

Lecturers' Variables as Predictors of Academic Performance in Universities

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ABSTRACT This paper examined the relationship between selected salient lecturers' variables and students' academic performances in Nigeria universities. Three hundred and fifty-five (355) undergraduates selected from five universities in south-west Nigeria were involved in the study. Samples cut across all disciplines were drawn from 200 level and 300 level. This became imperative so that the researcher might have a broad view of the problem being investigated. While the universities involved in this study were selected using purposive sampling techniques, the samples were randomly drawn. A self-developed and validated questionnaire was used to collect relevant data. Data was analysed making use of statistical tools such as Cronbach's alpha, principal component analysis, scree plot, percentages, and chi-square test. Results showed that all the lecturers' variables under investigation except lecturers' immediate provision of result feedback to students significantly influenced students' academic performance thereby promoting high academic excellence or otherwise in universities.

INTRODUCTION

In recent years, the academic standard of products from the university system is progressively on the downward trend. Some have even come to the conclusion that there is generally a fall in the standard of education in their respective countries (Agharuwhe and Ugborugbo 2009; Alderman 2010; Babcock and Marks 2011; Ghana News 2014; Bisht 2015; Tucker 2015; Ishaya 2016). This position is supported by Okebukola (2014) when he posited that the Nigerian university system has been brought into disrepute as a result of several years of neglect and management inefficiencies. Okebukola (2014) opines that employers of labor and the general public expressed concern over the quality of graduates from Nigerian universities. As can be observed from the above citations, the fall in the standards of university education, though not peculiar to universities alone and which is not just happening now, had become noticeable as far back as the 1990s. According to Okebukola (2014), the situation is glaringly evident when these university graduates are requested to take qualifying examinations. This is a sharp departure from what obtained in the past, when Nigerian university graduates were not only the toast of many employers of labour, but their certificates were internationally recognized. Today, it

is as bad as products' inability to construct simple sentences devoid of errors. The graduates neither possess sound communication skills, competence in any chosen areas of study, nor acquire values cherished by the society. This situation was reported by one of the national dailies that three (3) national youth service corps members were sent out of the orientation camp because they could not fill simple forms. However, this situation is not peculiar to the Nigerian educational landscape alone, it cuts across most developing countries, particularly African countries. This was why in September, 2014, 159 participants from 26 countries all over the world gathered in Bujumbura, Burundi to discuss this scourge and how to restore the past glory of African higher education system (African Union 2014). This is because this phenomenon has constituted a source of grave concern for all stakeholders - parents, school authorities, government and the society in general.

Studies (Materu 2007; Agharuwhe and Ugborugbo 2009; Shabani 2013; Okebukola 2014) have identified a number of factors that may be responsible for students' poor academic performances generally, and the university in particular. Some of these factors include students' attributes, quality of students admitted into universities, parental attitude to their children's education, government's lack of adequate at-

tention and support for education, government's inconsistent and conflicting educational policies, the tone of the school (discipline) as set by the school authority, insufficient fund, inappropriate governance and leadership, disconnect with the economy. Other problems confronting higher education in Africa as summarized by Materu (2007) include the fact that efforts to improve education quality at the secondary school level are still not yielding the desired results as shown by African countries' performance in international mathematics and science tests; low level of research funding in African universities, which is mostly supported by outside organizations and lecturers' factor (Bakhsh et al. 2015).

Shabani (2013) in his paper identified challenges to the quality of higher education in Africa including increase in school enrolment, inadequate facilities and infrastructure, shortage of qualified staff and heavy workloads, outdated teaching methods, low level or weakening of research activities, mismatch between graduate output and employment among others.

It could be observed that, most of the factors identified by these scholars as militating against universities education in most of the developing countries in general, and Nigeria in particular still remained unresolved due to corruption, lack of political will and lack of commitment to education on the part of the government. Shu'ara (2010) in the paper he presented at the UNESCO Institute of Statistics workshop on education statistics in Anglophone countries, Windhoek, observed that the total number of academic staff in Nigeria universities in 2006 was 27,394, twenty (20) percent of which was at the professorial and readership cadre, 23.6 percent were senior lecturers while 56.4 percent were lecturer 1 and below. Shu'ara further revealed that in 2010, the Nigeria university system required 50,000 academic staff, out of which 30,452 were available, with a shortfall of 19,548 which translates to 39.1 percent of the total number required. He therefore summarised his findings as follows:

