ASSESSING UNDERGRADUATES' ATTITUDE TO AND ACADEMIC ENGAGEMENT IN COMPUTER-BASED TEST COURSES IN NIGERIAN UNIVERSITIES

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Abstract

Academic engagement and attitude are required for a successful classroom teaching and learning process. Successful teaching and achievement come with assessment which takes different forms, it could be through Computer-Based Tests or Paper Pencil Tests. When it is a Computer-based test, students' attitudes and level of academic engagement become questionable. That was why the study investigated Lecturers' and Students' assessments of undergraduates' attitudes and academic engagement toward courses examined through computer-based tests, in a Nigerian University. Four research questions were raised and answered. The study adopted descriptive survey research. The population for this study comprised all students and lecturers at the University of Ilorin. The target population is 300 level students' of the Sampled University. Also, 365 students and 102 lecturers made a total of 467 respondents which were sampled through a multistage sampling technique. Eight out of 16 faculties were sampled using a purposive sampling technique. A 4-point Likert-scale researchers' designed questionnaire on attitude and a two-point scale for academic engagement titled "Lecturers' and Students' Assessment of Undergraduates' Academic Engagement and Attitude towards Computer-Based Test Courses in a Nigerian University", were used to elicit the needed data for the study. With psychometric properties of content validity and a reliability index of 0.79. The data collected were analyzed using descriptive statistics. Frequency count, percentage and mean were used to answer the research questions. Findings revealed that the lecturer's assessment of the student's attitude is low while the student's assessment of attitude is high. Both Lecturers and Students assessed undergraduate's level of academic engagement toward courses examined through Computer-based tests as low. Based on the findings of the study, it was recommended that the lecturer should make the teaching-learning process activities based on always motivating students' attitudes positively regardless of the mode of examining them.

Keywords: Attitudes, Computer-Based Test, Lecturers, academic, and engagement

Introduction

Education helps to bring about positive change in the attitude and behaviour of the learner. The process of learning starts from the womb and continues when the child is born till death. The first institution of learning that a child is exposed to is the family and

from there, the school takes over to continue the teaching and learning formally while the child takes on the position of being a student till graduation. Acquiring knowledge involves many steps both from the teacher and the student. Formal education has taken a giant stride in accomplishing the goal of making each learner useful to himself and able to add value to society at large. For a learner to attain this goal, there are a series of educational activities that must take place within the formal school system such as teaching and learning, and evaluation of students through the writing of tests and examinations which leads to promotion to the next level or repetition of the same academic level until the student gets qualified. However, student's participation in teaching and learning is important as no effective learning can take place if they are passive or not available in the class, meaning they should be academically engaged.

Engagement in the classroom is crucial for a successful educational experience. It entails participating fully in class and making a commitment to studying the subject matter outside of the classroom. Participating in class discussions, asking questions, and finishing homework are all examples of showing engagement. Participating in extracurricular activities like student clubs and organizations or doing community service are additional ways to display it (O'Donoghue, 2015). Students who participate in academic activities are better able to absorb and comprehend the course information as well as develop crucial abilities like cooperation, problem-solving, and critical thinking. A sense of community and connection to the campus can be fostered by participation in academic activities. Students who participate in extracurricular activities might make friends, form connections, and find their purpose in life (Dahlin et al., 2018). It can also improve academic achievement because more engaged students typically achieve better grades, have better attendance, and feel more accomplished (O'Donoghue, 2015). Engagement in academic activities is an important part of the higher institution learning experience, and students need to stay actively engaged to get the most out of their education.

Tertiary Education in Nigeria is subdivided into three categories, which are Colleges of Education, Polytechnics and Universities (Salami, 2021). Undergraduates from Nigeria usually display more developed personality traits and more well-defined aspirations about their attitude toward academic participation. Students at universities have greater autonomy because they have more possibilities for engagement and can pick and choose which classes to take. A successful undergraduate possesses the following traits: self-control, punctuality, active participation in scheduled classes, intelligence, the capacity to learn, study skills, and organizational and self-regulatory abilities (Matoskova, 2015). Meanwhile, undergraduates face numerous distractions while pursuing their education; as a result, they frequently fail to fully commit to their studies, which is the main goal. Their level of academic engagement will determine how well perform in their examination.

