



Assessment of Test Taking Skills of Undergraduates on Their Academic Performance in Ignatius Ajuru University of Education, Port Harcourt

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Abstract: The study investigated the assessment of test taking skills of undergraduates on their academic performance in Ignatius Ajuru University of Education, Port Harcourt. The study adopted quasi-experiential research method. The population of the study was 5446 year 2 students in the 2019/2020 academic session in the University. The sample of the study was 269 students drawn from various faculties in the university through multi-stage sampling method. The instruments for data collection were a computer-based performance test titled: "Use of English Test (UET)". Other instruments used in the study are: Interest Inventory (II), Attitude Scale (AS) and Test Anxiety Scale (TAS). The computer based Use of English Test was given to experts in the department of English and Communication Studies while all the instruments were given to experts in Measurement and Evaluation. The reliability of the computer-based Use of English Test was determined through Kuder-Richardson₂₁ while the reliability of the other instruments was determined through ordinal alpha. The instruments yielded the following coefficients: .82 for the Computer-Based Use of English Test, .81 for Interest Inventory, .75 for Attitude Scale and .83 for Test Anxiety Scale. Analysis of covariance was used in testing the hypotheses at .05 level of significance. The result of the study showed that test taking skills boost students' academic performance in the computer-based use of English test, enhanced their interest, make them have positive attitude towards the Use of English Test and decreased the test anxiety. Based on the results the researcher recommended that test taking skills be taught as a general course amongst others.

Keywords: Test talking skills, assessment, academic performance, use of English, interest, attitude, and test anxiety.

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INTRODUCTION

Test is a very important instrument in the school system. Inko-Tariah and Ogidi (2017) assert that test is a task or series of questions presented to an individual or a group of individuals in order to obtain the presence or traits possessed by them. They further explained that it is a systematic and objective method used to obtain a sample of an individual's behaviour. Ali in Asuru (2015) posits that in broad term, a test is a systematic procedure

for observing a person's behaviour and describing it by means of a numerical scale or a category system. He reiterated that test is an assessment and evaluation instrument used to measure skills, knowledge, competence, intelligence, academic achievement or performance, ability, aptitude, attitude, interest, attention span, motivation and the like hence it could take any form. It may be used to measure the extent to which students have mastered the planned learning experiences and activities in

the classroom. In the university system, test is the determinants of students' grade and may take the form of classroom test, assignment, practical activities, examination etc. In a nutshell, test is instruments for decision making at all levels of the educational system.

Test is a very important activity in the university system. This is because successful performance in a test is core or foundational to goal attainment. Test taking involves skills and knowledge on the part of the test takers. Slavin in Chittooran and Miles (2001), suggest that chances of test success are greatly improved if test-takers invest both time and effort in developing and refining their skills in test-taking. Dodeen, Faisal and Saleh (2014) assert that test taking skills are cognitive skills that allow students to undertake any test-taking situation in an appropriate manner and to know what to do before, during and after the test. It is the competencies possessed by students that enhance their academic performance in a test. Sefcit, Bile and Prerost (2013) refer to test-taking skills as transferable skills. This is because once acquired, students may be enabled to use such skills across a variety of subjects and within different settings, conditions and situations. In addition, Dodeen, Faisal and Saleh (2014) and Al Fraidan and Al-Khalaf (2012) suggest that most test-taking skills are useful in a students' practical life, where they may benefit their effective use of time, ability to set priorities, ability to work both fast and accurately and to make sure ideas become directly evident. Thus, test-taking skills are also relevant in other areas of life.

Ogunjimi (2018) assert that the performance of students does not happen but that it is the outcome of skills possessed by the student or test taker. Most of such skills are acquired over a period of time. Okwudiri (2015) posit that test-taking skills separate high achievers from low achievers in the school system.

Chittooran and Miles (2001) categorized test-taking skills to include familiarity with the characteristics and content of tests, test preparation, test wiseness and management of test anxiety. However, this study intends to categorize such skills into two, before and during the test. Some of the test-taking skills required before the test include the following: keeping a study schedule, studying with purpose, effective note taking, and use of memory strategies, preparing a study checklists, test wiseness or getting past questions on the course or subjects. These activities will keep the students ready for the test.

During the test, there are also skills that the students need to possess. These activities included:

listening to directions from supervisors, reading the instructions in the test carefully, avoiding distractions (remaining focused, reading the questions carefully, and giving each question the fullest attention). Other skills include skipping difficult questions and answering them later, in multiple choices, reading the options carefully, managing time effectively, ensuring that the computer used is functioning effectively, ensuring that the script is submitted before leaving the examination hall, shutting down the computer completely before leaving the examination hall.

