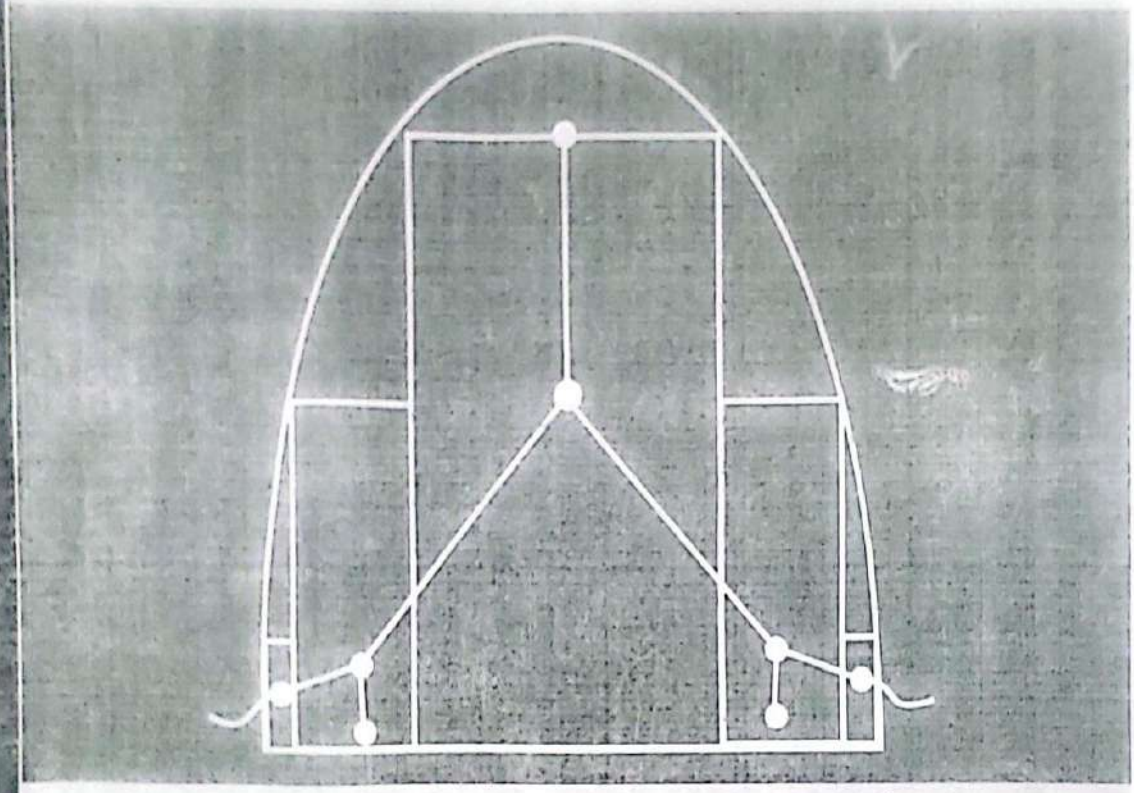
3

INTERNATIONAL JOURNAL OF EDUCATIONAL MANAGEMENT (IJEM)



VOLUME 12 No. 1, 2014

Published by

DEPARTMENT OF EDUCATIONAL MANAGEMENT,
UNIVERSITY OF ILORIN, ILORIN, NIGERIA

4. Affiliation of Author
5. Qualification
6. Phone Number
7. E-mail Address

All correspondence should be addressed to:
Managing Editor,
International Journal of Educational Management (IJEM), Department of Educational Management, University of Ilorin, Ilorin, Nigeria
E-mail address: ijem.edumgt@gmail.com
Phone numbers: 2348033733745; 2348072636327

A Study of University Entrance Requirements and Implications on Students' Academic Performance

Kilishi A. Abdulhakeem
Department of Economics, University of Ilorin
Corresponding E-mail: meetkilishi@yahoo.com

Abstract

This paper examined impacts of entrance requirements on students' academic performance in Nigeria. The sample frame was drown from 2011 Economics graduates of the University of Ilorin, Nigeria. The study being a descriptive survey adopted the use of both descriptive statistics and multiple regression analysis to analysed the data collected from the existing records of the students using proforma. The results revealed that: (i) high scores in UME, good grade in O'Level English and passing the require number of credits in one sitting of O'Level examination influence positively students academic performance at first year of their study; (ii) male students perform better than their female counterpart at first year, the performance of students who had credits in one Art or one Commerce subject to make up the require number of credits, is lower; and (iii) only UME scores and one O'Level sitting positively impacted on final year academic performance, while students with one Art or one Commerce graduated with lower grades. It is therefore recommended that candidates with one sitting O'Level result, high UME scores should be given priority in admission to the Department of Economics, while students with credit in O'Level Art or Commerce subjects instead of social sciences subject should be given less priority.

Key words: Entrance Requirement, Academic Performance, UME Scores, Number of Sitting.

