

STICKING PLASTER OR LONG TERM OPTION? TAKE HOME EXAMINATION IN UNIVERSITAS TERBUKA; STUDENTS' PERCEPTION

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Abstract

The shift from close book examination to take home examination raises many questions. One of the questions is about the quality of the students. In order to find the question, the stakeholders are seeking way to perform a valid and reliable test. However, in finding the best way, students' perception of the way they are examined should be one of consideration. Therefore, this paper explores students' view and also test students' anxiety of take home examination. 134 students from various department who have experienced two kind of tests; close book and take home examination involved in this study. The instrument was a questionnaire consisting 13 items to measure students' perception on take home examination and 17 items to test students' anxiety in performing take home examination. The finding indicate that most of students prefer take home examination than close book examination. Students' viewed that take home examination is better than close book in term of concept mastery, test score, accessibility, and low exam anxiety. Instead of using many types of test, Universitas Terbuka should investigate the way to strengthen the effectiveness of take home examination due to it shows a positive perception from students.

Keywords: Take home examination, open book exam, close book exam, perception, anxiety.

1 INTRODUCTION

The whole world is implementing new education system to adapt to the conditions of pandemic era. Many institutions and teachers are struggle to fulfill students' need in term of learning process and assessment. However, not all innovation are still effective to be used in the post pandemic era.

Universitas Terbuka (UT) as the pioneer of open and distance education in Indonesia also experience this condition. Many innovation are tried to facilitate students to study without decreasing the quality. In learning process, for example, in the beginning of pandemic era, UT has taken a policy to substitute face to face tutorial to web based tutorial. UT did not take much effort to familiarize students with this shift, because UT is known as the cyber campus.

Nevertheles, in term of assessment, UT still in the process to find the appropriate system. Before pandemic, UT conducted offline examination. This examination is held by cooperation with schools in some regencies and cities in South Sulawesi. Previously, students had to print the test taker's identity card (KTPU), then be present at the specified exam location. The examination is carried out simultaneously for all students in all units of Universitas Terbuka. The questions that have to be answered by the students are in the form of multiple choice which are done by filling out the answer sheet provided (paper based test).

In the beginning of pandemic era, 2020.1 academic period, final examination is removed and the students' final score is achieved from tutorial score or course assignment. Then, in 2020.2 academic period, based on the decision letter of the vice chancellor for academic number 40166/UN31.WR.1/PK.04.11/2020, as of December 1, 2020 the final semester examination system was changed to Take Home Exam (THE). THE as new final semester examination system requires students to download questions from the THE application page (the.ut.ac.id) and upload the answers in the same application page. Students download the questions according to the specified schedule with a maximum processing time of 12 hours. The 12 hours timeframe are calculated based on download hours. Then, students have to upload the answers on the same day as the download time. THE questions are in the form of descriptions with the HOTS (Higher Order Thinking Skill) question model and students can work on anywhere and can open books or use other reference sources without violating the principle of originality.

However, as a new system, one of the obstacles that may arise is the credibility of the assessment system. It is still questioned whether the assessment carried out can provide an accurate picture of students' abilities and knowledge. Students' learning outcomes are usually measured using several assessment components, such as assignments, attendance, participation in discussions/tutorials, and final semester exams. The final semester exam is intended to measure the achievement of learning objectives comprehensively. The grades that students have achieved in Web-based tutorials (*Tuweb*), or Online Tutorials (*Tuton*) or Course Assignments, will only contribute if THE or final exam scores achieved minimum 30% of maximum point of THE.

THE carried out by using the open-book examination system in the form of case-based description questions, while the face to face examination carried out by the closed-book examination system in the form of multiple choice questions. If the desired learning target is high-level learning ability that includes in-depth understanding, application, analysis, synthesis or the ability to construct alternative problem solving, then the type of questions used should be case-based descriptions, and carried out with an open book system. Open book examination system enable students to increase ability in handling large amount of information, higher taxonomical level and have a good effect on long-term retention (Kruger, 2018). In exams with an open book system, students are allowed to use various reference sources, both textbooks, other notes and internet. It is resulted on students' anxiety and retention. Students feel calmer and less anxious in taking the final exam because they can open references (textbooks, modules) when needed in the exam (Gharib, William

and Noelle, 2012). Moreover, Open book system probe students' content mastery, gained knowledge and solve the problem creatively (Theophilides and Koutselini, 2000).

