Students' Perception: Using Android-based Exam Browser as the Medium to Assess Examination

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Abstract

This study was to find out the students' perception on the use of Android- based Exam Browser as the medium to assess examination. This study used the qualitative survey method. The population of the study was the eighth and ninth grade students of SMPIT Tunas Cendikia Baturaja. The writer took all of the sample by applying total sampling consist of 85 students. The data collected through questionnaire, it consists of 35 statements. Then, the writer used percentage formula to analyze the data. The result of this study showed that there were many students who think that they were agree or had positive perception on the use of Android-based exam browser as the medium to assess examination in SMPIT Tunas Cendikia Baturaja. The data were in high criteria in each indicator. Students' interest/intention from the eighth graders (73,62%) and the ninth graders (64,90%), students' perceived usefulness from the eighth graders (74,07%) and the ninth graders (56,46%), students' perceived of ease of use from the eighth graders (59,26%) and the ninth graders (58,33%) and students' Android attitude from the eighth graders (68,52%) and the ninth graders (60,20%). From the result, students' anxiety from the nineth grade (44,39%) disagree or indicate to negative perception about the use of Android-based exam browser as the medium to assess examination in SMPIT Tunas Cendikia Baturaja. It was because Android-based Exam Browser still intimidated and made them feel afraid of making mistakes in using Android- based exam browser, beside that also anxious and nervous due to sometimes their Android did not as friendly as hangs, runs out of battery, and disconnected from the connection server.

*Keywords***: *Perception, Android-based Exam Browser, Examination.*

Introduction

Final semester exam is part of the evaluation aims to measure and assess student competencies or measures the achievement of students' learning competency outcomes taught by the teacher for a semester, so students can continue learning to the next material. The final semester exam, typically carried out conventionally using a Paper-Based Test (PBT), has slowly started to be replaced by Computer-Based Test (CBT). Utilization of computer technology is the right solution, so it is designed and made a computer-based examination system.

Computer-Based Test (CBT) is a test that can be used in environment that can be supervised or not supervised by the examiner, and can allows students to check their own

progress through self-assessment (Olumorin, et al., 2013). CBT is a new innovation in the era of digital technology, where CBT presents an online evaluation system or test managed by a server (Wati, et al., 2018).

Android-based Exam Browser is one of the secured web browsers for conducting online examination. It works in lock mode, so it prevents opening of any page, switching to unnecessary programs, operating system- specific key combinations and functions, leaving the browser secure at any time and opening gallery (Putra & Pamungkas, 2020). Therefore, the use of the browser-based android exam is expected to minimize the opportunities for students to cheat (Putra, et al., 2019). Android-based Exam Browser system is considered very beneficial with a realistic process, saving costs and time (Chikmah, 2016). Acording to a survey conducted in SMPIT Tunas Cendikia Baturaja, all the students have Android or Tablet out of a total of 129 students. Therefore, the school principal dared to implement an android-based exam browser system because all students owned and used tablet every day in the teaching learning process so that there would be no obstacles. the examination using android-based exam browser was good, the level of cheating can be suppressed, the funding is relatively effective and the results of the exam was good. Beside that, the schools no longer have to spend money on printouts and paper, the android-based exam browser system is considered very beneficial with a realistic process, saving costs and time.

Definition of Perception

Robbins and Judge (2013) states that perception is a process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment. Meanwhile, Qiong (2017) defines perception as: 1) the way you think about something and your view of how it is. 2) The manner in which you see things using your senses of sight, hearing, and so on. 3) The innate ability to comprehend or perceive information quickly. It means that on the explanation above, the writer concluded that perception is someone's opinion about the sense of sight, an environment that interprets the data and transforms it into something meaningful.

Factor that Influence Perception

There are many factor that influence perception as bellow:

a. Intention

According to Ubaidillah (2019) in, interest is a constant process of paying attention and focusing on something that is of interest to him with feelings of pleasure and satisfaction. It is means that interest can be a cause of activity and participation in activities.

b. Perceived usefulness

Gong and Xu (2004) state that the definition of perceived usefulness is the subjective probability that users using certain application systems can increase their expectations. So, the effectiveness of information if the users believe that using information systems will improve their performance and make their efforts easier.