"That over sixty percent of the academic staff in Nigeria university system is in the category of lecturer 1 and below; and that the shortage of academic staff in the university is compounded by inter-and-intra sectoral brain drain which has implications for the quality of teaching and learning in the university". This position seems to be in tandem with some of the factors identified by

scholars as militating against university education around the continent particularly as highlighted by Shabani (2013) even years after these data were released, where teachers are not supplied in the right quality and quantity. This is an indication that the problem is yet to be resolved. African Union (AU) (2014) while celebrating the golden jubilee of the union agreed that tertiary education in the continent should be improved as prerequisite to foster technological advancement and innovation. The fact that the union agreed to do this is an admittance of the fact that all is not well with university education in the continent. In the same vein, while assessing the state of education in Africa, the Africa-America Institute (AAI) (2015) notes that: "there is no quality education without qualified teachers, yet the acute shortage of qualified teachers has been identified as one of the biggest challenges to achieving education for all". The Institute went on to ask: "how do we expand the vision of what is required from a teacher in order to ensure that their mastery of basic topics positions them to best educate our children?". All these are pointers to fact that the success of the school, which invariably is woven around the teacher, is the success of the society that establishes it for the fulfilment of certain obligations. True to Shu'ara's (2010) opinion, each of these factors has the potentials of affecting the educational standard and level of any country in significant ways and at different magnitudes.

This explains why the teacher variables as factors determining the quality of education in countries of the world have featured prominently and is replete in literature. This is because the teacher is a major player in the education industry. According to Ajao (2001) students' academic performance has been over time linked with the effectiveness of the teacher in terms of teaching and learning. In other words, teachers have been shown to have tremendous influence on students' academic achievement. The teachers also play the crucial role of translating educational policies into actions and learning experiences at the classroom level (Afe 2001; Uchefuna 2001). The process of education which involves teaching and learning to a greater extent depends on the teachers. No matter, how huge the investment in education in terms of provision of facilities, equipment, infrastructures, instructional materials, it is the teacher who con-

trives and organizes these into a conducive learning environment to bring about learning.

In the education parlance, “the teacher has not taught if the students have not learnt”. In other words, the measure of academic excellence or standard at whatever level of the education system is determined by the students’ qualitative performance or achievement in their studies. It is therefore the assumption of this paper that 50 percent of the problems militating against higher education in Nigeria and elsewhere in the continent of Africa could have been resolved if teacher related factors have been identified and controlled.

The significance of this paper is the fact that it would sensitize the university lecturers to be alive to their responsibility of effectively engaging in teaching and learning activities to bring about learning in the students, through adequate mastery of the subject-matter, the use of appropriate teaching methods, use of relevant instructional materials, possession of good command of English language as medium of instruction and so on, thereby raising the students’ academic performance. The university authority too will be made to see the need to create the enabling environment for effective teaching-learning to take place by providing the wherewithal needed. The government, in addition to fulfilling its statutory function of making subventions available to the university as and when due, would be encouraged to come up with juicy welfare packages for the lecturers as incentive to be more committed to duty.

While research efforts have been concentrated on teacher and/or teaching effectiveness at the lower level of the education system, especially at the secondary school level, examining such variables as teachers’ qualifications, teaching experience, motivation and so on in relation to students’ academic achievement (Akpo 2012), this present study focuses on a few salient pedagogical variables of the lecturers at the university level with a view to finding out how these lecturers’ variables have influenced students’ academic performance in the universities. It however excludes other psycho-social factors such as student-teacher interaction, class control and the like in order to be properly focused.

Statement of Problem

Consequent upon the background above as seen by the steady downward trend in the qual-

ity of products from the universities, this study was carried out to examine lecturers’ variables as predictors of academic performance in Nigeria universities.

Objective of Study

The main objective of the paper is to find out the relationship that exists between selected salient lecturers’ variables and students’ academic performance. The paper specifically beamed search light on the influence of such variables as lecturers’ mastery of subject matter, methods of teaching, use of instructional materials, possession of good command over English Language being the medium of instruction and immediate provision of result feedback on students’ academic performance.

Hypotheses

The following null hypotheses were formulated and tested at 0.1 level of significance:

Ho1: There is no statistically significant relationship between lecturers’ mastery of subject matter and students’ academic performance.

Ho2: There is no statistically significant relationship between lecturers’ methods of teaching and students’ academic performance.

Ho3: There is no statistically significant relationship between lecturers’ use of instructional materials and students’ academic performance.

Ho4: There is no statistically significant relationship between lecturers’ possession of good command of English Language and students’ academic performance.

Ho5: There is no statistically significant relationship between the provision of immediate result feedback to students and their academic performance.

METHODOLOGY

Research Design and Methods

This is a quantitative study in the positivists’ paradigm. The ex-post facto research design was adopted to examine the influence of the selected salient lecturers’ variables on students’ academic performance in universities.