Examinations have always been a crucial component of formal education since they verify a student's understanding of the material. Examining someone or a group's knowledge, comprehension, or skills concerning a given topic or subject is a process called examination (Salami 2021). This evaluation may be conducted through tests, quizzes, oral interviews, or other assessment methods (Smith, 2017). This could also be a test administered using paper and pencil or a computer. Students are exposed to writing and submitting in a paper-and-pencil test, or physical papers are given for the questions, and answer sheets are presented for submission after the assessment within the designated period. According to Karthikeyan (2021), paper and pencil assessment refers to traditional student assessment formats such as written tests and also standardised tests that

ask students to use pencils to fill in bubbles on a scan-able answer sheet. The scripts are collected from the students, compiled together, and marked manually for scoring. Participants must read the questions on a paper and pencil test before writing or highlighting their answers. Being a test in which the questions are given to the pupils and they must write or shade the correct answers on answer sheets. It is expected that students will arrive at the exam site equipped with their writing supplies (Makinde, 2021). In classroom assessments, students are typically required to provide written solutions on paper because standardized tests are increasingly frequently given on computers. In comparison to computer-based assessment, which is carried out using a computer device, a category of information and communication technology, and is intended to measure deeper understanding through skills and ability, paper-and-pencil assessment is frequently used in the classroom to refer to tests scored objectively. These tests are meant to measure memorized knowledge and less advanced forms of understanding (He & Lao, 2018).

Information and communication technology (ICT) refers to a broad range of communication tools and media, including radio, television, mobile phones, computer networks, satellite systems, etc., as well as the numerous services and applications they enable, such as video conferencing and distance learning (Azor, 2017). ICT has become a common feature of daily life. The entire world has become a global village where communication is essential for everyday life. ICT's widespread use and quick progress have changed society from the information technology age to the knowledge age, also known as the millennial society, which digitizes information (text), images, sound, motion, and other forms (Obioma, Junaidu, & Ajagun, 2016). Additionally, since technology has permeated several facets of human life, including education, it has significantly altered a variety of human activities. It has become essential that various educational activities can be carried out utilizing the new technology ICT following the introduction of Information and communication technology (ICT). However, the recent push toward globalization has elevated information and communication technology to a crucial position in modern life. Almost every aspect of human society has been impacted by ICT, including the medical, social, economic, and educational spheres. Nations' educational systems have undergone significant transformation as a result of the recent integration of ICT. ICT can therefore be considered a change agent in the field of education. (Richard & Edna, 2019).

Communication and information in the educational system, technology resources are used for a variety of tasks such as student administration and registration (Ajinaja, 2017); serving as an instructor and learner facilitator (Azor, 2017); assessment of learning through Computer Based Test (Joshua, 2018) and even record keeping and management of resources in the education sector (Ghavifekr, Afshari, Siraj & Segar, 2013). According to Adegbija, Fakomogbon and Daramola (2012), technology has been the only thing that has made the education of nations reliable, efficient and globally based with its role in computer-based assessment being more significant. The computer-based test represents a modern way of answering an examination question, placed side by side in written Pen And Paper (PNP) format. It is possible to think of CBT as a complex of artificial techniques and knowledge for resolving the instructor's problem involving the marking pen and exam. CBT is a combination of networks, hardware, and software as well as methods of communication, collaboration, and engagement that enable the processing, management, and exchange of data, information, and knowledge (Bennett, 2015). Thus, computer-based examination helps the instructor to assess the students with convenience irrespective of the population as the computer marks the scripts with the programmed answers and gives each student's scores at the end of the assessment.