c. Perceived ease of use

According to Ndubisi et al., (as cited in Fegasanti & Priyatmojo, 2020) perceived ease of use refers to how clear and understandable, interaction with the system is ease of getting the system to do what is require, mental effort required to interact with the system and ease of use of the system. So, the writer can say that ease of use is about the clear and easy to understand when we interact with the system.

d. Anxiety

Johnston (as cited in Fegasanti & Priyatmojo, 2020) argues that anxiety is a reaction to threats, obstacles to personal desires, or a feeling of distress because of disappointment, dissatisfaction, insecurity, or hostility to others. So, the writer conclude that anxiety is talking about a feeling of people because of a condition that caused of disappointment, dissatisfaction, insecurity, or hostility.

e. Android attitude

According to Fegasanti and Priyatmojo (2020) android attitude is about people's believe of the use of android can give many advantages such as brought them into a bright new era, enhanced their standard of living, enjoyable system, saves paper and stationery, savings cost, and summarizing tasks for correction for teachers.

Definition of Android-Based Exam Browser

According to Putra and Pamungkas (2020) Android-based Exam Browser is one of the secured web browsers for conducting online examination. It works in lock mode, so it prevents opening of any page, switching to unnecessary programs, operating system-specific key combinations and functions, leaving the browser secure at any time and opening gallery. Android Kiosk is basically a gadget or smartphone that is intended to run a single application and to serve certain cases. Some basic requirements to be in kiosk mode include the need to be in a single mode serving specific use cases, hiding navigation, removing the toolbar, controlling or blocking all ways of setting it to the smartphone, turning off calls or messages according to the use case and the application must continue to run in mode full screen (James, 2018).

Key Features of Android-Based Exam Browser

The first appearance of the Android-based exam browser application is the input form server test URL. The URL can be an IP address or server domain name. If the server or domain URL entered is valid, the main index file will be accessed from the test server. Usually it will contain a login page.
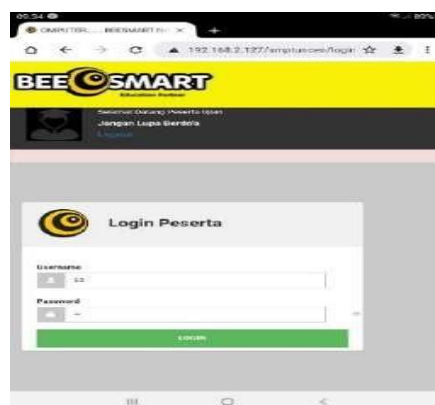

Figure 2.1 Login Page

Figure 2.1 displays the student login page, so that it can continue to the next menu. The user name box should be filled in with the name of the Student Identification Number of the examiners in order to show all the activities available in the Exam Browser, and the password should be filled in with 2 combined of numbers, to ensure that illegal logging by unauthorized parties is protected**.**

Next will go to the Confirmation data test page. Confirmation data test page shows the test code, the name and class of the examiner, the subject, the date and length of the test will appear in the first icon for the English final exam. Before that, students can take part in the exam by strictly following the time limit set as shown in figure 2.2
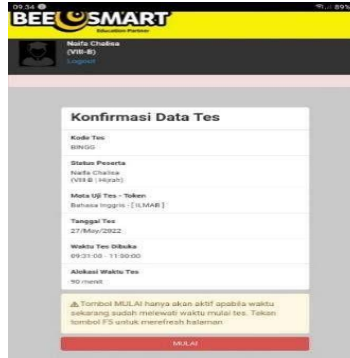

Figure 2.2. Confirmation data test

The Token Confirmation as shown in Figure 2.3 is intended to provide protection for this Android-based exam system. Before answering the question, each student must enter the token number first.

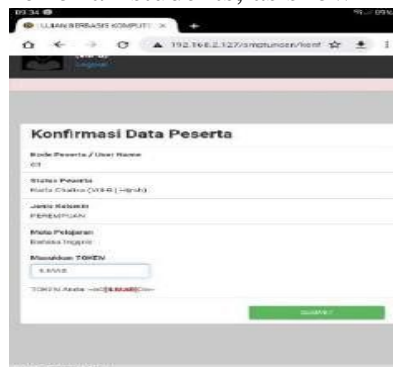The token number can be different or same for all students, as shown in Figure 2.3.