Although take home exam using the open book system is considered more suitable for higher educational levels that target high-level abilities, the use of this system has also been criticized. In fact, in performing take home exam, there are students who spend their exam time just flipping through the pages of textbooks. They are trying to find parts of books or modules that can be used because they tend to less time preparing and less threatening level (Rowlands and Forsyth, 2006). The other thing that should be consider is the use of JOKI examination is unavoidable.

Examination for courses with a large number of students usually rely on a close book examination system and use a multiple choice form of test. This system is considered to encourage students to put more effort into mastering the substance of the lecture, but it make easier for lecturers or institution to correct. In a study conducted on second-level university students, it was found that when preparing for the 'closed book' system exams, students tended to use a deep learning approach (Heijne Penninga, Kuks, Hofman, and Cohen-Schotanus, 2010). Furthermore, when facing a close book examination, students examination performance especially in preparing examination were greater than open book (Durning, Dong, Ratcliffe, Schuwirth, et al, 2016). Students takes a longer time to prepare because they need to memories many things. However, the multiple-choice closed-book examination system has been criticized for not being able to provide an accurate indication of students' abilities. It is undeniable that some students may just study intensively before the exam, memorizing notes and concepts that are deemed necessary, and then forgetting it.

Another fact that is should be considered is students' score. In the closed-book examination system, students tend to find it difficult to get the maximum score, in contrast to the open-book examination system where it is easier for students to get the maximum score. Among researchers there are still disagreements about the relationship or influence of the exam system used with student learning outcomes. Brightwell, Daniel, and Stewart (2004) found that there was no significant difference between the students' mean scores of the open book and close book examination, it was depend on the constructed questions. However, Francis (1982) found that students who take an open book test achieve a higher grade than their peers who take a close book test. In addition, Krasne, Wimmers, Relan and Drake (2006) state that final exam results using the book-opening system were higher than the book-close system).

Take home exam carried out the open book examination system is still not used widely in many institutions in the world, especially in Indonesia. In addition, the studies on the effect of this system on the students' score are still debated. The other questions that interesting to be answered through this research are students make adequate preparations in performing take home exam? Between take home and face to face exam, which one do students prefer and why? Do students think that it is easier for students to get better test scores on take home exam than on the face to face exam? After pandemic, should take home exam still be used or not (based on students' perception)?

2 METHODOLOGY

This research used an exploratory descriptive study, using a survey to explain students' perceptions about the final semester exam with take home exam system. The research survey method was carried out using a questionnaire consisted of 13 items to measure students' perception on take home examination and 17 items to test students' anxiety in performing take home examination and it used a 5 (five) Likert scale. 13 of the items used to test students' perception were adopted the questionnaire items from the research of Suciati (2016) under the research title of students perception and preference of open book exam in a graduate program. While 17 items to test the students' anxiety of take home exam were adopted from the Hamilton Anxiety Rating Scale (HAM-A) (Hamilton, 1959). It was conducted on large and small populations, but the data studied were data from samples taken from the population, so that the relative incidence, distribution and relationship between variables were found (Sugiyono; 2013). The questionnaire has sent to 1710 students of Universitas Terbuka Makassar who have experienced both take home and face to face examination. Nevertheless, only 134 students who responds the questionnaire due to the accuracy of the contact number and the ability of students in using google form. All data collected are analyzed quantitatively and then described descriptively by describing, and explaining problems related to the object of research.

3 FINDINGS AND DISCUSSION

This study investigates the students' perception on take home examination. It can be one of considerations in deciding whether take home exam will still be used or will be left. The students' perception studied based on several dimension namely students' understanding and literacies, students' preference, and students' anxiety on take home exam. The questionnaire used 1-5 Likert scale. Score 5 indicates a strongly agree response and 1 means a strongly disagree response.