Participants

Three hundred and fifty-five (355) under graduates selected from five universities in south-

west Nigeria were involved in the study. The researcher felt it will be inappropriate to use the universities' lecturers as respondents since they cannot be judges in their own case, hence the use of students as samples for the study as suggested by Keane and Labhrainn (2015). The samples cut across all disciplines and were drawn from 200 level and 300 level. This became imperative so that the researcher might have a broad view of the problem being investigated. Pertinent to mention that five hundred (500) participants were initially selected for the study, however only three hundred and fifty five participants who completed the exercise were reckoned with. While the universities involved in this study were selected using purposive sampling technique, the samples were randomly selected.

Instrument

The instrument utilised to collect pertinent data for this study is a questionnaire developed by the researcher titled: "*students' questionnaire on academic performance in universities*" tagged *SQAPU*. The instrument was thereafter sent by the researchers to two senior colleagues in two different universities to assure both face and content validity. The final copy was produced having reflected their comments, corrections and observations. The questionnaire sought information on university lecturers' mastery of subject-matter, methods of teaching, use of instructional materials, possession of good command of English Language, students-lecturers relationship and lecturers' commitment to duty amongst others. The questionnaire is similar to the one used by Moreno-Murcia et al. (2015). Participants rated their lecturers on a 5-point scale in relation to their academic performance. In order to further assure the internal consistency of the instrument, it was subjected to statistical treatment, using the Cronbach's Alpha, yielding 0.928 reliability index. This is shown in Table 1.

Table 1: Cronbach's alpha reliability statistics for the data

Cronbach's Alpha	No. of items
.928	23

Source: Adeyemi 2016

Cronbach's alpha in Table 1 was used to investigate the level of reliability for the data, which was observed to be 0.928. According to reliability standards, this proved to be a high degree of reliability based on the agreeable minimum level of 0.70. This meant that the data had been well planned and that the data collection instrument addressed the same research issues as envisaged by the research objectives.

Data Collection Procedure

The researcher visited the universities involved in the study at different dates and with the cooperation of colleagues in the different universities, administered the questionnaire on students of different academic programs / courses and across the levels identified for the study. The study is not course-specific because the focus is to examine the influence of the variables under investigation on students' performance in whatever course. At the end of the administration of the questionnaire, 355 respondents out of 500 completed the questionnaire giving a return rate of seventy-one percent.

Data Analysis

Data collected for this study was analysed making use of such statistical tools as Cronbach's alpha which was used to investigate the degree of reliability of the data, principal component analysis, scree plot, percentages, chi-square test, and cross tabulation for significance.

RESULTS

The analysis of how each of the variables considered in this paper is associated with students' academic performance is shown in Table 2.

A total of twenty-three lecturer's teaching variables were involved as shown by the serial number in Table 2. However, of the 23 items, only 4 components were extracted which contributed to students' achievement. These include lecturers' possession of adequate mastery of the subject matter, utilisation of suitable methods of teaching, the use of appropriate and relevant instructional materials and the possession of good command of the English language as medium (tool) of instruction. These four factors were subjected to further statistical treatment making use of Pearson Chi Square to show the

Table 2: Principal component analysis

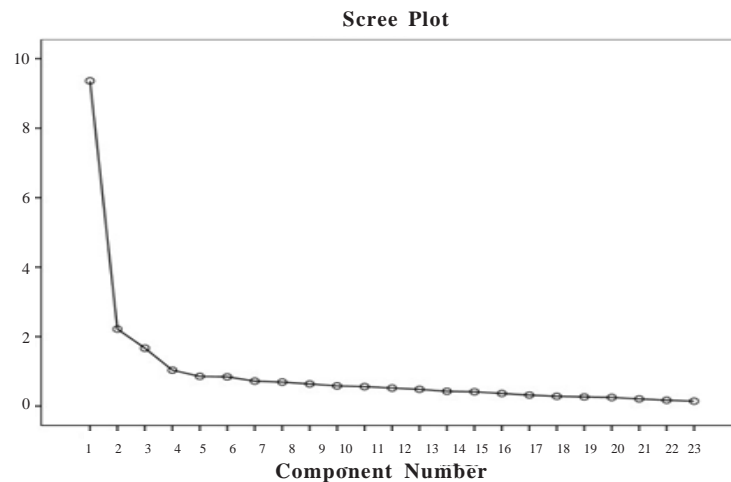
Component	Total variance explained								
	Initial Eigen values			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.360	40.697	40.697	9.360	40.697	40.697	5.107	22.205	22.205
2	2.216	9.635	50.332	2.216	9.635	50.332	3.738	16.251	38.456
3	1.668	7.254	57.586	1.668	7.254	57.586	3.698	16.077	54.533
4	1.035	4.500	62.086	1.035	4.500	62.086	1.737	7.553	62.086
5	.855	3.718	65.804						
6	.843	3.665	69.469						
7	.719	3.128	72.597						
8	.690	3.002	75.599						
9	.637	2.769	78.368						
10	.581	2.528	80.895						
11	.561	2.437	83.333						
12	.519	2.258	85.591						
13	.483	2.098	87.690						
14	.426	1.851	89.540						
15	.412	1.793	91.333						
16	.363	1.579	92.912						
17	.317	1.378	94.289						
18	.281	1.222	95.511						
19	.266	1.156	96.667						
20	.250	1.086	97.754						
21	.206	.894	98.648						
22	.169	.734	99.382						
23	.142	.618	100.000						

The numbers 1-23 represent the numbers of items included in the questionnaire.
 Source: Adeyemi 2016

degree of association between each of the factors and students' academic performance.