Figure 2.3. Token Confirmation

After filling the token number in the browser, the student is considered to have been identified as an examiner in the English exam and must comply with the schedule as shown in Figure 2.3. If the student clicks the submit attempt button, the exam will start and the questions for the subjects will appear and must be answered by the examiner, as shown in Figures 2.4

Figure 2.4. Questions Page

The type of questions presented in the Exam Browser is typically multiple choice questions in which the questions were validated by the relevant teachers of the subjects so that they meet the requirements to be considered. At the end of the display of questions, there is a navigation boxes icon as in Figure 2.5 shown at the conclusion of test questions, namely a brief report on the exam such as the remaining time and the number of questions that have been and have not been answered.
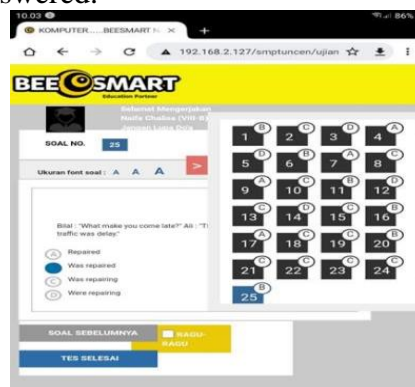

Figure 2.5. Quiz Navigation

To exit the application can be done by selecting the finish attempt button on the page. When leaving the browser, Exam Browser will request confirmation to exit as shown in figure 2.6. If the examiner has validated the button, the test is ended.
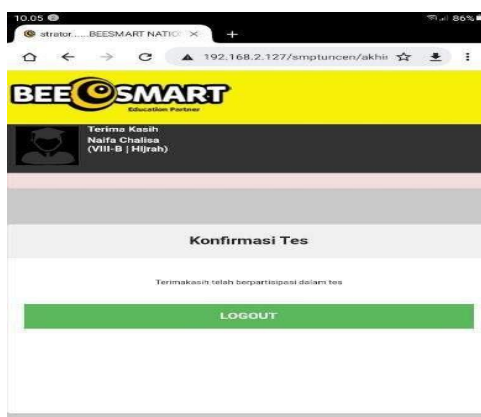
Figure 2.6 Confirmation Page

Methodology

The method is the way used by the writer to solve a problem in a study. The method of study is a way to get a solution to a problem. According to Sugiyono (2017) method of study can be interpreted as a scientific way to get data with purpose and use certain knowledge is developed and proven so that in turn it can be used to understand, solve and anticipate problems. This study was a descriptive qualitative with survey method. Descriptive qualitative study is the form of research with method or case study approach (Sugiyono, 2017). In this study, the writer used total sampling. So, the sampling was the whole of population with 85 students. Then, the instrument of the study used for the data collections was a questionnaire and it is close-ended questionnaires. In this study, the questionnaires adopted from a ready-made questionnare that belong to Fegasanti and Priyatmojo (2020). Then, the writer distributed the questionnaires directly to respondents. The questionnare were consist of 35 items to reveal the students' perception on the use of android-based exam browser as the medium to assess final semester exam

Finding and Discussion

The findings are presented into five parts; they are the students' interest, students' perceived usefulness, student's perceived ease of use, students' anxiety, and students' Android attitude about the use of Android- based Exam Browser as the medium to assess final examination.

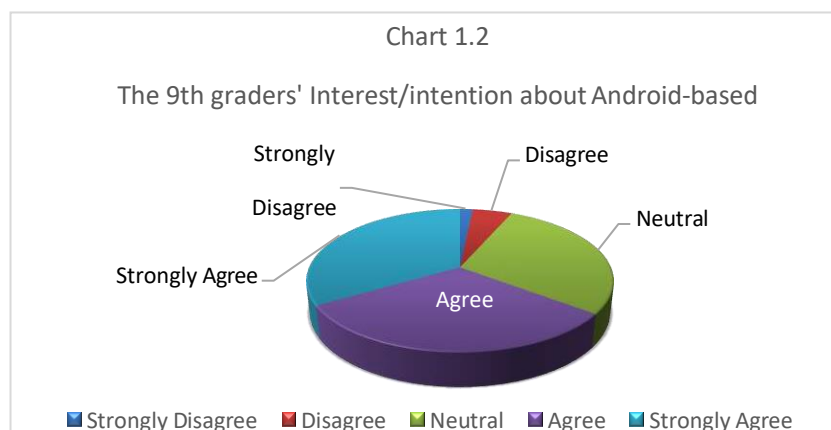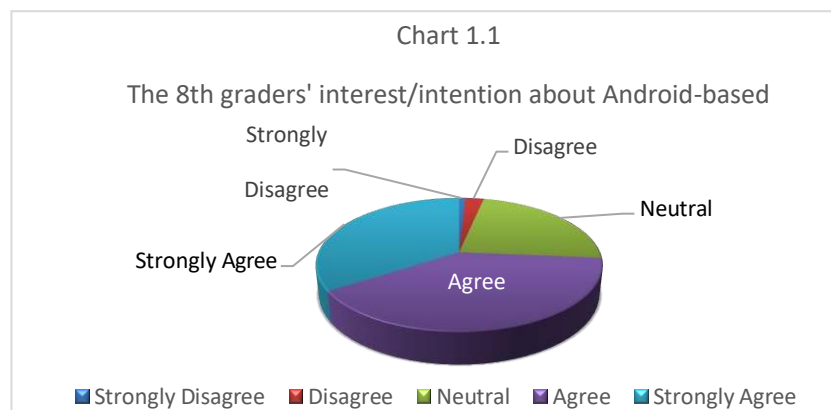**Students' interest about the use of Android-based Exam Browser**

