

**COMPARING LEARNERS' PERFORMANCE IN DISTANCE LEARNING
INSTITUTE, UNIVERSITY OF LAGOS, NIGERIA**

Joy C. IYIEGBUNIWE,

*University of Lagos, Distance Learning Institute (DLI), Nigeria,
jiyiegbuniwe@unilag.edu.ng*

Gloria C. ALANEME, (Corresponding Author),

*University of Lagos, Distance Learning Institute (DLI), Nigeria,
galaneme@unilag.edu.ng*

Comfort O. REJU,

*University of Lagos, Distance Learning Institute (DLI), Nigeria,
creju@unilag.edu.ng*

&

Athanasius I. OPARA,

*University of Lagos, Distance Learning Institute (DLI), Nigeria,
aopara@unilag.edu.ng*

Abstract

This paper examined the differences in the academic performance of learners in accounting and business administration departments of the distance learning institute (DLI), University of Lagos. The aim is to determine if the accounting and business administration learners outperform themselves in the courses that cut across the two departments. Gender and level performances of the learners were considered to see if differences existed. The interpretive single-case study research approach was used to explore the phenomenon, while secondary data was used as a sample to explore and compare the pass rate of these learners. Two theories - 'Self-determination theory' and the 'theory of performance' underpinned this work. A three-factor analysis of variance (ANOVA) was used to test the hypotheses. From the results, the interactions were not significant, but the Accounting students performed better than the Business students. Gender was not a significant determinant of academic performance, and the performance of learners across the levels did not change over the years. This suggests a need for tutors to pay more and special attention to Business Administrative learners in quantitative courses they take.

Keywords: *Academic Performance, Open Distance Learning, Online Education, Accounting, Business Administration.*

1. Introduction

The Distance Learning Institute (DLI), University of Lagos (Unilag) has since the onset admitted and graduated thousands of students learning through this mode. Adeleke and Adesina (2018) opine that most regular learners prefer the conventional mode as against the distance learning mode. This is probably because they want to enjoy the face to face interaction with their teachers and peers, use physical facilities, and other supports that come with the conventional learning. Those who are unable to go through the conventional mode of learning choose the alternative (Open and Distance Learning mode). The open and distance learning mode represents approaches that focus on open access to education and training; freeing learners from the constraints of time and place and offering flexible learning opportunities to individuals and groups (Adams, 2016). In other word, it enables learners to work and study with flexible study periods mediated by online resources. More importantly, it might be cost effective as the learners continue to earn a living while studying (Adewara, *et al.* 2010; Adeleke & Adesina, 2018). The flexibility allows most of the learners to complete their studies at their own pace and time.

In DLI Unilag, learning is mostly done online with minimal fortnightly face-to-face supports and opportunity is given to the learners yearly to have campus experience during the residential period of revisions and examinations. DLI offers, in particular, various common courses to Department of Accounting and Business Administration from the first to the final years of their studies. Both programmes are run within the period of 5years; the entry requirements are the same and the students in the two departments have many common courses from the entry year (Year 1) to the final year (year 5). Other similarities of the two groups are: they have same mode of examinations and same grading matrix. The mode of delivery of the DLI programme is by print medium (modules) and online materials deployed to the Learning Management System (LMS) supplemented by occasional face-to-face tutorials during weekends with facilitators.

Common characteristics of successful distance learners is that they are self motivated, committed, efficient time managers who are not scared to advocate for themselves (Towson University, 2010). This implies that they are willing to self manage, encourage, promote or speak for themselves as regards their academic choices. The crucial aspect of this self management is the intrinsic motivation and the possession of a learning strategy that will have visible effect on their learning results (Wang, Peng, Huang, Hou, & Wang, 2008). This

regulated educationally evaluative or reflective practices necessary to ascertain learners' performance and competence, is considered extrinsic motivation to learners. It is extrinsic in the sense that, they may not be able to make progress in their studies (irrespective of their intrinsic motivation) if they do not satisfactorily pass their exams; so they make effort to write the exams and pass. How well they pass their exams, which department leads in terms of pass rate is of concern to most school management. It is worthy of note that concerns with learners' performance are not peculiar to DLI, University of Lagos, Nigeria. Many institutions become interested in documenting its teaching-learning pedagogy with the performance of learners, whether the learners' academic performance differs from one department to another or even within gender in same department, among others. Jayanthi, Balakrishman, Ching, Latiff and Nasirudeen (2014) opine that "students' academic performance has always been a topic of interest for educators".