An increasingly common type of assessment utilized in many educational contexts is the computer-based test. CBT consists of assignments or questions that are given and graded by a computer-based system. The technology makes it possible to offer assessment information, automatically score responses, and monitor student achievement. Additionally, computer-based tests decrease the time and expense involved in marking exams (Fries & Doorlag, 2019). Chalmers (2016) cited by Bandele and Olatunji (2019), asserted that computer-based tests a tests that can be used in a supervised or non-supervised environment, and can allow students to check their progress through self-assessment. It can also be used for testing lower-order skills (such as knowledge, understanding and application); it can also be used for testing higher-order skills to improve the students' analysis. In addition, computer-based tests are simple to develop and can be used to give exams to undergraduate students at various levels, providing more accurate and quick responses than paper-based tests in situations when the population is huge (Smith, 2017). Higher education institutions, particularly the University of Ilorin, have embraced computer-based testing as one of their assessment methods since organizations like JAMB provide qualifying tests to millions of applicants. CBT other than the University of Ilorin, the National Open University, the University of Nigeria, Nsukka, and others also use computer-based tests to administer exams to students to lighten the workload caused by the high student population. Technology integration into educational programs is now possible, but for this to work and produce the desired results, students must be actively involved throughout their academic career and their attitude towards it is one of the important tools that determines if the impact of technology would produce the expected result.

Student attitudes regarding computer-based test courses can be both good and negative. It is appropriate to state that attitude is a significant precursor to action. A person's attitude toward an object, problem, circumstance, or abstract entity can be used to forecast, regulate, and influence that person's behaviour. Attitudes are established by experience, and both internal and external circumstances have the potential to change them. A crucial factor in the learning process is a person's attitude (Adeyinka & Bashorun, 2012).

An individual's attitude is an emotional tendency that might be favourable or negative. In contrast to kids who learn using traditional methods, students who use mobile devices for learning adopt positive attitudes regarding it. Even if writing exams using computer-based tests is probably simple for them, there are still some procedures they must go through to write exams or tests. Their approach to this process is crucial to attaining the course's objective, which is evaluated through a computer-based test (Salami, 2021).

Adewole (2021), remarked that attitude is considered to be individualistic, an abstract entity and a kind of intervening variable imposed to explain irregularities in behavioural responses. Students work harder, are more engaged, and perform better when they perceive utility value, which suggests that they have a positive attitude about learning. However, if they are not interested in learning, they will stop participating in the learning that is required of them and instead concentrate on their grades since the course will be evaluated using a computer-based test. However, a student's attitude can be positive or negative depending on how they view building learning habits in a classroom setting, which can also impact how engaged they are in their academic work.

Academic engagement is a multifaceted notion that is defined as the student's commitment to academic activities in terms of time, effort, and motivation (Shah & Barkas, 2018). Kuh (2010), cited by Alrashidi et al (2016), defined academic engagement

as the energy and time a student devotes to educational sound activities outside and inside classrooms, and practices and policies that educational institutions use to encourage the student to participate in these activities. Multimedia in the classroom provides significant pedagogical benefits in terms of encouraging higher student participation. This has also been shown in the context of online learning, which has increased student academic engagement and decreased the core issues of learner isolation and dropout using a variety of platforms including Zoom, Google Classroom, etc. (Nepal & Rogerson, 2020). However, the usage of computer-based exams, one of the many strategies that encourage students to actively interact with their topic has increased as a result of efforts to involve students through more tests, assignments, or examinations. It enables computer processing of marking, instant feedback, the recording of student scores, and the analysis of student performance, which lessens the workload on teachers. In a Computer-Based test hall, students are actively engaged in answering the questions given within the allotted time, therefore, distractions are minimized and the expected effort is given to the assessment process.

Academic engagement includes consistent attendance, completion of assignments, preparedness for class, and participation in class and school activities, which contribute to students' ability to adhere to rules and regulations, qualify them to write examinations and keep them actively engaged in learning. However, when the reverse is the case among undergraduate whose goal is to read on their own to pass the examination, all that it takes to get them engaged academically would be wasted. In line with the current discussion, assessment of undergraduate academic engagement and attitude towards Computer-Based Test courses is important to reduce possible associated problems in higher institutions. Based on the discussion, it is pertinent to note that a study like this is amply justified and research-worthy.