Result of Questionnaire of the Eighth Grade

No	Answer Choice	Frequency	Percentage
1	Strongly Disagree	3	0,83%
2	Disagree	9	2,50%
3	Neutral	83	23,06%
4	Agree	142	39,44%
5	Strongly Agree	123	34,17%
Total			**100,00%**

Result of Questionnaire of the Ninth Grade

No	Answer Choice	Frequency	Percentage
1	Strongly Disagree	8	1,63%
2	Disagree	23	4,69%
3	Neutral	141	28,78%
4	Agree	154	31,43%
5	Strongly Agree	164	33,47%
Total			**100,00%**

Chart 1.1

The 8th graders' interest/intention about Android-based

Chart 1.2

The 9th graders' Interest/intention about Android-based

After analyzed of the questionnaire, the writer found that the students' interest about the use of Android-based Exam Browser as the medium to assess final examination 3,33% of the eighth graders was strongly disagree and disagree, 23,06% of the eighth graders was neutral, and 73,61% of the eighth graders was agree and strongly disagree. Then, 6,33% of the ninth graders was strongly disagree and disagree, 28,78% of the ninth graders was neutral, and 64,90% of the ninth graders was agree and strongly disagree.
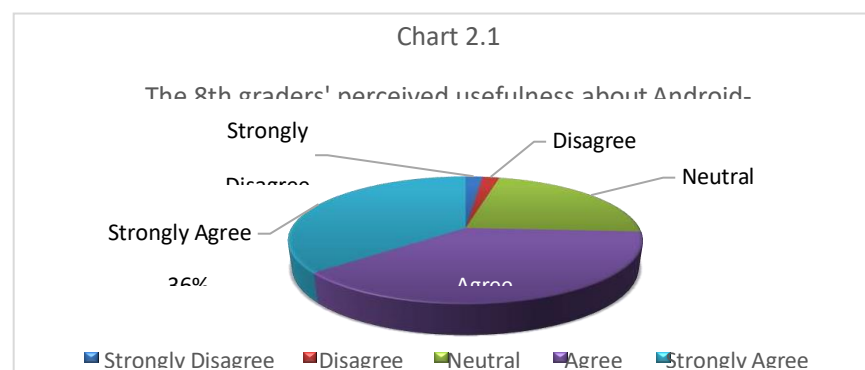
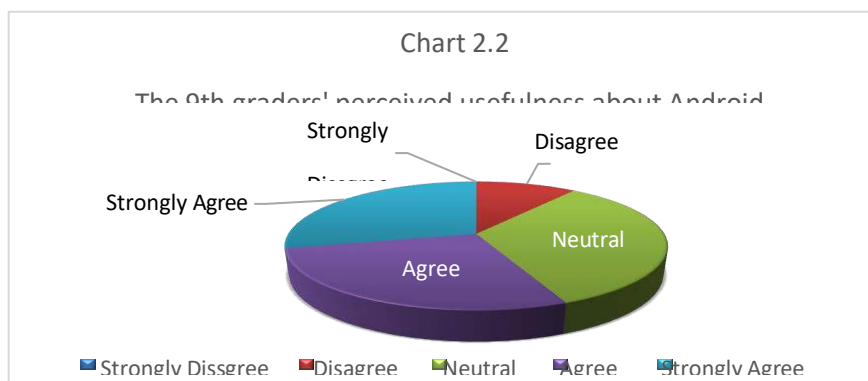**Students' perceived usefulness about the use of Android-based Exam Browser**