Therefore, it has been a burning desire of DLI management and staff to ascertain the academic performance (pass rate) of Accounting and Business Administration learners believed to have similar characteristics as distance learners, and have so much in common especially as it concerns their courses. Albeit, there is this unconfirmed assumption among the teachers and students that accounting learners are likely to outperform the business administration learners in common quantitative courses termed "complex", while the business administration learners will do same for common qualitative courses termed "non complex". It is also not certain if the males outperform their female counterparts in both programmes, or do pattern of performance differ at different levels. These set the need for this study. The outcome of this study will straighten out the assumption and equip management with the necessary information required to set some policy issues regarding admission requirements for future prospective learners, counselling of the learners, as well as pedagogic strategies of instructors.

1.1. Research Aim and Objectives

The aim of this study is to compare the academic performance of learners in the accounting and business administration programmes of distance learning institute (DLI), University of Lagos, Nigeria. The specific objectives are to:

- (1) Determine if the accounting and business administration learners outperform themselves in the courses that cut across the two departments.
- (2) Verify if there is difference in learners' academic performance across gender

- (3) Examine the difference in performance across levels (such as business administration year 1 versus accounting year 1 and vice versa)

1.2. Research Questions

To achieve the above objectives, the following research questions are formulated:

- (1) To what extent does the accounting and business administration learners outperform each other in the courses that cut across the two departments?
- (2) What is the difference in learners' academic performance across gender?
- (3) What is the difference in performance of accounting and business administration learners across the levels?

1.3. Research Hypotheses

The following corresponding null hypotheses are devised.

Ho₁: There is no significant difference in the mean performances of learners in both programmes across the common courses.

Ho₂: There is no significant difference in the academic mean performance of Male and Female learners.

Ho₃: There is no statistically significant difference in the mean performance of students across levels.

2. Conceptual and Theoretical Framework

Extant literature has shown that there is a remarkable interest in distance education institutions of higher learning (Mahlangu, 2018). Experience has also shown that there has been an increase in enrolment of learners in both accounting and business administration of DLI and margin has always existed between the two department (Table 1). Various studies have investigated learners' academic performance in Open and Distance Learning (ODL) system all over the world and came out with various results (Da Silva *et al.*, 2015; Adeleke & Adesina, 2018). Students' performance can be measured by a series of tests associated with coursework and any other type of assessment required by an educational institution. According to Da Silva *et al.* (2015), the diversified nature of online assessment, age and learners background have

positive effect on the academic performance of learners. This study compares the performance of accounting and business administration learners in a dual institution of University of Lagos.

Most studies on academic performance of learners are mainly based in comparing the online and face-to-face learning. Paul and Jefferson (2019) compared learner performance in an Online and face-to-face Environmental Science course from 2009 to 2016. They evaluated the gender and class rank and concluded that there is no significant difference in the academic performance of the learners in online and face-to-face learning. Another researcher Bir (2019), found that the learners in traditional class outperform those in an online class. Again, the male and female learners who enrolled in an online class performed below their mate in a traditional class. Some other sresearchers, (Odeh 2007); Bugge & Wikan 2013); Kyoshaba (2009) and Alhajraf and Alasfour (2014) found that gender has no significant effect on the academic performance of higher education learners. However, Yousef (2011) result indicatethat academic performance of accounting and business differ across gender.