3.1 Students' understanding and literacies on take home exam

Table 1. Students' understanding and literacies

Item	N	Minimum	Maximum	Mean	Std. Deviation
Take home exam is more suitable for education system at Universitas Terbuka compared to close book examination.	134	1	5	4.41	.758
Take home exam is more suitable to assess the students' learning outcome due to the thick modules of Universitas Terbuka	134	1	5	4.20	.940
The system used in Take home exam confused me	134	1	5	1.89	1.128
THE questions assess high taxonomy level such as analysis	134	1	5	4.31	.929
In performing THE, most of my time allocated to find the answer in the book	134	1	5	2.46	1.199
In performing THE, I copy a lot from books or notes rather than make analysis	134	1	5	2.57	1.126
I am not preparing myself seriously for THE exam because I can looking for the answer later in the book	134	1	5	2.13	1.160

There have been a rapid movement in education especially in higher education institutions post pandemic. Universitas Terbuka with a huge variety of students' background has to strive for this to ensure that students are achieve support to gain a skill for good academic practice especially skill in doing the assessment. Therefore, Universitas Terbuka held clinic assessment to all students, to ensure all students can understand and have a good literacy on their assessment. It is important especially when the students are facing a new system of assessment (Koutselini, 1997).

The data pictured that Universitas Terbuka has embedded a good understanding and literacy of take home exam on their students. It can be seen from the data that the students doesn't feel confused in performing take home exam with mean score 1.89 (the item used a negative tone). Moreover, the students has known that take home exam assess high taxonomy level and limited time with mean score 4.31 and 3.50 respectively. The students need to be prepared to optimize

their exam performance (Kruger, 2020). This good preparation affects the students' approach in answering the question in exam. During take home exam, students make analysis rather than copy a lot from book (mean score is 2.57 using negative tone). Furthermore, it keep students use their time efficiently rather than use most of their time to flip the book (mean score is 2.46 with negative tone). The item of the conformity of take home exam with education system and thick modules of Universitas Terbuka also support the positive perception of students on take home exam with mean score 4.41 and 4.20 respectively.

This good understanding and literacy of the assessment system may drive the students to change their learning style and make a better preparation before the examination (Suciati, 2016). It is in line with a study that was found that when preparing for the 'closed book' system exams, students tended to use a deep learning approach (Heijne Penninga, Kuks, Hofman, and Cohen-Schotanus, 2010). Furthermore, when facing a close book examination, students examination performance especially in preparing examination were greater than open book (Durning, Dong, Ratcliffe, Schuwirth, et al, 2016).

3.2 Students' preference

Table 2. Students' preference

Item	N	Minimum	Maximum	Mean	Std. Deviation
Take home exam is easier than face to face exam held in particular location.	134	1	5	4.37	.939
THE questions are easier than face to face questions	134	1	5	3.15	1.306
Time allowed (12 hours) for doing the exam is enough	134	1	5	3.50	1.291
I master more concept and have a good learning retention after performing THE	134	1	5	4.04	.888
I achieve better grade or score in THE system than in face to face exam system.	134	1	5	4.38	.793
I more enjoy with THE than face to face examination.	134	1	5	4.49	.753

According to the student response statistics presented in Table 2, the mean score of all the items indicate that students more prefer take home exam than face to face exam. The highest mean score

is on the item of the convenience in performing take home exam than face to face examination (mean score 4.49). Doing an exam in home with sufficient time, read modules and notes, open other source from internet, consult other make students more relax and feel less tense (Akulwar-Tajane et al., 2021; Dave et al., 2020; Özdin & Bayrak Özdin, 2020). Another factor of students' preference is the students can achieve higher score in take home exam than in face to face exam. The comparative study of score achieved in take home exam and face to face in Universitas Terbuka has not done yet, but from the questionnaire, most of students agree that they achieve better grade in take home exam than in face to face exam with mean score 4.38. Students' positive views' on take home exam can increase students' performance (Senel & Senel, 2021). Moreover, after performing take home exam, students thinks to have a good retention and concept mastery with mean score 4.04. Take home exam using higher order thinking skill question type that need analysis rather than memorizing. A study stated that open book examination system which is used in take home exam can increase students' ability in handling large amount of information, higher taxonomical level and have a good effect on long-term retention (Kruger, 2018). Furthermore, in need of embedded deeper understanding on learning, the use of take home is an opportunity (Meeran and Davids, 2022).