Result of Questionnaire of the Eighth Grade

No	Answer Choice	Frequency	Percentage
1	Strongly Disagree	2	1,85%
2	Disagree	2	1,85%
3	Neutral	24	22,22%
4	Agree	41	37,96%
5	Strongly Agree	39	36,11%
Total			100,00%

Result of Questionnaire of the Ninth Grade

No	Answer Choice	Frequency	Percentage
1	Strongly Disagree	0	0,00%
2	Disagree	15	10,20%
3	Neutral	49	33,33%
4	Agree	41	27,89%
5	Strongly Agree	42	28,57%
Total			100,00%

Chart 2.1

The 8th graders' perceived usefulness about Android-

After analyzed of the questionnaire, the writer found that the students' perceived usefulness about the use of Android-based Exam Browser as the medium to assess final examination 3,70% of the eighth graders was strongly disagree and disagree, 22,22% of the eighth graders was neutral, and 74,07% of the eighth graders was agree and strongly disagree. Then, 10,20% of the ninth graders was strongly disagree and disagree, 33,33% of the ninth graders was neutral, and 56,46% of the ninth graders was agree and strongly disagree.
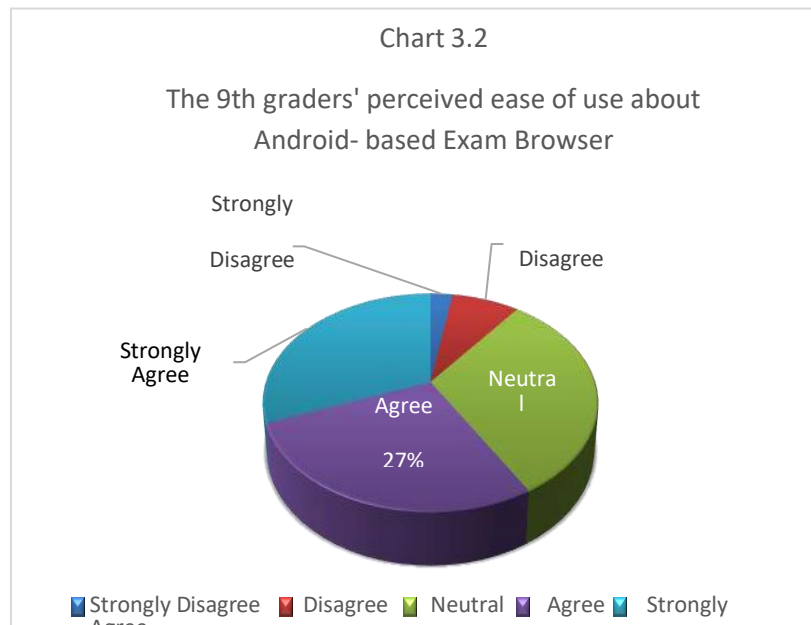
Students' perceived ease of use about the use of Android-based Exam Browser

Result of Questionnaire of the Eighth Grade

No	Answer Choice	Frequency	Percentage
1	Strongly Disagree	9	2,08%
2	Disagree	36	8,33%
3	Neutral	131	30,32%
4	Agree	166	38,43%
5	Strongly Agree	90	20,83%
Total			**100,00%**

Result of Questionnaire of the Ninth Grade

No	Answer Choice	Frequency	Percentage
1	Strongly Disagree	15	2,55%
2	Disagree	46	7,82%
3	Neutral	184	31,29%
4	Agree	161	27,38%
5	Strongly Agree	181	30,93%
Total			**100,00%**

