, Darnawati, and Uke (2017), stating that their study highlighting the challenges of implementing CBT. Including technical issues and longer testing schedules. Also the authors recommend that students practice more with CBT and that teachers motivate them to become accustomed to computer-based testing.

The obstacles that they faced indicates of complaint among the students, it can be concluded from the tenth statements of the interview that indicates; (1) first is need for extra time. Students faced significant obstacles in becoming familiar with the CBT system. Common issues included difficulty with the login process, system lags, and understanding how to save progress. These challenges led to feeling of distraction, stress, and anxiety, as students felt that adapting to the system took valuable time away from answering the exam questions. (2) second is the internet connection. Unreliable internet connections significantly disrupted students' exam experiences. Frequent internet slowdowns and disconnections caused anxiety and loss of focus. Students reported feeling rushed and worried about losing their progress, which added to their stress and negatively impacted their ability to concentrate on the exam. (3) third is technical issues. Technical glitches such power outages, screen freezes, and unexpected device shutdowns severely impacted student' exam performance. These issues led to feelings of anxiety, frustration, and panic, as students worried about losing their progress and not being able to complete the exam on time. Even minor disruptions required extra time to resolve, which further distracted students from their test-taking efforts. (4) the fourth is potential health concerns. Prolonged use of devices exams caused various health issues for

students, including eye strain, headaches, neck and shoulder stiffness, and back pain. These physical discomforts made it challenging for students to stay focused and maintain their performance throughout the exam. (5) the last is the schedules. The extended duration of CBT exams led to significant fatigue and exhaustion among students. They reported difficulty maintaining concentration and staying alert throughout the lengthy test session. The prolonged screen time and lack of breaks made it hard for students to keep their energy levels up, which negatively affected their ability to perform well on the exam.

Dewi, Saehu, and Budiman (2021), stating that their research uncovered a predominantly negative perception among participants toward using *Edubox* for evaluating their English performance. Technical problems encountered before and during the test contributed to this negative perception.

In conclusion, the analysis of students' perceptions regarding CBT implementation for final exams revealed generally positive and negative feedback. The positives are indicating its perceived usefulness, academic benefits, pleasantness, and efficiency compared to traditional testing methods. Meanwhile the negatives are indicating the familiarity with operating devices, the internet connection, technical issues, health concerns due to prolonged device use, and the fatigue from longer test sessions.

CONCLUSION

The aim of this study is to examine students' perceptions regarding the implementation of CBT in the final examination of *MKU Bahasa Inggris*. Upon thorough analysis of the data, it is evident that the majority of students hold favorable perceptions towards the implementation of CBT in the final exam of *MKU Bahasa Inggris*. Notably, the aspect of effectiveness indicators stands out the highest positive response among students, indicating that CBT has effectively contributed to enhance students' technological literacy and digital learning skills. However, despite the predominant positive feedback, it is important to note that there were also students who expressed negative sentiments towards the impact of CBT.

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