Figure 1 is the graphical representation of the principal component analysis shown in Table 2.

The scree plot in Figure 1 presents a means by which the researcher determined the number of factors/components extracted by the procedure. The factors are displayed on the graph.

**Fig. 1. Scree plot of principal component analysis**

Source: Adeyemi 2016

The point of interest is where the plot of the graph starts to bend towards the right. All the factors after the bending of the arm are defined to be insignificant. This implies that those components which are above the “bending” are termed to be significant. Consequently, there are only four factors which were identified to be significant. From the analysis, it is noted that the scree plot confirmed four constructs representing the data collected. In addition, there is a need to determine Eigen-values corresponding to different factors. If a factor has an Eigen-value less than 1, it is termed to be insignificant and thus not counted as a factor. It can be observed from the figure that from the beginning of arm-bent, all Eigen-values are less than 1.

Ho1: There is no statistically significant relationship between lecturers’ mastery of subject matter and students’ academic performance.

The cross-tabulation of adequate mastery of subject matter and students’ motivation to do better in their academic work is displayed in Table 3 that showed the level of relationship between lecturers’ adequate mastery of subject matter and students’ academic performance. The degree of relationship of the cross tabulation in Table 3 is shown in Table 4.

Table 3: Weight attached to possession of adequate mastery of the subject matter versus Weight attached to motivating students to do better in their academic work

		Weight attached to motivating students to do better in their academic work					Total	
		5	4	3	2	1		
A	4	Count	0	1	1	0	1	3
		% within A	0.0%	33.3%	33.3%	0.0%	33.3%	100%
		% within B	0.0%	2.9%	4.0%	0.0%	3.6%	1.7%
		% of Total	0.0%	0.6%	0.6%	0.0%	0.6%	1.7%
	3	Count	13	6	0	1	2	22
		% within A	59.1%	27.3%	0.0%	4.5%	9.1%	100%
		% within B	18.8%	17.1%	0.0%	6.3%	7.1%	12.7%
		% of Total	7.5%	3.5%	0.0%	0.6%	1.2%	12.7%
	2	Count	22	15	9	2	7	55
		% within A	40.0%	27.3%	16.4%	3.6%	12.7%	100%
		% within B	31.9%	42.9%	36.0%	12.5%	25.0%	31.8%
		% of Total	12.7%	8.7%	5.2%	1.2%	4.0%	31.8%
1	Count	34	13	15	13	18	93	
	% within A	36.6%	14.0%	16.1%	14.0%	19.4%	100%	
	% within B	49.3%	37.1%	60.0%	81.3%	64.3%	53.8%	
	% of Total	19.7%	7.5%	8.7%	7.5%	10.4%	53.8%	
Total	Count	69	35	25	16	28	173	
	% within A	39.9%	20.2%	14.5%	9.2%	16.2%	100%	
	% within B	100.0%	100.0%	100.0%	100.0%	100.0%	100%	
	% of Total	39.9%	20.2%	14.5%	9.2%	16.2%	100%	

Legend: A=Mastery of subject Matter; B=motivation for Students to do better academically.

Note: B is constant for all tables except the Chi-square and Cronbach’s tables

Source: Adeyemi 2016

Table 4: Chi-square tests on adequate mastery of subject matter

	Value	df	Asymptotic significance (2-sided)
Pearson chi-square	18.807 ^a	12	.093
Likelihood ratio	23.360	12	.025
Linear-by-linear association	4.226	1	.040
N of valid cases	173		

P<0.1

Source: Adeyemi 2016

Since the observed p-value (0.093) in Table 4 is less than the level of significance, the null hypothesis is rejected and we conclude that the adequate possession of mastery of the subject matter has a significant influence on students and motivates them to do better in their academic work.

Ho2: There is no statistically significant relationship between lecturers’ methods of teaching and students’ academic performance.