An investigation of academic performance of graduates from the traditional and distance learning modes of accounting and business administration, by Adeleke and Adesina (2018) at the University of Lagos shows that marginal differences exist in the academic performance of accounting and business administration learners in these modes. Similarly, Da Silva *et al.* (2015) presented empirical evidence that face-to-face learning cannot be preferred over online learning because the learners' academic performance is statistically similar for both mode of learning irrespective of the learning styles they present. Moreover, Yousef (2017) in his study argues that undergraduate business learners have challenges in understanding the technicalities in quantitative courses and might not perform as much as their counterpart in accounting department. More studies have been done in comparing academic performance of distance and traditional learners', (Bir 2019; Paul & Jefferson 2019) but very little have provided insight regarding the academic performance of accounting and business administration learners in ODL mode. This paper helps to contribute to the existingargument on distance learners' academic performance in the departments of accounting and business administration.

The self-determination theory of Deci and Ryan (2000) applied to education reveals intrinsically motivated needs (need for autonomy, competence and relatedness) which promotes learners' interest in learning, and confidence in their abilities and traits. These needs when given the right institutional and social support result in high quality learning and understanding as well as enhanced personal growth and adjustment. This is also similar to the

theory of performance by Elger (2007) which is useful in both traditional and non-traditional learning contexts like distance learning; and states that humans including learners when challenged can do extraordinary things. In the case of learners, the guide of an adviser or teacher's connection with the learner, coupled with learners continued interest to learn, may inspire such learner to perform greatly. It is obvious that a learner without self motivation and willingness to self develop may not have the continued interest to learn or grow. Therefore, the three maxims of Elger - the performer's mind set (engaging the performer in an optimal emotional state), immersion in an enriching environment, and engagement in reflective practice will play significant role in a learner improving performance. The performer's mindset signifies the willingness, preparedness and self determination of the learner to engage in learning; immersion in an enriching environment indicates the ability to take advantage of the institutional and social supports available; engagement in reflective practice means readiness to be evaluated or assessed to determine performance.

Both theories are assumed to fit into the characteristics of accounting and business administration learners of DLI. The learners are intrinsically motivated with burning needs for autonomy, competence, and relatedness to enable them to excel. They have the continued interest to learn and are willing to engage in evaluative or reflective practices which is an external regulation and somewhat the least of the self determination autonomous continuum (Niemec and Ryan, 2009); as most learners would wish away exams but for the fact that it is compulsory to determine qualification to move to the next level, hence, DLI learners like others, have had to face the challenge that most students face – assessments (examinations).

3. Methodology

The paper compared the academic performance of learners in accounting and business administration of distance learning institute, university of Lagos. These two programmes are housed within the same department in DLI, with differences and commonalities in courses the students offer. The authors are interested in knowing the academic performance of the learners in the common courses the learners offer. The study is situated within the interpretive research paradigm. This paradigm helped to explore the diverse phenomenon (such as common courses, time-year of study and gender) and subject the participants data to interpretations aimed at enhancing a better understanding of the issues raised in the paper. The authors used quantitative

approach to create realities within the time and context bounds of the secondary data collected for the study (Cohen, Manion & Morrison, 2011). A quantitative approach was appropriate in this paper to supply numerical data on the individual programme (accounting and business administration) and provide knowledge levels of academic performance of accounting and business administration learners in courses they offer together. The performance of the learners across gender and level was explored as well.

Secondary data used for this paper was collected from a single source (DLI). All the authors are facilitators in distance learning institute, university of Lagos. Permission was sought from the head of computer in charge of the learners' results, five-year (2011/2012 – 2015/2016) results as required (accounting and business administration students) was collected and used for the study. The result of the learner in each year passes through the Business Committee and Senate of the university to ensure the validity of the results. In order to maintain ethical guidelines, the privacy of the participants was respected and was not mentioned in the study (Yin, 2014).

