INVESTIGATING THE PREDICTIVE VALIDITY OF MOCK EXAMINATION FOR FINAL IJMB PERFORMANCE: A CASE STUDY OF IJMB PHYSICS STUDENTS OF KWARA STATE COLLEGE OF EDUCATION, ILORIN

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Abstract

This study was designed to determine the predictive of mock examination on the final IJMB examination among Physics students of school of Basic and Remedial studies, Kwara State College of Education, Ilorin. The study sought to examine the relationship between students' achievement in the two examination between 2008 to 2011 academic session. The result of the two examination were obtained; rank ordered and correlated using the spearman's rank order correlation method. The analysis of the result shows a very high correlation between the two examinations. Indicating that the mock examination is a good predictor of student's academic performances in the final IJMB examination. However the t-test for a bivariate normal population was use to test the hypothesis formulated in the work. The null hypothesis was rejected which showed that, "there is significant relationship between mock examination and final IJMB examination". It was therefore concluded that mock examination serve as a good predicator of students achievement in their final examination. Then recommendation were made; that government should employ experienced and qualified teachers in schools, provision of more infrastructural materials in schools, parents should provide educational needs for their children and teachers should take more pain in preparing their lectures and conducting test for the students, that aim at guiding them for success in their final examinations.

Keywords: IJMB, Mock Examination, Predictive, Validity, Final Examination and Physics

Introduction

Academic performance is defined as students' ability to carry out academic tasks, and it measures their achievement across different academic subjects (Al-Rahmi *et al.,* 2022). In educational institutions success is measured by academic performance or how well a student meets standards set out by examination body e.g. interim joint Matriculation Board i.e. IJMB or Senior Secondary Certificate Examination (SSCE) such as WAEC, NECO and NABTEB etc or the Examination conducted by the institution itself. The annual releases of Senior Secondary Certificate Examination results conducted by WAEC justified the problematic nature and generalization of poor Secondary School students performance in different school subjects. Smith et al. (2021) note that there has been a growing concern among educators about the declining performance of students in both internal and external examinations. Teachers have expressed frustrations with students' lack of preparation and low academic achievement in various subjects, pointing to the

continued challenges in the education system. Hence, mock examination or internal examination is selective, predictive and diagnostics in nature. It is supposed to reveals how successful teacher instruction have been mastered and prepare the final year students readiness for the final examination and further academic endeavours.

However, the National Assessment of Educational Progress 2023 results revealed declining student performance in basic reading skills, particularly for lower-performing students across racial and ethnic groups. These declines suggest that students are not performing as well as their previous achievements would have predicted. (National Center for Education Statistics [NCES], 2023). Browsing for pornographic images and other social irrelevancies pointed by Gabriel (2012) contributed to students poor performance in examinations. So students give rapt attention to frivolities.

In addition, there is a general complain of students poor performance at both internal and external examinations. Khanal (2023) emphasizes that teachers' academic behaviors, including their teaching styles, attitudes, and feedback strategies, have a direct impact on students' academic achievement. Effective teacher-student interactions are critical to improving learning outcomes. More so, Odenigbo (2012) reported that the set back in academic performance is as a result of overcrowding of classrooms, poor infrastructure and few teachers with poor remuneration. But findings revealed that overloaded curriculum and meta-physical influence on the time keepings by teachers attribute to students poor performance at both mock examination and final IJMB examination. According to Adebayo & Olorunfemi (2023) there was no significant difference between the performance of students in mock exams and the final SSCE exams, emphasizing that mock exams are reliable predictors for final exam performance.

Moreover, this study aimed at establishing the correlation between school mock examination and final IJMB examination performances. Baker & Roberts (2021) highlighted how grading systems that rank students on a numerical scale help reduce complaints by clearly showing how teachers and schools are accountable for the grades awarded. Therefore, the tracking of academic performance fulfils a number of purposes. Because areas of order to foster improvement and make full use of learning process.

In this paper, students' academic performance in interim joint Matriculation Board Examination (IJMB) is the peak and their grades in the mock examinations and final examination were compared, for the year 2008 to 2011 respectively. So as to determine the relationship between students performance in the two examinations using the spearman rank correlation technique.