In Table 5, the level of relationship between the use of suitable teaching methods and students’ academic performance is considered. To ascertain the degree of relationship, the data in

Table 5: Weight attached to the use of suitable teaching method(s) versus weight attached to motivating students to do better in their academic work

		<i>Weight attached to motivating students to do better in their academic work</i>					<i>Total</i>	
		5	4	3	2	1		
C.	5	Count	14	1	1	0	1	17
		% within C.	82.4%	5.9%	5.9%	0.0%	5.9%	100%
		% within B	20.0%	2.9%	4.2%	0.0%	3.6%	9.8%
		% of Total	8.0%	0.6%	0.6%	0.0%	0.6%	9.8%
	4	Count	12	7	4	0	0	23
		% within C.	52.2%	30.4%	17.4%	0.0%	0.0%	100%
		% within B	17.1%	20.0%	16.7%	0.0%	0.0%	13.2%
		% of Total	6.9%	4.0%	2.3%	0.0%	0.0%	13.2%
	3	Count	20	11	6	4	2	43
		% within C	46.5%	25.6%	14.0%	9.3%	4.7%	100%
		% within B	28.6%	31.4%	25.0%	23.5%	7.1%	24.7%
		% of Total	11.5%	6.3%	3.4%	2.3%	1.1%	24.7%
	2	Count	12	8	7	5	15	47
		% within C	25.5%	17.0%	14.9%	10.6%	31.9%	100%
		% within B	17.1%	22.9%	29.2%	29.4%	53.6%	27.0%
	% of Total	6.9%	4.6%	4.0%	2.9%	8.6%	27.0%	
1	Count	12	8	6	8	10	44	
	% within C	27.3%	18.2%	13.6%	18.2%	22.7%	100%	
	% within B	17.1%	22.9%	25.0%	47.1%	35.7%	25.3%	
	% of Total	6.9%	4.6%	3.4%	4.6%	5.7%	25.3%	
Total	Count	70	35	24	17	28	174	
	% within C	40.2%	20.1%	13.8%	9.8%	16.1%	100%	
	% within B	100.0%	100.0%	100.0%	100.0%	100.0%	100%	
	% of Total	40.2%	20.1%	13.8%	9.8%	16.1%	100.0%	

Legend: C=Use of suitable teaching methods
Source: Adeyemi 2016

Table 5 were subjected to further statistical treatment as found in Table 6.

Table 6: Chi-Square test on the use of suitable teaching methods

	<i>Value</i>	<i>df</i>	<i>Asymptotic significance (2-sided)</i>
Pearson Chi-square	41.956 ^a	16	.000
Likelihood ratio	48.292	16	.000
Linear-by-linear association	25.507	1	.000
N of valid cases	174		

P<0.1
Source: Adeyemi 2016

The observed p-value 0.000 in Table 6 is far less than the level of significance 0.10, therefore, the null hypothesis is rejected in favour of the alternative hypothesis and it is concluded that the use of suitable teaching method(s) has a direct influence on student performance and further motivates students to do better in their academic work.

Ho3: There is no statistically significant relationship between lecturers' use of instructional materials and students' academic performance.

Shown in Table 7 is the level of relationship between the use of appropriate instructional materials during lectures and students' performance as indicated in percentage weights. The result in Table 7 was subjected to Chi square test (Table 8) in order to have a clear picture of the level of relationship.

The calculated test statistics in Table 8 is 36.993 creating a p-value of 0.002. The observed p-value is far less than the level of significance 0.10. Since the observed p-value is less than the level of significance, the null hypothesis is rejected in favour of the alternative hypothesis and it is concluded that use of appropriate instructional materials has a strong impact on motivating students to do better in their academic work.

Ho4: There is no statistically significant relationship between lecturers' possession of good command of English Language and students' academic performance.

Table 7: Weight attached to the use of appropriate instructional materials versus weight attached to motivating students to do better in their academic work

		<i>Weight attached to motivating students to do better in their academic work</i>					<i>Total</i>	
		5	4	3	2	1		
D	5	Count	2	0	1	0	0	3
		% within D	66.7%	0.0%	33.3%	0.0%	0.0%	100%
		% within B	2.9%	0.0%	4.0%	0.0%	0.0%	1.7%
		% of Total	1.2%	0.0%	0.6%	0.0%	0.0%	1.7%
	4	Count	4	4	1	2	0	11
		% within D	36.4%	36.4%	9.1%	18.2%	0.0%	100%
		% within B	5.8%	11.4%	4.0%	11.8%	0.0%	6.4%
		% of Total	2.3%	2.3%	0.6%	1.2%	0.0%	6.4%
	3	Count	24	6	2	0	3	35
		% within D	68.6%	17.1%	5.7%	0.0%	8.6%	100%
		% within B	34.8%	17.1%	8.0%	0.0%	11.1%	20.2%
		% of Total	13.9%	3.5%	1.2%	0.0%	1.7%	20.2%
	2	Count	20	16	10	3	7	56
		% within D	35.7%	28.6%	17.9%	5.4%	12.5%	100%
		% within B	29.0%	45.7%	40.0%	17.6%	25.9%	32.4%
	% of Total	11.6%	9.2%	5.8%	1.7%	4.0%	32.4%	
1	Count	19	9	11	12	17	68	
	% within D	27.9%	13.2%	16.2%	17.6%	25.0%	100%	
	% within B	27.5%	25.7%	44.0%	70.6%	63.0%	39.3%	
	% of Total	11.0%	5.2%	6.4%	6.9%	9.8%	39.3%	
Total	Count	69	35	25	17	27	173	
	% within D	39.9%	20.2%	14.5%	9.8%	15.6%	100%	
	% within B	100.0%	100.0%	100.0%	100.0%	100.0%	100%	
	% of Total	39.9%	20.2%	14.5%	9.8%	15.6%	100%	