The population of this study includes all the registered learners of DLI, University of Lagos Nigeria, while the sample consists of all the students admitted in accounting and business administration departments of Distance Learning Institute (DLI), University of Lagos, in 2011/2012 academic session. DLI programme runs within a minimum period of five years, hence 2011/2012 to 2015/2016 session was used. This subset was chosen for the study because they have completed the minimum five years of the programme in 2015/2016. A total of 772 (Male=468 and Female=304) learners were admitted to study accounting in 2011/2012 academic session, while 1094 (Male=605 and Female=489) were admitted in the Business Administration department. The learning materials in the common courses are the same and, in most cases, facilitated by the same tutors. The courses that cut across these departments according to academic year under consideration and the total number that registered in each course are represented in Table I.

Table 1: Pass rates of Accounting and Business Administration Students in the Period 2011/2012 to 2015/2016 in Selected Subjects.

		Accounting Pass Rate		Business Administration Pass Rate	
Level (Year)	Course	Male	Female	Male	Female
One (2011/2012)	ACC 210	84.01	88.04	77.04	96.84
	BUS 210	92.51	99.27	93.40	97.11
	BUS 211	96.11	96.06	95.65	97.62
	ECN 210	97.49	97.83	88.19	89.96
	ECN 211	98.04	99.6.3	98.59	99.13
	IRP 210	94.54	95.74	96.51	97.45
Two (2012/2013)	ACC 220	88.47	86.30	83.30	81.17
	BUS 220	98.15	98.48	96.00	97.48
	BUS 221	99.06	98.86	95.59	94.46
	FBA 220	98.49	98.49	94.04	95.28
Three (2013/2014)	CIL 308	99.73	100.00	95.45	94.54
	FBA 310	94.57	94.56	88.70.	91.54
	FIN 310	98.79	100.00	99.00	99.10
Four (2014/2015)	BUS 410	98.24	98.93	97.56	99.31
	BUS 412	97.76	97.54	95.05	96.17
	FIN 320	91.97	93.24	86.83	88.47
Five (2015/2016)	BUS 420	99.06	99.15	99.57	99.52
	BUS 422	96.32	96.67	98.91	98.34

Source: Learners' performance data from DLI

Represented in Table 1 is the level (year) of the study of the learners, the common courses in accounting and business administration departments, the pass rates (percentage of learners who pass each of the courses) over five years and in each programme according to gender. The primary interest of the authors is to understand if there are differences regarding the academic performance (pass rate) among accounting and business administration learners of DLI in these common courses that cut across the two departments. Also, the study examined whether there was gender and level difference in performance among the learners. This will help to explain the enrolment gap witnessed at the point of admission of the students into these programmes. The dependent variable here is academic performance which is measured as pass rate (the percentage pass rate of learners that were examined in the course), while the independent variables are; Gender (G), Major or Specialisation of students (Programme) which is P and time/study level measured in Years (Y).

Case study research approach as described in Creswell (2014) was adopted while the data were secondary data. The choice of this research approach is due to its appropriateness in exploring a specific phenomenon and it also allows the authors to carry out the study in its natural settings (Merriam, 2009). It is a single case study research that help in presenting, analyzing and interpreting the uniqueness of the individual programmes used in this study. It portrays and represents the reality of the five years results of these accounting and business administration learners in DLI. It was used in order to examine and compare academic performance (pass rate) of these two programmes.

The unit of analyses in this study is the respective courses taken by the students in accounting and business administration degree programmes, respectively. Performance measurement was not taken on individual learners but on the respective courses. A comparison of the performance of Accounting students with those of Business Administration learners was made using a three-factor analysis of variance (ANOVA).

Factor 1 consists of Programme, of which accounting, and business administration are the factor levels while the second factor is the Time measured in Years. Different courses were taken by both learners over the five-year period. The third factor was gender. Learners' performances were tracked for both males and females such that gender differences can be assessed. As with any factorial analysis of variance, the interactions between the three factors were examined for proper interpretation of the concepts of the study. When two or more variables act jointly, their separate effects on the response (dependent) variable, which are called main effects, are of interest but the interactions may also be relevant. Interaction can be described as the joint effect of two or more variables which is distinct and separate from the main effects.