3.3 Students' anxiety

Table 3. Students' anxiety

Item	N	Minimum	Maximum	Mean	Std. Deviation
My head is a bit heavy during take home exam	134	1	5	2.13	1.109
I felt a headache or migraine when I am doing take home exam	134	1	5	1.93	.983
I felt uneasy during take home exam	134	1	5	1.84	.951
My body feel stiff during take home exam	134	1	5	1.67	.856
My palms of my hands are sweating during take home exam	134	1	5	1.83	.922
I sweated profusely during take home exam	134	1	5	1.66	.796
My feet are sweating during take home exam	134	1	5	1.68	.889
My heart beat faster during take home exam	134	1	5	1.84	.916

I felt weak when during take home exam	134	1	5	1.70	.876
It is difficult for me to breath during take home exam	134	1	5	1.58	.807
I felt like about to defecate while taking take home exam	134	1	5	1.60	.785
I felt like about to urinate while doing take home exam	134	1	5	1.65	.825
I felt hasty while doing take home exam	134	1	5	1.90	.933
I am afraid that I will not be able to finish my exam on time	134	1	5	2.75	1.313
I am afraid that I will not able to answer the questions on take home exam	134	1	5	2.51	1.187
I am afraid that I unable to use the application page of take home exam.	134	1	5	2.08	1.124
I am afraid that my answer will not be uploaded in take home exam application page.	134	1	5	2.83	1.301

Examination anxiety refers to students' tendency to perceive to be evaluated in performance, such as a difficult exam, fears of achieving negative judgment by others (e.g., teachers, peers or parents), or of not being able to achieve their educational or score targeted (Putwain, 2008). In order to face this problem, a studied suggested that open book exam is set to reduce exam anxiety (Durning, Dong, Ratcliffe, Schuwirth, et al, 2016). Another studies also found that students tend to feel less anxiety in open book test than in close book exam (Block 2012; Gharib and Phillips 2013; Karagiannopoulou and Milienos 2013). The result of this study also indicates that take home exam carried out open book system can reduce students' anxiety.

As a new system of final examination in Universitas Terbuka, take home exam surprisingly can make students' feel less anxiety. It can be seen from the mean score of all items which is varied between 1.58 and 2.83 with the range of strongly disagree to strongly agree. Based on the data of anxiety test, it is found that during the exam, students doesn't feel anxious. It may be caused by some factors. The students don't need to memorize many thing, they just need to understand the concept. Take home exam using open book system has several advantages, including preventing students from simply memorizing and getting closer to reality in the world of work (van Der Fleuten, Lambert and Schuwirth, 2005; Steinberg, 2008). This system is considered to free

students from test anxiety in exams (Broyles and Korsen, 2005). In addition, take home exam system enable them to open book or other resources (Suciati, 2016). Furthermore, doing the test wherever they want, there is no teacher who supervised the exam (the text environment) also reduce the students' fear.

The data also reveal that the high fear of students is about the fear of failed to upload the answer. The mean score for this item is 2.83 with 1.301 std. deviation. It indicates that students has understand the system. It could be one reason why the students do not feel anxious during the exam.

4 CONCLUSION

Take home exam has been applied during the pandemic by Universitas Terbuka. Now, in post pandemic era, especially for undergraduate program, the proportion of subject that is assessed using this system is decreased and there is a tendency to back again to face to face exam. Moreover, the shift of the assessment system is not easy. However, this article provides insight from students' view that Universitas Terbuka has done a great effort to struggle in pandemic era to ensure that all students understand about the way they are assessed. This study also indicate that in general, students have a positive perception of take home exam. This assessment system is claimed to suit with Universitas Terbuka education system which has a thick modules, has easier questions than in face to face exam, could promotes deep learning and higher retention and less anxiety. Due to the students' positive views, this system has a good potential to be consider as the assessment system applied in Universitas Terbuka. However, there are many unobserved aspectss that could support this finding such as the learning process, the construction process of questions, the use anti-cheating system, and the scoring system. These aspects could be an interesting topic to be studied further.

ACKNOWLEDGEMENTS

We thank Prof. Suciati, M.Sc., Ph.D for permitting us to adopt her questionnaire items in finding the students' perception on take home exam, I Made Gunawan Sanjaya, ST for helping us in providing the students' data and phone number.

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