Statement of the Problem

Academic performance is something that every parent wishes for their wards, Evidences from reviewed literatures, personal observation and experience indicate that mock examination is a good predicator of students' achievement in their final examination among IJMB Physics student of Kwara State College of Education, Ilorin. Therefore, this

study seeks to establish the relationship between the two examinations among IJMB Physics student of Kwara State College of Education, Ilorin.

Research Question

Based on the objective of the study, the research question below was raised in this direction:

What is the relationship between mock examination and final IJMB examination for the year 2008 to 2011?

Research Hypothesis

In the course of investigation to facilities this paper, attempts were made to satisfactorily test the hypothesis below:

There is no significant relationship between mock examination and final IJMB examination for the year 2008 to 2011?

Methodology

This work employs the correlational research design. This design can be described as a useful statistical tool to be employed when testing for relationship between two variables. In this paper, for the purpose of statistical analysis, the letter grades were quantified as in table 1.0.

Results and Discussion

To answer the research question raised in this study, the spearman rank order correlational analysis and t-test analysis for bivariate normal population for the year considered.

Table 1:0 Letter Grades and Magnitudes

Letter Grades	**A**	**B**	**C**	**D**	**E**	**F**
Magnitude	5	4	3	2	1	0

Also, the table 2 show value interpretation of ρ (rho), the Spearman Rank Order's Correlation Coefficient.

Table 1:0 ρ (rho) Value Interpretation

Correlation Coefficient	0.0 – 0.2	0.2 – 0.4	0.4 – 0.6	0.6 – 0.8	0.8 – 1.0
Relationship	Negligible	Low	Moderate	High	Very High

Table 3.0: Relationship Between Mock Examination and Final IJMB Examination for the year 2008 – 2011

Year	**Variable Sample Size, N.**	**Correlation**	**Level of**	**t-**	**t-**

	Mock Examination (X)	Final Examination (X)		Coefficient (e)	Df, N-2	Significance (α)	critical Value	calculated Value
2008	60	60	48	0.9987	58	0.05	1.671	149.2
2009	74	74	60	0.9991	72	0.05	1.667	199.9
2010	55	55	50	0.9982	53	0.05	1.676	127.3
2011	23	23	14	0.9931	21	0.05	1.721	38.8

Table 3.0 above shows that the correlation coefficient values indicate very high correlate between the two examinations (see table 2.0). Also, the t-calculated value are greater than the t-critical values upheld within 0.05 level of significance as the ρ (rho) values are less than one for the year considered in this study.

Thus, the hypothesis that "there is no significant relationship between mock

examination and IJMB examination for the year 2008 – 2011" was rejected.

The result of the data analysed to facilitate this paper indicated a significant relationship in the students' performance in the two examinations. A lot of on. It can however, be concerned as far this paper is concerned that various problems effect, jeopardize and determine students chances of passing external examination. Based on the data analysed in this study, it was discovered that "there is no significant relationship

between mock examination and IJMB examination over the period of 2008-2011". Therefore, the mock examination serves as a good predictor of students academic performance in their final examinations.

evidence shown a strong association between mock and final IJMB examination.

Besides, this study will help the teacher to take cognizance of the identified relationship between student performance in mock and external examination and find alternative solution to the student poor performance in both examination.

Conclusion

This study was conducted so as to bring solutions to the problem of problem of poor performance in external examination (final IJMB examination as a case study). The mock examinations have been seen as a must for student preparing for any form of external examination; WAEC, NECO, IJMB and so

Recommendations

There has been general comment about the falling standard of education in Nigeria. Government factors, parental influence, teachers attitude to work and student attitude to study are attributed to poor performance in examinations.

Therefore, the recommendations in this paper are summarized as follows:

- Government should employ experience and qualified teacher in schools.

- The Ministry of Education should endeavour to provide training facilities for teachers to improve their academic knowledge.
- Provision of more infrastructures in schools e.g. conducive lecture rooms, well equipped laboratory, e-library, geographical garden, biological garden e.t.c.
- Establishment of educational resources centres in each LGA of the state.
- Parent should provide the educational needs for their children or ward.

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