Introduction

The Nigeria admission system is structured to determine the placement of most qualify candidates into the course of choice in the university. In turn, the quality of candidates admitted into the university or any other higher institution of learning serves as predicting variable on the substance the graduates are made of upon graduation and by extension their ability to contribute to the growth and development of the nation. The candidates turned graduates eventually become major actors in the affairs of the nation at different sectors of the economy. Hence, in order to have high quality graduates that will contribute meaningfully to the economy each institutions set out certain requirements or criteria to guide the admission. Prospective students are expected to meet these requirements/criteria before they can be qualified for admission into any programme in the University. These admissions criteria are made to streamline

the quality and quantity of students to be admitted, particularly those with high chance of succeeding in chosen disciplines.

Understanding the impact of admission criteria on students' academic performance is crucial because this will help make admissions procedures more efficient and effective (Millimet & Flume, 1982; Nunnally& Bernstein, 1994; Powers & Lehman, 1983, Wallace & Schwab, 1976).

There is need to carry out a detailed empirical study on impact of admission criteria so as to provide empirical justification for the existing admission criteria or the need to make changes. Tolson, (1986) argued that empirically based admissions criteria may also insulate admissions procedures from pressures created by ever increasing applications. In particular, it provides standards that admissions officials can use to offset various pressures to admit students who may not be well prepared to cope with the demands of university study.

Though there are a number of studies on the impact of admission requirement on students' academic performance in Nigeria, no single study exist on the impact of admission requirements/criteria on the performance of students in Department of Economics, University of Ilorin. Since admission requirements vary across departments and universities, there is need for department case specific study. Therefore, this paper is the very first attempt to empirically study the impact of entrance requirements on students' academic performance in Department of Economics, University of Ilorin.

Therefore the objective of this paper is to empirically investigate the impact of admission requirement which includes UME scores, number of sittings, number of additional social sciences, and grades in English, Mathematics as well as Economics on academic performance. Additional factors such as age of students and gender are controlled for. The paper is arranged in six sections. Following this introduction is section two which presents review of related literature, section three presents the entrance characteristics of the case study students. Section four presents the effects of admission requirement on first year's academic performance, while the effect of entrance requirement on final grade is presented in section five and sectional six concludes the paper.

Literature review

A number of studies such as Gbore, (2013), Uwaifo (2012), Salahdeenand Murtala (2005), Gregory and Engberg (2010), and Mora and Escardíbul (2008) among many others attempt to provide explanation on students' academic performance in the university and other institutions of learning in different countries. Several factors were identified in the literature as predictors of students' academic performance. For instance, Gregory and Engberg (2010) investigated whether or not exposure to different high school contexts could explain university students'academic performance in the United States (US). The results indicate that the quality of the high school infrastructure and exposure to

violence at school, and high school contexts affect first year college grades. The authors also provided evidence of the conditional nature of these effects, where the high school context reinforces advantages of students with relatively greater economic resources prior to college.

Mora and Escardíbul (2008)analyzed the effects of several factors related to high school, such as the school type (public or private), the structure of education (general or vocational), school location and peers on academic performance of students in University of Barcelona (Spain). The results show that variables related to high school, students' ability, and some household's characteristics are determinants of final grades in the university.

Dayioglu and Turut-Asik (2007)examined whether there are significant gender differences in academic performance among undergraduates in a large public university in Turkey based on three indicators; university entrance scores, performance in the English preparatory school and in the program the student is majoring in. The study found out that a smaller number of female students manage to enter the university and when they do so, they are admitted with lower scores. However, once they are admitted to the university, they excel in their studies and outperform their male counterparts. They argued that this result holds even after controlling for the field of study and individual attributes.

Hansen and Mastekaasa (2006),examined the impact of social class origin on university grades among practically all first-year students and higher-level graduates in Norwegian universities over two periods, 1997 to 2002 and 1997 to 2003, respectively. Their findings show that there is association between class origin and academic performance. And that this is true both for higher and lower level university studies, and in the majority of fields.

Altonji, Elder, and Taber (2005), Epple, Figlio, and Romano(2004), Horowitz and Spector (2005) and Smith and Naylor (2005)show that several high school characteristics, such as the type of school attended (public or private, either religious or not), peer effects and school resources are important determinants of undergraduate academic performance in the US and the UK.

Robert, Sarmistha and Peter (2002) explored the relationship between gender and academic achievement controlling for various personal and institutional attributes using data for all university graduates in England and Wales. It was found that, although women students perform better on average than their male counterparts, they are significantly less likely to obtain a first class degree. Also their findings indicate, that differences in such things as subject mix and individual and institutional characteristics cannot explain the gender gap in achievement of any significant degree. An important conclusion of their analysis is that gender differences in academic achievement arise because of differences in the way these attributes impact upon performance.