Legend: D=Use of appropriate instructional materials
 Source: Adeyemi 2016

Table 8: Chi-square tests on the use of appropriate instructional materials

	<i>Value</i>	<i>df</i>	<i>Asymptotic significance (2-sided)</i>
Pearson chi-square	36.998 ^a	16	.002
Likelihood ratio	41.433	16	.000
Linear-by-linear association	16.910	1	.000
N of valid cases	173		

P<0.1
 Source: Adeyemi 2016

Reflected in Table 9 are respondents' scores of the effect of lecturers' possession of good command of the English language on students' academic performance. The P-value of the data in Table 9 was calculated to give an idea of the degree of relationship between the two variables under investigation in Table 10.

The calculated test statistics is 28.530 creating a p-value of 0.027. The observed p-value of 0.027 in Table 10 is less than the level of significance 0.10. Therefore, the null hypothesis is

rejected in favour of the alternative hypothesis and it is concluded that the possession of good command of the English language (simple, clear, fluent and accurate) has a direct influence and further motivates students to do better in their academic work.

Ho5: There is no statistically significant relationship between the provision of immediate result feedback to students and their academic performance.

Revealed in Table 11 are respondents' scores of the effect of Lecturers' provision of immediate result feedback to students on their academic achievement.

The p-value of the data for level of relationship was calculated and reflected in Table 12.

The observed p-value 0.835 is more than the level of significance 0.10. Since the observed p-value is more than the level of significance, the null hypothesis will not be rejected in favour of the alternative hypothesis and it is concluded that the provision of immediate result feedback to students does not have any influence on the performance in academic work.

Table 9: Weight attached to possession of good command of English language versus weight attached to motivating students to do better in their academic work

		<i>Weight attached to motivating students to do better in their academic work</i>					<i>Total</i>	
		5	4	3	2	1		
E.	5	Count	5	0	0	0	0	5
		% within E	100.0%	0.0%	0.0%	0.0%	0.0%	100%
		% within B	7.0%	0.0%	0.0%	0.0%	0.0%	2.9%
		% of Total	2.9%	0.0%	0.0%	0.0%	0.0%	2.9%
	4	Count	14	3	2	1	1	21
		% within E	66.7%	14.3%	9.5%	4.8%	4.8%	100%
		% within B	19.7%	8.6%	8.3%	5.9%	3.8%	12.1%
		% of Total	8.1%	1.7%	1.2%	0.6%	0.6%	12.1%
	3	Count	15	9	2	2	4	32
		% within E	46.9%	28.1%	6.3%	6.3%	12.5%	100%
		% within B	21.1%	25.7%	8.3%	11.8%	15.4%	18.5%
		% of Total	8.7%	5.2%	1.2%	1.2%	2.3%	18.5%
	2	Count	22	13	11	3	10	59
		% within E	37.3%	22.0%	18.6%	5.1%	16.9%	100%
		% within B	31.0%	37.1%	45.8%	17.6%	38.5%	34.1%
	% of Total	12.7%	7.5%	6.4%	1.7%	5.8%	34.1%	
1	Count	15	10	9	11	11	56	
	% within E	26.8%	17.9%	16.1%	19.6%	19.6%	100%	
	% within B	21.1%	28.6%	37.5%	64.7%	42.3%	32.4%	
	% of Total	8.7%	5.8%	5.2%	6.4%	6.4%	32.4%	
Total	Count	71	35	24	17	26	173	
	% within E	41.0%	20.2%	13.9%	9.8%	15.0%	100%	
	% within B	100.0%	100.0%	100.0%	100.0%	100.0%	100%	
	% of Total	41.0%	20.2%	13.9%	9.8%	15.0%	100%	

Legend: E=Possession of good command of English Language
Source: Adeyemi 2016

Table 10: Chi-square tests on possession of good command of English language

	<i>Value</i>	<i>df</i>	<i>Asymptotic significance (2-sided)</i>
Pearson chi-square	28.530 ^a	16	.027
Likelihood ratio	30.028	16	.018
Linear-by-linear association	16.736	1	.000
N of valid cases	173		