Haruna (2019) posited that test-taking skills assist in improving the performance of students in secondary schools. It minimizes test anxiety; enable the students to get ready for the test and draws out the interest of the students in the test. Johnson (2017) posits that test-taking skills enable the students to have positive attitude towards the test. Dennis (2016) asserts that test-taking skills help to eliminate fear and apprehension associated with test-taking among students.

Scholars (Ndubeze, 2015; Haruna, 2019) investigated different aspects of test-taking skills especially in secondary schools. Dodeem, Faisal and Saleh (2014) investigated test-taking skills of secondary students: The relationship with motivation, attitudes, anxiety and attitudes towards tests in Mathematics. Positive and significant relationship was reported between students' test-taking skills and each student's motivation to learn mathematics, attitude towards Mathematics and attitude tests, while Mathematics anxiety was shown to have significant negative relationship with test-taking skills. Mohammed (2018) examined the effect of test-taking skills on the academic performance of secondary school students in Physics in Kaduna State; using attitude and interest in Physics as moderating variables. The finding of the study was that the treatment group had positive attitude towards test-taking in Physics and also there interest in taking test in Physics increased than the attitude and interest of students in the control group.

Ogunjimi (2018) also investigated the effect of test-taking skills on the academic performance of secondary school students in Chemistry in Lagos State. The result of the study was that students in the experimental group did better in chemistry students in the control groups. Also, the interest of the students in the test was significant.

Okwudiri (2015) examined the effect of test-taking skills on the academic achievement of students in Mathematics in Imo State. The result of the study showed that there was significant

improvement in the academic achievement of students in the experimental group that the academic achievement of students in the control group.

A cursory look at the various studies involving test-taking skills showed that most of the studies were carried out at the secondary school levels with traditional methods of assessment. This study however was carried out in a university using computer-based test. The emergence of new technologies and digitalization of processes carried out manually in education necessitated the use of computerized testing and assessment. Noyes and Garland (2008) assert that the gains of computer-based tests, such as quick and objective results and the ease of comparing results with others make this method very popular. Other benefits of computer based assessment include cost-effective administration, ease of administration, more accuracy, immediacy of scoring and reporting and flexible test scheduling and location. Adegun, Akinola, Adepoju and Kolajo (2018) observed that students who are familiar with computers feel more comfortable using it. Therefore, this study was designed to investigate the effects of test-taking skills on the academic performance of undergraduates at the Ignatius Ajuru University of Education in Port Harcourt in the use of English using computer-based test.

HYPOTHESES

The following null hypotheses were tested in the study:

1. There is no significant main effect of treatment on students’ performance in computer-based English Language Test.
2. There is no significant interaction effect of treatment on students’ interest in the computer-based English Language Test.
3. There is no significant interaction effect of treatment on students’ attitude towards the computer-based English Language Test.
4. There is no significant interaction effect of treatment on students’ anxiety in the computer-based English Language Test.

METHODOLOGY

The study adopted a pre-test-posttest, control group quasi-experimental design method. The outlay of the design is shown below:

O ₁	X	O ₂	Experimental Group (this group was administered with test-taking skills)
O ₁	X	O ₂	Control Group (this group was given current affairs)
O ₁	-		represents pre-test measure
O ₂	-		represents post-test measure

It was the experimental group that was given treatment while the control was given current affairs.

The target population for this study was 5446 year two students in the 2019/2020 academic session in the Ignatius Ajuru University of Education in Port Harcourt, Rivers State. This level of students was chosen on purpose because they offer the General study course on the Use of English Language written through the use of computer resources.

Simple random sampling technique was used in selecting the faculties and departments that participated in the study. Lastly in each of the selected faculties and departments, simple random sampling was adopted to select the students 269 (116 males and 153 female from eight (8) departments that participated in the study.

The instruments for data collection were a computer-based achievement test on the use of English titled: “Use of English Test (UET), Interest Inventory (II), Attitude Scale (AS) and Test Anxiety Scale (TAS). The instrument was given to experts in English and Communication Studies, Educational Evaluation and Measurement in order to determine its content validity. The instrument was there after pilot tested on 20 students who did not take part in the study. The reliability coefficient of the instrument was established using Kuder-Richardson estimate₂₁ and it yielded a value of .86. However, the Interest Inventory yielded a reliability index of .81, the Attitude Scale yielded an index of .75 while the test anxiety scale yielded a reliability index of .83. These show that the instrument was reliable for use in the study.