Chart 3.1

The 8th graders' perceived ease of use about Android- based Exam Browser

Strongly Disagree — Strongly Agree 21% — Disagree — Neutral — Agree 39%

Strongly Disagree · Disagree · Neutral · Agree · Strongly Agree

Chart 3.2

The 9th graders' perceived ease of use about Android- based Exam Browser

Strongly Disagree — Strongly Agree — Disagree — Neutral — Agree 27%

Strongly Disagree · Disagree · Neutral · Agree · Strongly Agree

45

After analyzed of the questionnaire, the writer found that the students' perceived ease of use about the use of Android-based Exam Browser as the medium to assess final examination 10,42% of the eighth graders was strongly disagree and disagree, 30,32% of the eighth graders was neutral, and 59,26% of the 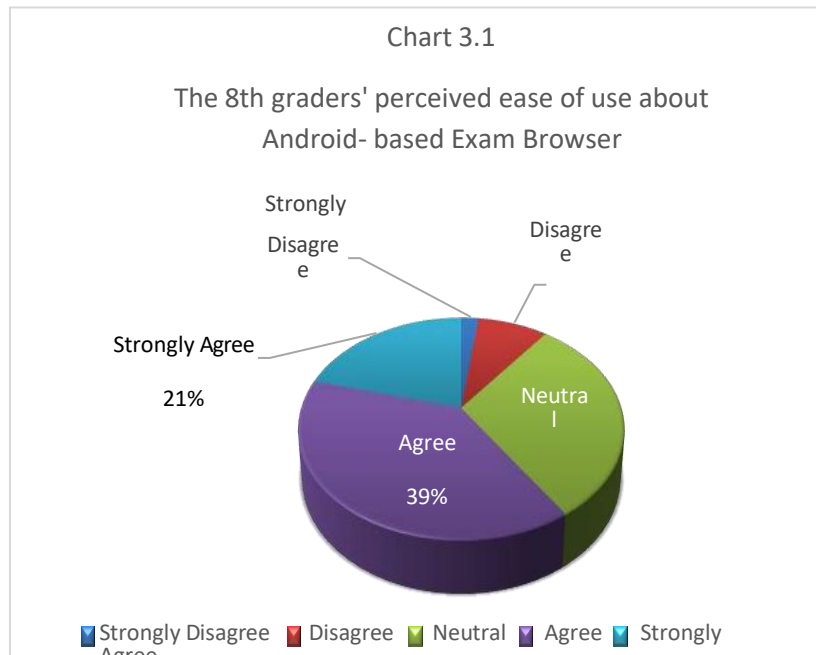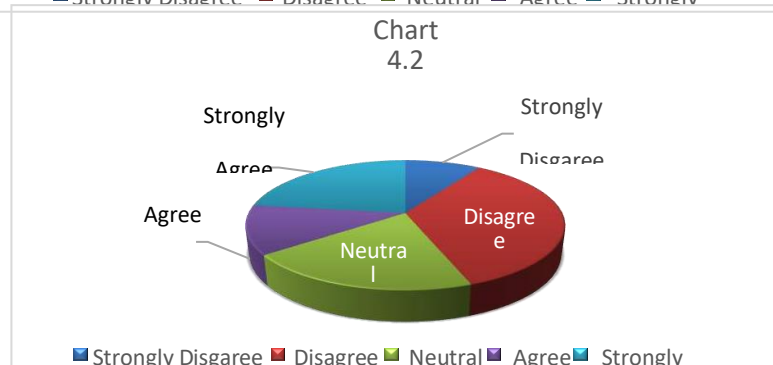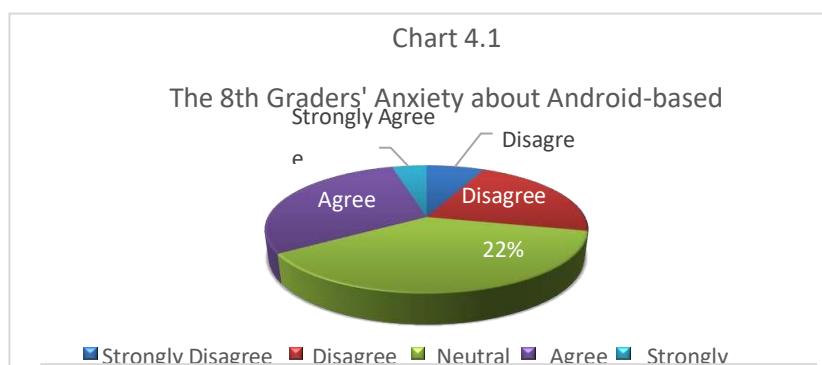eighth graders was agree and strongly disagree. Then, 10,37% of the ninth graders was strongly disagree and disagree, 31,29% of the ninth graders was neutral, and 58,33% of the ninth graders was agree and strongly disagree.