Problem Statement

In many academic institutions, the trend of students' declining class attendance is a problem. Students' motivation is influenced by a variety of elements, which in turn encourage them to attend classes, finish their assignments, participate fully in class and school events, and show up to class mentally and physically prepared. It is obvious that students retain more information when they actively participate in class, and increased attendance at lectures also helps students learn the material more effectively, particularly when teaching strategies like active learning and learner-centred instruction are used. As a result, it is crucial to evaluate the undergraduate's degree of academic engagement and attitude in the courses assessed using computer-based tests, which are an essential component of teaching and learning in the modern higher education setting of the twenty-first century. Undergraduate academic engagement in higher institutions has drastically reduced as several processes take place before the learning objective is achieved. School performs both manifest and latent functions i.e. obvious and hidden functions respectively. However, the latent function of the school which is expected to bring about an expected positive outcome in learners, especially the ones that occur in the classroom during teaching and learning has given rise to serious questions and concerns. Students need total attention in any teaching and learning process, by attending almost all lessons until the attendance and every class task or activity is adhered to, and at the end, the examination is given. All these have practically been disapproved of or have not been given high priority in today's class or lessons taken among undergraduates. Some find it difficult to even know and identify their course lecturers as all they are after is to register for the course, buy textbooks to read on their own and meet for continuous assessment

and examination. What happened to all the initial teaching-learning academic engagement is the concern of this study.

Undergraduate students have the freedom to come to class or not, but some rules guide the school activities and teaching and learning before students are qualified to write exams such as the availability of 75% of attendance. It is very discouraging seeing lecturers in class and not up to one-third of registered students are physically present either online or physically in the four walls of a classroom to learn after the lecturer has put in so much effort in preparing for the lectures as their manifest role; students find it unnecessary to attend lectures due to reasons best known to them. For instance, a GNS class of 14,000 registered students where only 120 students are present in class or a class of 500 registered students and just less than 300 students are actively engaged in the class activities, calls for alarm on what is happening to academic engagement. The lecturers are charged with the responsibility of teaching, taking of student's attendance in class, and conducting their assessments with enthusiasm to ensure student's progress in their academics and a positive change in behaviour at the end of every academic session but all these measures have not been able to produce the desired and expected change in student's academic engagement, especially towards courses examined through Computer-Based Test.

Similarly, Kim et al (2019), examined the role of academic engagement and digital readiness in students' achievements in university e-learning environments and one of the findings revealed that student's e-learning adoption and attitudes in the university context and academic achievements are mediated by digital readiness and academic engagement.

Lastly, the study of Sengsouliya et.al (2020), investigated predictors of student academic engagement and the findings show that the student participants rate is on a high level of engagement in all dimensions. That means they perceived that they are well engaged in learning across three types of engagement: Emotional, Behavioral, and Cognitive engagement. However, looking at the mean scores, two dimensions of Emotional and Behavioral engagement are found to be scored highest of all. However, even when many studies have been conducted on students' attitudes towards computer-based tests, no study is available to the best of the researcher's knowledge that combined lecturers' and students' assessments of undergraduates' level of academic engagement towards courses examined through Computer-Based Test. Hence, this necessitated the study of lecturers' and students' assessment of undergraduate academic engagement and attitudes towards Computer-Based Test Courses, in a Nigerian University, which is considered complementary to existing studies.

Objectives of the Study

The study investigated Lecturers' and students' assessment of undergraduate academic engagement and attitudes towards Computer-Based Test Courses, in a Nigerian University. Specifically, the study evaluates.

I. Lecturers' assessment of undergraduates' attitudes towards courses examined through computer-based Tests.

II. Students' assessment of undergraduates' attitudes towards courses examined through computer-based Tests.

III. Lecturers' assessment of undergraduates' level of academic engagement towards courses examined through Computer-Based Test.

IV. Students' assessment of undergraduates' level of academic engagement towards courses examined through Computer-Based Test.

Research Questions

The following research questions were generated to guide this study;

I. How do Lecturers assess undergraduates' attitudes towards courses examined through computer-based Tests?

II. How do Students assess undergraduates' attitudes towards courses examined through computer-based Tests?

III. How do Lecturers assess undergraduates' level of academic engagement towards courses examined through a Computer-Based Test?