4. Data Analysis

This paper which is situated within the interpretive paradigm employed qualitative design to compare the academic performance of learners in the accounting and business administration programmes of distance learning institute (DLI), University of Lagos, Nigeria. Secondary data of the learners was collected from the computer office in-charge of the results. The model used to examine the three ((common courses, time-year of study and gender) main factors in the paper was stated below.

Analysis Model

The initial model of analysis consists of 3-factor Analysis of Variance (ANOVA) design with Year Programme and Gender as main effects including their interactions.

$$Y_{ijkl} = \mu + \beta_1 Y_i + \beta_2 P_j + \beta_3 G_k + \beta_4 YP_{ij} + \beta_5 YG_{ik} + \beta_6 PG_{jk} + \beta_7 YPG_{ijk} + E_{ijkl}, \text{ Where}$$

Y_i represents Year/level,

P_j represents Programmes,

G_k represents Gender,

YP_{ij} is two-way interactions between Y and P.

YG_{ik} is two-way interactions between Y and G.

PG_{jk} is two-way interactions between P and G.

YPG_{ijk} is three-way interactions between Y, P and G.

The initial analysis is exhibited in Table 2 below and it showed that the interactions are not significant at 5% level of significance because each of their p-value (year ($p=0.248$), programme ($p=0.147$) and gender ($p=0.638$)) are more than 0.05. In linear regression, the parameters are used for inferences and are therefore exhibited. In ANOVA, variance components are used for inference and displayed in the ANOVA table. No need to display parameters.

Table 2: Tests of Between-Subjects Effects*Dependent Variable: Rate of Pass*

<i>Source</i>	<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig. (P-value)</i>
<i>Corrected Model</i>	347.330	19	18.281	.573	.909
<i>Intercept</i>	575643.400	1	575643.400	18045.519	.000
<i>Year</i>	178.340	4	44.585	1.398	.248
<i>Programme</i>	69.229	1	69.229	2.170	.147
<i>Gender</i>	7.125	1	7.125	.223	.638
<i>Year * Programme</i>	34.207	4	8.552	.268	.897
<i>Year * Gender</i>	11.106	4	2.776	.087	.986
<i>Programme * Gender</i>	.003	1	.003	.000	.992
<i>Year * Programme * Gender</i>	1.371	4	.343	.011	1.000
<i>Error</i>	1658.775	52	31.900		
<i>Total</i>	650621.046	72			
<i>Corrected Total</i>	2006.105	71			

Source: Authors computation

In a factorial design, Hicks, (1973) said that “both the main effects and interactions come from a breakdown of overall treatment effect and do not come from the random error”. This implies that when interactions are not significant, the model is re-examined for main effects only so as to remove the effects of the unimportant interactions.

The second and final model was a factorial design without interactions. Thus:

$$Y_{ijkl} = \mu + \beta_1 Y_i + \beta_2 P_j + \beta_3 G_k + E_{ijkl}$$

The results are shown in Table 3

Table 3: Tests of Between-Subjects Effects (Main Effects Only)*Dependent Variable: Rate of Pass*

Source	Type III Sum of Squares	df	Mean Square	F	Sig. (P-Value)
Corrected Model	300.592	6	50.099	1.909	.093
Intercept	575643.400	1	575643.400	21938.751	.000
Year	178.340	4	44.585	1.699	.161
Programme	109.076	1	109.076	4.157	.046
Gender	13.176	1	13.176	.502	.481
Error	1705.513	65	26.239		
Total	650621.046	72			
Corrected Total	2006.105	71			

Source: Authors computation

It can be seen from Table 3 above that the programme factor has p -value of 0.046 which is less than 0.05 and is therefore significant. This means that Accounting and Business Administration programmes do not have the same level of performance: one is higher than the other. This answered Research Question 1 stated in this paper and this result is not completely in support of Adeleke and Adesina, (2018) who found marginal difference in the academic performance of accounting and business administration learners in distance and traditional mode of learning..