P<0.1

Source: Adeyemi 2016

DISCUSSION

The result in Table 4 shows a significant P-value of 0.093. Thus the null hypothesis H_{01} is rejected. This implies that there is statistically significant relationship between lecturers' adequate mastery of subject-matter and students' academic performance. This result lends credence to earlier findings of Olatunji et al. (2006), Odusanya (2010), Akpo (2012) and Olaniyi (2014) on one hand, and the claim of AAI (2015) on the

other hand. This is obvious as lecturers are expected to have an in-depth knowledge of their areas of specialisation, as no lecturer shares what he or she does not have with other people. They should be seen as experts in whatever field of study they profess. This singular attribute significantly rubs on other areas of his / her responsibilities as a lecturer. This is why every lecturer should strive as much as possible to be well versed in his field of study, which is why Bisht (2015) opines that the education system is as good as the teacher. However, the result is at variance with the finding of Hattie (as cited in Heggart 2016), that knowledge of subject matter has very little effect size of 0.19 which is less than the average variable effect size of 0.4 on student achievement. It is argued in the present paper that adequate mastery of subject matter contributes substantially to students' performance as no lecturer or teacher shares what he/she does not have or know with others.

A highly significant P-value of 0.000 is reported in Table 6. The null hypothesis H_{02} is therefore rejected. It therefore means that there

Table 11: Weight attached to provision of immediate result feedback to students versus Weight attached to motivating students to do better in their academic work

		<i>Weight attached to motivating students to do better in their academic work</i>					<i>Total</i>	
		5	4	3	2	1		
F	5	Count	2	0	0	0	1	3
		% within F	66.7%	0.0%	0.0%	0.0%	33.3%	100%
		% within B	2.9%	0.0%	0.0%	0.0%	3.7%	1.7%
		% of Total	1.2%	0.0%	0.0%	0.0%	0.6%	1.7%
	4	Count	4	1	1	1	0	7
		% within F	57.1%	14.3%	14.3%	14.3%	0.0%	100%
		% within B	5.8%	2.9%	4.2%	5.9%	0.0%	4.1%
		% of Total	2.3%	0.6%	0.6%	0.6%	0.0%	4.1%
	3	Count	14	13	8	3	5	43
		% within F	32.6%	30.2%	18.6%	7.0%	11.6%	100%
		% within B	20.3%	37.1%	33.3%	17.6%	18.5%	25.0%
		% of Total	8.1%	7.6%	4.7%	1.7%	2.9%	25.0%
	2	Count	20	11	7	5	10	53
		% within F	37.7%	20.8%	13.2%	9.4%	18.9%	100%
		% within B	29.0%	31.4%	29.2%	29.4%	37.0%	30.8%
	% of Total	11.6%	6.4%	4.1%	2.9%	5.8%	30.8%	
1	Count	29	10	8	8	11	66	
	% within F	43.9%	15.2%	12.1%	12.1%	16.7%	100%	
	% within B	42.0%	28.6%	33.3%	47.1%	40.7%	38.4%	
	% of Total	16.9%	5.8%	4.7%	4.7%	6.4%	38.4%	
Total	Count	69	35	24	17	27	172	
	% within F	40.1%	20.3%	14.0%	9.9%	15.7%	100%	
	% within B	100.0%	100.0%	100.0%	100.0%	100.0%	100%	
	% of Total	40.1%	20.3%	14.0%	9.9%	15.7%	100%	

Legend: F=Provision of immediate result feedback to students
Source: Adeyemi 2016

Table 12: Chi-square tests on provision of immediate result feedback to students

	<i>Value</i>	<i>df</i>	<i>Asymptotic significance (2-sided)</i>
Pearson chi-square	10.580 ^a	16	.835
Likelihood ratio	12.548	16	.705
Linear-by-linear association	.400	1	.527
N of valid cases	172		

P<0.1
Source: Adeyemi 2016

is statistically significant relationship between the methods of teaching the lecturer uses and students' academic performance. This agrees with the findings of Afe (2001), Akpo (2012), Olaniyi (2014) and Okebukola (2014). The result underscores the fact that a lecturer does not only need to be well versed in his field of study, he also needs to be trained in the pedagogy of the profession. In other words, he needs to undergo professional training. This is why all lecturers in Nigeria at all levels, particularly at the

tertiary level are giving up till year 2020 to get professionally qualified or get sacked.