IV. How do students assess undergraduates' level of academic engagement towards courses examined through a Computer-Based Test?

Methodology

The study employs a descriptive research design of the survey type. The data collected were analyzed using descriptive statistics. Percentage and mean were used to answer the research questions raised. The population for this study comprised all lecturers and students of the University of Ilorin, Ilorin, Nigeria. Multi-stage sampling procedure was used for this study. At stage one, the purposive sampling technique was used to select only one university which is the University of Ilorin out of the Eight universities in Kwara State. In stage two, simple-random sampling was adopted to sample only (8) faculties, which are the faculty of Education, Agriculture, Arts, Physical Sciences, Communication and Environmental Sciences, Engineering, Environmental Science, and Law. At Stage Three, the students were stratified based on academic level, and 300 Level students were purposively sampled. They were considered appropriate for this study because they have had prior experience on courses examined through computer-based tests for not less than two sessions.

There are 5,872 300 level students in the following ratio: Education (2,745), Arts (479), Agriculture (748), Physical Sciences (350), Communication and Information Sciences (500), Engineering (400), Environmental Sciences (400), and Law (250), out of which 365 were sampled. This is in line with the research advisor (2006) who stated that 365 is suitable for a total population of 5,000-7,500 at a confidence level of 95% and 5.0% margin of error. Lastly, a simple random sampling procedure was adopted in selecting the students that constituted the sample.

On the part of lecturers, a simple random sampling procedure was adopted in the selection of 102 lecturers across the faculties to make a total of 467 respondents

The instrument for this study was a researcher's designed questionnaire titled "Lecturers and Students Assessment of Undergraduate's Academic Engagement and Attitude towards Computer-Based Test Courses in a Nigerian University" (LSAUAEACTCNU)", which consisted of two sections for both lecturers and students. The sections in the

questionnaire were made to address the research questions raised. Section A contained the demographic data of the respondents; section B contained 10 items on attitude; respondents were to indicate one option out of four options, of Strongly Agree, Agree, Disagree and Strongly Disagree, while section C contained 19 items on level of academic engagement with each items having two options of Yes and No.

Results

The findings of this study were presented by the purpose of the study. The analyzed data were collected through a researchers' designed questionnaire, which was analyzed with the use of descriptive statistics in the following order:

Four research questions were raised and answered in the study. Research questions 1 and 2 were answered with a 4-point Likert scale. 1.0 is the lowest mean and 4 is the highest mean. The mean range of 1-2.54 is regarded as negative and 2.55 - 4.00 as positive. Research questions 3 and 4 were answered with a two-point scale with 1 being the lowest frequency while 3 is the highest. The frequency range of 1 - 1.54 is considered low and 1.55 – 3.00 is considered high.

Research Question One: How do lecturers assess undergraduates' attitudes towards courses examined through computer-based Tests?

Table 1: Lecturers' Assessment of Undergraduates' Attitude towards Computer-Based Test Courses

STATEMENTS	N	Mean	Remark
Adopting a Computer-based mode of examining my course allows me to adopt a variety of teaching /learning styles	102	2.85	Positive
The convenience of examining through CBT promotes the willingness to attend such courses.	102	3.19	Positive
Students prefer attending classes of courses examined through computer-based Test	102	2.28	Negative
I feel that writing of assignment for a computer-based test is flexible for students	102	2.33	Negative
I think computer-based test courses accurately reflect student's true ability to participate in class and school activities	102	1.80	Negative
Students' learning speed and level of preparedness for class are improved in courses examined through computer-based.	102	2.00	Negative
I have observed that courses examined through Computer-based tests allow me to be in charge of their learning	102	3.33	Positive
Students feel motivated to complete my assignments on computer-based test courses	102	2.00	Negative

Students always arrive early with enthusiasm for computer-based test classes	102	1.90	Negative
Students prefer to raise questions and participate in discussions in a computer-based test class	102	2.33	Negative
Weighted mean		**2.40**	**Negative**

Key: Negative = 1.00 - 2.50   Positive = 2.60 - 4.00

Table 1 shows the attitude of lecturers toward undergraduates attitude towards courses examined through the computer-based Test platform. It reveals at a benchmark of 2.50 that the attitude of students assessed by lecturers was positive. The weighted mean of 2.40 is a confirmation of the negative attitude of students assessed by Lecturers. Therefore, the attitude of lecturers on their assessment of students' attitudes towards courses examined through the Computer-Based Test is negative, since their 2.40 falls below the benchmark of 1.00-2.50.