The treatment package (TP) was a training manual and the instructional guide for the research assistants (Lecturers in the Department of English and Communication Studies in the University) who participated in the study. This was packaged by the researcher in line with the suggestion and contribution of experienced lecturers in English and Communication Studies, lecturers from Computer Department and experts in research from the same university.

The researcher met with the lecturers in English and Communication Studies, created rapport with them, got them informed of the purpose of the study and how to go about the research work. Both the researcher and the lecturers agreed on the time and venue for training for those that fell into the experimental and control groups. The students from the selected departments were also made to realize the purpose and benefits of the participating in the study.

A week before the commencement of the treatment, the Interest Inventory, the Attitude Scale, Test Anxiety Scale and Use of English Test was administered on the participants. The instruments and the participants' responses were collected immediately. The instruments were used as post-test, at the end of the treatment which lasted six weeks. The researcher did not participate in the teaching but monitored the proper execution of the experimental or treatment package. Analysis of

covariance ANCOVA was used to test the hypotheses stated in the study at .05 level of significance.

RESULT

Hypothesis One

There is no significant main effect of treatment on students' performance in computer-based English Language test.

Table-1: Summary of Analysis of Covariance (ANCOVA) on Students' Performance in the Use of English Test

Source	Type III Sum of Squares	Df	Mean Squares	F	Sig	Partial Eta
Corrected Model	8464.311	4	2116.08	25.004	.000	.243
Intercept	1971.6132	1	1971.6132	23.297	.000	.422
Pre-test	334.56	1	334.56	3.953	.000	.521
Treatment	2893.4281	1	2893.4281	34.189	.000	.072
Error	22342.512	264	84.631			
Total	10522.136	269				
Corrected Total	34752.47	268				

a. R Squared = .248 (Adjusted R Squared = .231)
(F(1/264) = 34.189; p < .05)

Table 1 shows the summary of analysis of covariance (ANCOVA) of students' post test scores on the treatment. The result reveals that the effect of treatment on students' academic performance is the computer-based Use of English test was statistically significant (F(1/264) = 34.189; p < .05); therefore, the null hypothesis which stated that there is no significant main effect of treatment on students'

performance in computer-based use of English test was rejected.

Hypothesis Two

There is no significant interaction effect of treatment on students' interest in the computer-based English Language test.

Table-2: Summary of Analysis of Covariance (ANCOVA) on Students' Interest in the Computer-Based Use of English Test

Source	Type III Sum of Squares	df	Mean Squares	F	Sig	Partial Eta
Corrected Model	8464.311	4	2116.08	25.004	.000	.243
Intercept	1971.6132	1	1971.6132	23.297	.000	.422
Pre-interest	2042.561	1	2042.561	23.135	.000	.069
Treatment	2893.4281	1	2893.4281	34.189	.000	.072
Treatment* Interest	2169.66	1	2169.66	25.637	.000	.126
Error	22342.512	264	84.631			
Total	105021.36	269				
Corrected Total	34752.47	268				

a. R Squared = .248 (Adjusted R Squared = .231) (F(1/264) = 25.637; p < .05)

Table 2 reveals the summary of Analysis of Covariance (ANCOVA) of students' post-test scores on the treatment and interest. The result revealed that the effect of treatment and students' interest in the computer based Use of English test was statistically significant (F(1/264) = 25.637; p < .05); therefore, the null hypothesis which stated that there is no significant interaction effect of treatment

and students' interest in the computer-based use of English test was rejected. The alternate hypothesis is therefore not rejected.

Hypothesis Three

There is no significant interaction effect of treatment on students' attitude towards the computer-based English Language test.

Table-3: Summary of Analysis of Covariance (ANCOVA) on Students' Attitude in the Computer-Based Use of English Test

Source	Type III Sum of Squares	df	Mean Squares	F	Sig	Partial Eta
Corrected Model	8464.311	4	2116.08	25.004	.000	.243
Intercept	1971.6132	1	1971.6132	23.297	.000	.422
Pre-Attitude	2417.4484	1	2417.4484	23.565	.000	.079
Treatment	2893.4281	1	2893.4281	34.189	.000	.072
Treatment* Attitude	2094.86	1	2094.86	24.753	.000	.129
Error	22342.512	264	84.631			
Total	105021.36	269				
Corrected Total	34752.47	268				

a. R Squared = .248 (Adjusted R Squared = .231)
(F(1/264) = 24.753; p < .05)

Table 3 indicated the summary of Analysis of Covariance (ANCOVA) of students' post-test scores on the treatment and attitude. The result revealed that the effect of treatment and students' attitude in the computer based Use of English test was statistically significant (F(1/264) = 24.753; p < .05); therefore, the null hypothesis which stated that there is no significant interaction effect of treatment and students' attitude towards computer-based use

of English test was rejected. The result of the hypothesis shows that the alternate hypothesis is not rejected.