Result on Table 8 shows a high significant P-value of 0.002. By this result, the null hypothesis H₀₃ is therefore rejected. This implies that lecturers' utilisation of relevant and appropriate instructional materials has a statistically significant effect on students' academic performance in the university. This result supports the finding of Olatunji et al. (2006), Agharuwhe et al. (2009) and Odunsanya (2010). The emphasis on the use of appropriate and relevant instructional materials during classes becomes crystal clear when one is aware of the fact that learners acquire information through the five senses, so, a learner who cannot hear very well can see clearly what is being displayed to facilitate learning. Apart from making students actively involved in the teaching-learning process, it makes the lecturer become a facilitator, assisting the students where and when necessary. This way, the teaching-learning process becomes students-centred as opposed to teacher-centred approach where the teacher does everything from the beginning to the end of the class. This underscores

why practical classes in all fields of study should be attended to with the seriousness it deserves.

Indicated in Table 10 is a P-value of 0.027, which is found to be highly significant, therefore leading to the rejection of null hypothesis H_04 . The result shows statistically significant correlation between lecturers' possession of good command of the English language and students' academic achievement. The result is in agreement with the findings of Olatunji et al. (2006), Akpo (2012) and Olaniyi (2014). Language generally is an important aspect of the social and cultural life of a society. Through Language, people across culture, race, religion, ethnic groups and social strata interact. People get to understand one another through the instrument of language. It is the basis for human interaction and understanding in the society. Language therefore plays a very important role in the teaching-learning process. It is therefore pertinent that every lecturer at whatever level of the education system should possess a good command of the English language, more so as it is the medium of instruction (tool of communication) in all schools. A lecturer who is deficient in English cannot be an effective lecturer regardless of how well grounded he is, in his area of specialisation, as he lacks the tool by which he gets his ideas across to the students in the most effective and efficient manner.

Table 12 reports a P-value of 0.835. This result is not significant, which therefore means that the null hypothesis H_05 is not rejected. This implies that there is no relationship between lecturers' provision of immediate result feedback to the students and their academic performance. This result is at variance with the findings of Uchefuna (2001), Olatunji et al. (2006), Odusanaya (2010) and Hattie (as cited in Heggart 2016). The result may not be funny after all. It is either that the lecturers are not in the habit of providing immediate feedback to students, in which case the lecturers have to improve in this direction; or that the students are not keen in seeing their results probably due to fear of failure. Unfortunately unknown to the students, is the fact that both results (pass or failure) promote higher academic achievement. For instance, a student who is leading the class will do everything possible to maintain the lead, whereas a student who has been consistently performing poorly may suddenly realise the need to work harder and come to the fore front. However, this result is a confirmation of the essence of research.

CONCLUSION

Based on the results and the subsequent discussion above, it may be safely concluded that all but one of the lecturers' variables under investigation namely lecturers' adequate mastery of the subject matter (area of specialisations); deployment of appropriate method(s) of teaching; use of relevant instructional materials, facilities and equipment; possession of good command over the English language as medium of instruction significantly influence students' academic achievement, thereby promoting higher academic performance or otherwise in the universities. However, lecturers' immediate provision of result feedback to students was not found to significantly influence students' academic achievement.

RECOMMENDATIONS

The following recommendations are made consequent upon the findings and discussion above:

Lecturers are advised to study very hard in order to be well versed in their respective areas of specialisation for effective delivery in classes. There is no short cut to it. This however calls for more dedication and commitment on the part of the lecturers.

The use of appropriate teaching methods is instrumental to effective teaching – learning process in the class. This underscores the imperativeness for lecturers to acquire professional training, in order to acquire the necessary skills, methods and competences needed to perform effectively in the classes. A lecturer with adequate mastery of the subject matter achieves little or nothing if he lacks the appropriate method of putting his idea across to his students. This also has an implication on the university authorities to provide the enabling environment to do so.

Lecturers regardless of their status should be encouraged to always employ the use of instructional materials in their lectures owing to specific roles such instructional materials play in the teaching-learning process, particularly in practical oriented classes or courses.

As language is regarded as the “tool of the trade”, it behooves the individual lecturer to make concerted efforts to improve their skills in both written and spoken English. This may be achieved in a number of ways such as listening

to news, reading newspapers, deliberate learning of English as a subject among others.

Finally, lecturers are advised and encouraged to cultivate the habit of providing immediate result feedback to students which will not only enable them to know their academic standing, but also serve as a basis for motivation to achieve better academic performance.

SUGGESTION FOR FUTURE STUDIES

The present study investigated lecturers' variables such as mastery of subject matter, methods of teaching, use of instructional materials, possession of good command of the English language and provision of immediate result feedback to students as predictors of students' academic performance. Future studies may investigate other lecturers' variables such as class control, students' involvement in the course of lectures, lecturer-student interaction and/or relationship and others, as they influence students' academic achievement. Furthermore, the present study may be replicated in other settings so as to gather evidence to verify the findings and conclusions of the present study.

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