Research Question Two: How do students assess undergraduate attitudes towards courses examined through a computer-based Test?

Table 2: Students' Assessment of Undergraduates' Attitude towards Computer-Based Test Courses

STATEMENTS	N	Mean	Remark
Courses examined through CBT make it easy to understand the subject matter	365	3.12	Positive
I find it easy to navigate and choose the correct answer even with prior knowledge of the course contents	365	3.13	Positive
Computer-based courses offer flexibility in terms of when and where I can study.	365	3.07	Positive
I feel motivated to actively participate in discussions and assignments in computer-based courses	365	3.07	Positive
I feel motivated to attend courses examined through CBT regularly	365	2.98	Positive
I believe courses examined through CBT require a similar level of effort as traditional testing mode.	365	3.03	Positive
I am comfortable seeking help or clarification from instructors in computer-based courses	365	2.97	Positive
Courses examined through CBT are also considered self-motivated courses that do not require the presence of teachers and students in face-to-face class teaching.	365	2.90	Positive
Courses examined through CBT are more convenient in terms of teaching /learning	365	2.92	Positive

Performance in a course examined through CBT is always better than PPT even with students with less attendance	365	2.73	Positive
Benchmark		**2.99**	**Positive**

Key: Negative = 1.00 – 2.50   Positive = 2.60 – 4.00

Table 2 shows the assessment of students' undergraduate attitudes towards courses examined through the Computer-Based Test platform. It reveals at a benchmark of 2.50 that the attitude of the students was positive on all the presented items without any exemption. The weighted mean of 2.99 is a numeric indicator that the attitude of the students towards courses examined through the Computer-Based Test is positive.

Research Question Three: What is the Lecturers' assessment of undergraduate's level of academic engagement towards courses examined through a Computer-Based Test?

Table 3: Lecturers' Assessment of the level of Undergraduate Level of Academic Engagement towards CBT Examined Courses

Levels	Frequency	Per cent
Low	73	71.4
High	29	28.6
Total	**102**	**100.0**

Key: Low = 1 - 1.54   High = 1.55 – 3

Table 3 shows lecturers' assessment of undergraduate's level of academic engagement towards courses examined through Computer-Based Tests in a Nigerian University as low at 71.4%.

Research Question Four: What is students' assessment of undergraduate's level of academic engagement towards courses examined through a Computer-Based Test in a Nigerian University?

Table 4: Students' Assessment of the level of Undergraduate Level of Academic Engagement towards CBT Examined Courses

Levels	Frequency	Per cent
Low	231	63.4
High	134	36.6
Total	**365**	**100.0**

Key: Low = 1 - 1.54   High = 1.55 – 3

Table 4 revealed that students assessed their level of academic engagement in a Nigerian University as low at 63.4%.

Discussions

The first finding of this study shows that lecturers' assessment of undergraduate's attitudes towards courses examined through computer-based tests is negative. This could be because students do not attend classes that are examined through CBT and this could be due to the availability of instructional text. Students feel they can easily read on their own to prepare for examinations without having to attend classes. Also, since the questions are constructed in an objective format, they can easily choose answers.

Another reason why undergraduates have a negative attitude towards courses examined through computer-based tests could be because assignments are not given for courses

examined through CBT, due to the large population of students that attend the course. Majorly, most of the courses are either faculty courses or general courses, which are taught by different lecturers who are assigned to teach different topics from the curriculum contents. Therefore, given of assignment and collation of scores might not be feasible.