Students' anxiety about the use of Android-based Exam Browser
Result of Questionnaire of the Eighth Grade

No	Answer Choice	Frequency	Percentage
1	Strongly Disagree	10	6,94%
2	Disagree	31	21,53%
3	Neutral	54	37,50%
4	Agree	43	29,86%
5	Strongly Agree	6	4,17%
Total			100,00%

Result of Questionnaire of the Ninth Grade

No	Answer Choice	Frequency	Percentage
1	Strongly Disagree	18	9,18%
2	Disagree	69	35,20%
3	Neutral	40	20,41%
4	Agree	24	12,24%
5	Strongly Agree	45	22,96%
Total			100,00%

Chart 4.1
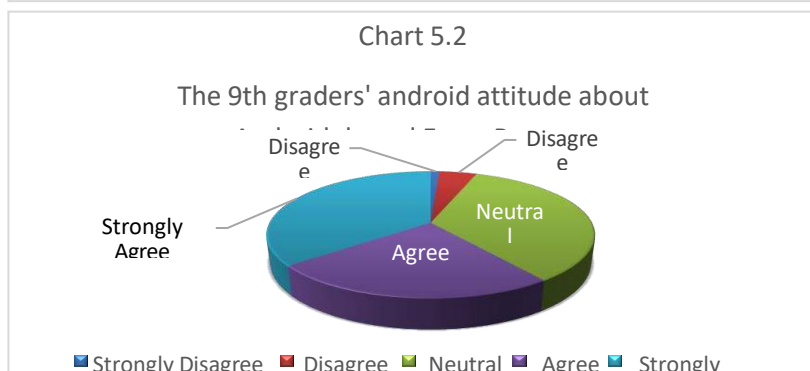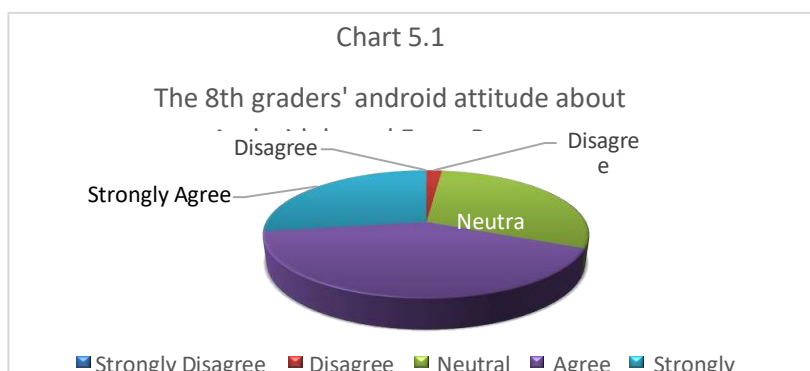The 8th Graders' Anxiety about Android-based

Chart 4.2

After analyzed of the questionnaire, the writer found that the students' anxiety about the use of Android-based Exam Browser as the medium to assess final examination 28,47% of the eighth graders was strongly disagree and disagree, 37,50% of the eighth graders was neutral, and 34,03% of the eighth graders was agree and strongly disagree. Then, 44,39% of the ninth graders was strongly disagree and disagree, 20,41% of the ninth graders was neutral, and 35,20% of the ninth graders was agree and strongly disagree.

Students' Android attitude about the use of Android-based Exam Browser

Result of Questionnaire of the Eighth Grade

No	Answer Choice	Frequency	Percentage
1	Strongly Disagree	0	0,00%
2	Disagree	4	1,85%
3	Neutral	64	29,63%
4	Agree	89	41,20%
5	Strongly Agree	59	27,31%
Total			**100,00%**

Result of Questionnaire of the Ninth Grade

No	Answer Choice	Frequency	Percentage
1	Strongly Disagree	3	1,02%
2	Disagree	13	4,42%
3	Neutral	101	34,35%
4	Agree	72	24,49%
5	Strongly Agree	105	35,71%
Total			**100,00%**

Chart 5.1

The 8th graders' android attitude about

Chart 5.2

The 9th graders' android attitude about

After analyzed of the questionnaire, the writer found that the students' Android attitude about the use of Android-based Exam Browser as the medium to assess final examination 1,85% of the eighth graders was strongly disagree and disagree, 29,63% of the eighth graders was neutral, and 68,52% of the eighth graders was agree and strongly disagree. Then, 5,44% of the ninth graders was strongly disagree and disagree, 34,35% of the ninth graders was neutral, and 60,20% of the ninth graders was agree and strongly disagree.