Table 4: Mean performance (Pass Rates) of Accounting and Bus. Admin. Students

Department	Mean Performance
Accounting	96.14%
Business Administration	93.68%

Source: Authors computation

A look at mean performances in Table 4 revealed that the mean performance of accounting (96.14%) was higher than that of Business Administration which was 93.68%. This indicates that the accounting learners perform better than the business administration learners in courses common to both departments. This result is consistent with the finding of Yousef (2011; 2017) which found that the academic performance of business administration learners differs from that of the accounting learners in quantitative courses. The p -value for the gender factor was

0.481 and is not significant. This means that female and male students performed equally in these common courses. This answered Research Question 2.

With regards to a time difference in academic performance, the p -value for the Time factor was 0.161 which is not significant. This means that the academic performance of the students did not improve or decline over the 5-Year period. This might be because the same facilitators are engaged in facilitating these common courses across the department. This answered Research Question 3.

5. Discussion of Findings and Conclusion

This study is aimed at comparing academic performance of learners in the accounting and business administration programmes of distance learning institute (DLI), University of Lagos. It also explores if the accounting and business administration learners outperform themselves in the courses that cut across the two departments, gender and levels.

Despite the autonomy and interest as presented in the theories used in the study, the findings revealed differences in the mean academic performance of the learners, this indicates that accounting learners performed better in the courses than the business administration learners. Moreover, gender was not a significant determinant of academic performance of learners. This result differs from that of Alhajraf and Alasfour (2014) who studied the learners' demographic and academic performance of business administration learners and found that gender is significantly related to the learners' academic performance. However, the result is consistent with Kyoshiba (2009); Yousef (2011) and Bugge & Wikan (2013) who found that gender has no significant effect on the academic performance of learners. Furthermore, the overall level of academic performance of the learners did not change significantly over the years. This could be because of the effect of self-determination and performance theories where the learners are intrinsically motivated with strong needs for autonomy, competence, and relatedness to learn with right attitudes. Hence, the academic performances of learners did not improve over the years based on the level of studies, nor declined. The use of the same instructors could also be responsible for the learners' academic performance.

5.1. Implications of the study

The major results of this study revealed that the academic performance of students over the 5-year period did not change but was rather sustained. This calls for more motivation of the

facilitators in order to encourage them to continue to provide effective pedagogy and adequate resources aimed at sustaining the academic performance of learners and/or improve where necessary.

The study found that accounting learners performed generally better than business administration learners. Despite having equal autonomy, examination of the rates of passes in the Courses showed that business administration learners had lower rates of a pass than the accounting learners in common courses taken by learners in both departments. This supports the other studies that accounting learners outperform business administration learners in both the complex and non-complex courses (Adeleke & Adesina, 2018). Tutors and the institute should pay special attention to business administration learners in those courses which appear problematic.

Gender effect on performance was not significant. This means that attention paid to girl-child education in Nigeria is yielding results. The implication is that policymakers should continue to pay special attention to women by creating more academic opportunities and awareness; as well as providing the enabling environment that will encourage more women participation. The Institute on the other hand, should intensify periodic advice on study habits and attitude that can sustain the improved performance.

5.2. Contribution to Knowledge

The validity of the self-determination theory of Deci and Ryan (2000) and performance theory of Elger (2007) used in this study are further substantiated. The open and distance learners, encouraged by the need for autonomy, connectedness, sense of belonging and a feeling of control for their own goals, go through the process of acquiring skills which higher education confers, to prepare themselves for the job market (which does not discriminate the mode of certificate acquisition) or establish their own business. Consequently, they do not depend so much on external compensation or penalty to motivate them (because they are intrinsically motivated), even though external compensation plays a role in the course of their studies. This partly explains why both genders performed well alongside each other, because they are matured learners who know the reason for enrolling into the programme and what they want.

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