Low attendance in class is another reason for the negative attitude observed by their lecturers. When students are not enthusiastic to attend classes, it can lead to low attendance. Also, attendance is not taken even though there is a rule of 75% attendance before students would be allowed to write examinations, but since there is no documented attendance given due to the large class, students do not feel motivated to attend classes. This could also lead to little or no participation in group discussions or presentations. This is in contrast with the study of Erdogdu (2019), whose study revealed that there is a positive relationship between attitude toward learning, school engagement and academic achievement. As is expected, school engagement plays a mediating role in the relationship between attitude toward learning and academic achievement. Furthermore, when the attitude toward learning is positive, individuals are more academically successful, and when academic achievement is high, positive emotions toward school engagement have a mediating role. However, lecturers are unable to influence students' attitudes positively which has drastically led to low academic engagement towards courses examined through Computer-Based tests.

The findings of this study also revealed that Students assessed their attitude as positive. This may be because they believe they can access information concerning the course without class attendance. It could also be because they are mostly Education students and they believe that their courses are easy to read and understand, which involved less practical. However, since they can easily understand the subject matter, their primary goal would be to read and prepare for the examination, not minding the adequate process of learning and internalization of the subject matter.

Computer-based test courses offer flexibility in terms of where and when they can study. Unlike courses that are examined through paper and pencil test format where the lecturer can call for an impromptu test at any time of the teaching and learning process. The fear of failing would push them to read ahead of class in case of any unannounced test or discussion in class. The computer-based test needs to be programmed and scheduled for students to know when to converge at the CBT centre to write their test or examination. Therefore, they have the freedom to study when the examination timetable is released since instructional texts are available. This also made them believe that courses examined through CBT require a similar level of effort as a traditional testing mode in terms of preparation for tests and examinations.

Undergraduates' attitudes are also positive because they can easily form discussion groups among themselves even if they do not attend classes or have face-to-face learning with their instructors. This study group would assist them to prepare ahead of the examination, those that attend classes would share their notes and teach their colleagues what they've learnt in their previous lesson. This can be a form of positive advantage for them when it is a course examined through computer-based tests. This finding is in line with that of Bandele and Olatunji (2019), whose finding showed that students' attitude to the Computer-Based Test for General Studies examination was positive and the objectives of general studies using computer-based tests were achieved and effectively implemented. In the same vein, Muhammad et al (2020) findings indicated that the students have a strong

and positive attitude in a learning management system (LMS) environment. The result is possibly because the students are positive and support the implementation of e-learning and they feel e-learning can improve their learning activities. There is a positive attitude toward the LMS environment, and this is probably due to their feeling that using LMS is a better learning approach in a higher learning institution.

Furthermore, findings also revealed that Lecturers' assessment of undergraduate's level of academic engagement towards courses examined through Computer-Based Tests in a Nigerian University is low. Lecturers are trained to engage their students in all learning activities but when the students are not available to learn, it leads to low participation in class and school activities, little or low preparedness for class, lack of completion of assignments, and inconsistency in class attendance especially towards courses examined through computer-based test and negative attitude would lead to low academic engagement. It was confirmed that Students considered attending Classes for CBT courses a waste of time and group discussions are more vital to students than attending classes when it is a CBT form of examination. Since the classes are always large, keeping 75% attendance is a scam since it is a CBT mode of examination. Students also find it difficult to read ahead of the class in preparation for the next lecture when instructional texts are made available; meanwhile, reading ahead of the class would enhance viable discussion of the subject matter and ask important questions on what was not well understood while preparing for the class ahead. This finding is in line with the finding of Abdull (2014), on the relationship between Lecturers' teaching style and students' academic engagement and it was found that the relationship between teaching style does not determine students' academic engagement. If there is no relationship between teaching style and academic engagement, then attitude has a lot to do with students' level of academic engagement. In the findings of Eunice and Joseph (2013) on student levels of engagement in learning: A case study of Cape Peninsula University of Technology, lecturers reported that students had low levels of engagement in learning, felt that the students had lacked dedication, knowledge of what is required of them in tertiary education, the skills to study and to apply knowledge, focus, and time management skills. The nonengaged students were seen as immature and as having been forced to take up a course of study by their parents.