Hypothesis Four

There is no significant interaction effect of treatment on students' anxiety in the computer-based English Language Test.

Table-4: Summary of Analysis of Covariance (ANCOVA) on Students' Test Anxiety on the Computer-based Use of English Test

Source	Type III Sum of Squares	df	Mean Squares	F	Sig	Partial Eta
Corrected Model	8464.311	4	2116.08	25.004	.000	.243
Intercept	1971.6132	1	1971.6132	23.297	.000	.422
Pre-Test Anxiety	2308.9315	1	2308.7315	27.282	.000	.169
Treatment	2893.4281	1	2893.4281	34.189	.000	.072
Treatment* Anxiety	76.487	1	76.487	0.904	.459	.004
Error	22342.512	264	84.631			
Total	105021.36	269				
Corrected Total	34752.47	268				

a. R Squared = .248 (Adjusted R Squared = .231)
(F(1/264) = .904; p > .05)

Table 4 shows the summary of Analysis of Covariance (ANCOVA) of students' post-test scores on the treatment and anxiety. The result indicated that the effect of treatment and students' anxiety in computer based Use of English test was statistically significant (F(1/264) = .904; p > .05); therefore, the null hypothesis which stated that there is no significant interaction effect of treatment and students' test anxiety on the computer-based use of English test was rejected. The result of the hypothesis reveals that the alternate hypothesis is rejected.

test. The result of the study showed that test-taking skills enhanced the performance of the students. It promotes effective study habit which enables students to prepare adequately for any test. In addition, it gives the students some measure of competence or proficiency in the test taken. This result is in agreement with Haruna (2014) that test taking skills improve the academic performance of students in secondary schools. This result is corroborated by Okwudiri (2015) that test-taking skills enhance the academic performance of the secondary school students in Mathematics in Imo State.

DISCUSSION OF RESULTS

The result of the study showed that there was significant main effect of treatment on students' performance in the computer-based use of English

The result of the study revealed that there was significant interaction effect of treatment on students' interest in the computer-based use of English test. The result revealed that the motivation

of students in the treatment group was aroused and this contributed to their sustained interest in the computer-based Use of English Test. Thus, the students in the treatment group enjoyed taking the test than students from the control group. This result was in agreement with Ogunjimi (2018) that test-taking skills enhance the interest of students in taking test. This result is because the students show eagerness in taking test in the treatment group than the students in the control group that showed some reluctance in taking the test.

The result of the study indicated that there was significant interaction effects of treatment on students' attitude in the computer based use of English test. The result showed that the students in the treatment group had positive attitude toward computer-based Use of English Test than the students in the control group. The students in the treatment group showed likeness to the computer-based use of English test than their counterparts in the control group. This result is in agreement with Mohammed (2018) that test-taking skills enabled students to have positive attitude towards the test or examination. This result was corroborated by Dodeem, Faisal and Saleh (2014) that test-taking skills improves students attitude toward Mathematics.

The result of the study revealed that there was no significant interaction effect of treatment on students' test anxiety in the computer-based use of English test. The result showed that the test anxiety of students in the treatment group reduced drastically compared to that of the students in the control group. This result is due to the fact that the fear and apprehension that accompanies the taking of test is decreased. The students in the treatment group have more measure of confidence in taking the test. This result is in agreement with Dennis (2016) that test-taking skills eliminate fear and anxiety associated with talking test. Also, the result is corroborated by Ndubueze (2015) who explained that test-taking minimizes test anxiety among students.

CONCLUSION

Based on the results of the study, the researcher concluded that test-taking skills boost the academic performance of students in use of the computer based use of English test, enable students to have interest in the computer-based use of English test, promotes students' positive attitude towards the computer-based Use of English Test and decreased test-anxiety among students in talking the computer-based Use of English Test.

RECOMMENDATIONS

Based on the results of the study, the researcher recommended as follows:

1. Test-taking skills should be taught as a General course in universities in Rivers State as it will reduce test anxiety among the students.
2. Test-taking skills should be made an essential component of courses in the universities as it will improve attitude of students towards taking test.
3. There should be training and retraining of students in the use of computer for students before participating Computer-Based Test (CBT) as this will assist in improving students' performance in computer based test and reduce text anxiety.

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