Discussion

Based on the finding, the writer gave further information and interpretation as follow:

1. **Students' interest about the use of Android-based Exam Browser**

In this study, the writer conclude that the students believe that the use of Android based Exam Browser as the medium to assess final examination is a good system for test. It can be proven by the result of questionnaire that 73,61% of the eighth graders and 64,90% of the ninth graders were agree and strongly agree or gave a positive perception about the use of Android-based Exam Browser system.

It is also in line with Chikmah (2016) statement that says Computer- based Test is a good and enjoyable system for conducting online examination. The students believe that the use of Android-based Exam Browser can improve the students' speed in answering the questions and can make the exam easily.

2. **Students' perceived usefulness about the use of Android-based Exam Browser**

In this study, the writer conclude that the students believe that the use of Android-based Exam Browser as the medium to assess final examination is perceived usefulness. It can be proven by the result of questionnaire that 74,07% of the eighth graders and 56,46% of the ninth graders agree and strongly agree or had positive perception about the use of Android-based Exam Browser system. The students believe that the use of Android-based Exam Browser can improve the students' performance in the test, and they also believe that Android based Exam Browser is an effective system for assessing exam.

3. **Students' perceived ease of use about the use of Android-based Exam Browser**

In this study, the writer conclude that the students believe that the use of Android-based Exam Browser as the medium to assess final examination was an easy tool system for test. It can be proven by the result of questionnaire that 59,26% of the eighth graders and 58,33 of the ninth graders were agree and strongly disagree or gave a positive perception about the use of Android based Exam Browser system. The students believe that the use of Android based Exam Browser was useful, clear and understandable, easy to use and navigate. According to Ndubisi et al., (as cited in Fegasanti & Priyatmojo, 2020) stated that perceived ease of use refers to how clear and understandable, interaction with the system is ease of getting the system to do what is require, mental effort required to interact with the system and ease of use of the system.

4. **Students' anxiety about the use of Android-based Exam Browser**

In this study, the writer conclude that the students believe that the use of Android-based Exam Browser as the medium to assess final examination make students have a sense of anxiety. It can be proven by the result of questionnaire that 44,39% of the ninth graders was disagree and strongly disagree or gave a negative perception about the use of Android- based Exam Browser system. The students believe that the use of Android-based Exam Browser creates anxiety for students. This finding is in line with research

findings of Nahdia (2017) which proved that exams put pressure on students due to fear, panic, and fatigue

5. Students' Android attitude about the use of Android-based Exam Browser
In this study, the writer conclude that the students believe that the use of Android-based Exam Browser as the medium to assess final examination is a good system for test. It can be proven by the result of questionnaire that 68,52% of the eighth graders and 60,20% of the ninth graders were agree and strongly agree or had a positive perception about the use of Android-based Exam Browser system. The students believe that the use of Android-based Exam Browser can brought them into a bright new era, enhanced their standard of living and they also believe that Android- based Exam Browser is an enjoyable system. The students also believe that Android-based Exam Browser is responsible for many of the good things such as saves paper and stationery, savings cost, and summarizing tasks for correction for teaching.

Conclusion

Based on the finding and interpretation, it can be concluded that the students' perception on the use of Android-based Exam Browser as the medium to assess final examination was positive. The students believed that Android-based Exam Browser is an attractive and enjoyable system or platform to assess final examination. It can be proven by the result of questionnaire that 68,87% of the eighth graders and 59,97% of the ninth graders were agree and strongly agree or gave a positive perception about Android-based Exam Browser. The students believed that Android-based Exam Browser was a useful, clear, and understandable platform for conducting online examination and it gave some positive impacts such as improving their speed in answering the questions, improving their performance in the test, and helping them to answer the exam easily.

Besides the positive perception about the use of Android-based Exam Browser as the medium to assess final examination there were also the negative perception. The 44,39% of the ninth graders believed that using the Android-based Exam Browser was somewhat intimidating to them because not all students used Android with enough internal memory to install these applications. The students also feel afraid of making mistakes in using Android-based exam because sometimes the application is often slow and even suddenly exit from the application. The use of Android-based Exam Browser not only makes the students afraid, but also anxious and nervous due to sometimes their Android not as friendly as hangs, runs out of battery, and disconnected from the connection server.

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