Lastly, the finding of the study revealed that students' assessment of undergraduate's level of academic engagement is on the negative side. However, academic engagement is subdivided into four variables in this study, which are consistent class attendance, completion of assignments, preparedness for class and participation in class and school activities. In terms of low academic engagement through little or no attendance to class on courses examined through computer-based tests, students affirmed that they need half lessons to pass the exams given to them and attending two hours of class is not always necessary for courses examined through CBT, all they need is one hour class. When they are not available in class, class and school activities will not be achieved as planned by the instructor. Also, students do not work with their colleagues to complete a task or an assignment in Computer-Based test courses, since Computer-Based test courses do not always require assignments and not all lecturers give assignments on the courses. Meanwhile, giving assignments would spur them to do personal research by making good use of e-facilities provided for them in the school. It would be difficult for students who do not have access to personal computers, or good phones or are financially buoyant to buy data for online research to back up their responses to the assignment given. A large number of the students affirmed that note-taking is one of the class activities that stimulate active participation in class activities but the unavailability of students in the

class would not make this take place. When students write down personal notes in class, they will be able to express their understanding of the subject matter in writing. It would also serve as additional text material while revising or reading for their exams apart from the instructional texts given in school. This finding is in line with the findings of Adewole (2021), who studied Class attendance and academic performance in Banking and Finance Courses: Cross-level comparison revealed that students with 75% and above attendance performed remarkably better than students with less than 75% attendance, suggesting that the policy on 75% minimum class attendance contributes to higher academic performance. It was therefore suggested that Class attendance in the conventional manner should be encouraged and regulated, while the virtual learning system is being worked upon to be a perfect substitute for the regular class system. However, the findings of Ishola and Benedict (2021) found that Computer-Based Test influences undergraduate students' lecture attendance regardless of their course of study and suggested that an enabling environment that will motivate and gear students toward making lectures a priority should be provided in schools.

Conclusion

The study concluded that lecturers viewed the attitude of students as negative while students assessed theirs as positive. Both the lecturer's and students' assessments of their academic engagement were low. The evidence showed that when students lack a positive attitude towards their studies, they are less likely to actively engage with their academic tasks, leading to potential negative consequences for their educational outcomes. The low attitude of students would drastically reduce their academic engagement in the teaching and learning process. It is therefore possible for students to view their attitude as positive when they think that the goal is to have high grades in the course.

Recommendations

Based on the findings, the following recommendations are made:

I.   As a result of the study's finding that undergraduates have negative attitudes towards courses examined through computer-based tests as assessed by their lecturers. Therefore, it is advised that learning activities should include elements that encourage students to adopt a positive outlook. To accommodate varied learning styles, lecturers might use a variety of teaching techniques, such as group exercises, case studies, and real-world examples. They can also help students understand what is expected of them by offering clear course objectives, expectations, and grading criteria. Last but not least, lecturers can promote candid dialogue and active engagement by establishing a judgment-free environment for queries and conversations.

II. By participating in all the events that their professors and school have arranged for them, students should actively demonstrate a positive attitude about their course of study. They would be able to maximize their learning as a result. The establishment of both short- and long-term educational goals that are both obvious and attainable can help students stay motivated. They should use digital tools, planners, and calendars to stay organized as well. Keeping track of tasks, due dates, and study plans can help students focus and feel less stressed. Finally, they should recognize and appreciate successes, no matter how minor they may appear to be. Motivation can be increased through positive reinforcement.

III.   It was revealed that the lecturer's assessment of student's academic engagement is low, it is therefore recommended that learning should be more learner-centered. They need to take an active part in both teaching and learning. Peer study groups should be developed, for instance, so that students can share knowledge and ask questions about the course material. In turn, this will motivate them to work together on group tasks. Regardless of how big the class may be, attendance should be required and count toward their evaluation. As a result, they will become more actively involved in studying and school activities.

IV.   Students should become more involved in the teaching and learning process by actively using learning strategies such as active participation in class, developing note-taking skills to capture important information during lectures, asking questions during lectures, and utilizing educational technology and online resources to improve their learning experience. High levels of academic engagement would result from this.

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