Julian and Morell (1999) analysed the Grade Point Average (GPA) of more than 5,000 undergraduates at the University of California, San Diego. It was found that family back-ground measured by family income had negative impact

on GPA at lower levels of income and positive impact as income grows beyond certain threshold. Teachers' experience in the student's high school bears a positive and significant link to the student's university GPA, but the effect is small. No such positive link with GPA emerged for the teacher-pupil ratio or teachers' level of education.

Dunlap, Henley, and Fraser (1998), investigated the correlation between admissions criteria and academic performance at a state university in the US. It was found that two admissions criteria, undergraduate Grade Point Average (GPA)and Graduate Record Examination (GRE) score, and two applicant characteristics: gender and race, were significantly correlated with academic performance.

Mohammad and Almahmeed, (1988) in the study on the usefulness of Kuwait University admission standards to predict students' academic performance found that the established admission criteria such as students 'score in standardized secondary school examinations and branch of study (that is, sciences or arts emphasis)highlypredict students university cumulative grade point average in Kuwait. Anderson, Benjamin and Fuss (1994) analysed the factors that determine student's success in introductory economics, concentrating on information with respect to prior achievement and background. The most important factors were the overall achievement level in high school and whether the student has taken a course in calculus at a senior high school. The authors argued that Prior study of economics played a more complicated role in the determination of the final grade in ECO 100, having a positive influence only if the student had been relatively successful in the high school course. Background knowledge of calculus and economics were the most important determinants of the probability of dropping the course in the first semester, whereas the grade 13 average grade was the most important determinant of the decision to drop the course in the second semester. The study also showed that ceteris paribus male students obtain 2.5 to 3.5 percentage points higher grades, on average, than their female counterparts.

There are also a number of studies in Nigeria that tried to understand what explain students' academic performance in the university. While majority of these studies considered general factors, some focused on the impact of admission requirements. In a related development, Gbore, (2013) sampled a total of 600 students selected from six State Universities in South–West, Nigeria to examine the relationship between academic performance and entry requirements such as SSSCE (Senior Secondary School Certificate Examination) and UME (Universities Matriculation Examination) scores, as well as ND (National Diploma) and NCE (National Colleges of Education) grades. The results of the study show that there is significant positive relationship between academic performance and all the four entry requirements. Of all entry requirements, UME had the least/weak relationship.

Uwaifo (2012), examined whether academic performance significantly differ across family structure using a sample of 240 students randomly drawn from six selected faculties in Ambrose Alli University, Ekpoma, Edo State, Nigeria. The results showed that significant differences existed between the academic performance of students from single-parentfamily and those from two-parent family structures. The results also indicated significant differences in academic performance of male and female students compared on the two types of family structures.

Oladokun, Adebanjo, and Charles-Owaba, (2008)used an Artificial Neural Network (ANN) model, to identify factors that could influence academic performance of engineering students in University of Ibadan, Nigeria. Various factors were identified which include: O/level results in Mathematics, English Language, Physics, Chemistry, and Further mathematics, UME score, Age of student at admission, time that has elapsed between graduating from secondary school and gaining university admission, Parents educational status, Zonal location of student's secondary school, type of secondary school attended (privately owned, State or federal government owned), place of residence while in the university, and Student's Gender.

Salahdeenand Murtala (2005) examined the relationship between the quality of Senior Secondary School Certificate Examination (SSCE) results, Joint Admissions and Matriculation Board / Universities Matriculation Examination (JAMB-UME) scores, and student's academic performance at Lagos state University College of Medicine (LASUCOM) in Nigeria. Their results showed that there was no significant correlation between the SSCE and the JAMB scores. In addition, correlation between JAMB and the student performance at 100 level and pre -clinical sciences also proved to be non-significant. These results indicate that SSCE is a better predicator of students' performance at pre-clinical sciences examination than JAMB Scores.

Entrance characteristics

One hundred and forty one (141) students admitted in 2007/2008 academic session into the Department of Economics formed the sample frame for this study. The characteristics of these 141 students are presented in Table 1. In the total 141 students, 78 are males while 63 are females which represents 55.32% and 44.68% of the total students respectively. One hundred and eight (108) candidates presented only one O'Level result (that is, one sitting) while thirty three (33) presented two results (two sittings). This implies that 78.60 percent of the students were able to make at least five credits including credit in English, mathematics, and economics in one sitting. However, thirty three (33) of them could not make the five credits in one sitting. Among the 108 candidates who made minimum of five credits in one sitting, fifty six (56) are male, while fifty

two (52) are female. It was one of the requirements for admission into the Department of Economics, University of Ilorin, that a candidate must have credit in two social science subjects in additional to credit in Economics. This requirement was relaxed during the 2007/2008 admission exercise. This change allow students to enroll that year and subsequent years with only one social science subject. Thus, among the 141 students admitted in the 2007/2008 academic session only thirty one students had credit in two social sciences, while seventy four had one commercial (whether Principle of Accounting, Book Keeping, Commerce,), nineteen had one arts subject, eleven had credit in one pure science to make up the required five credits. It is also discovered that 4 students had no credit in any social science subject except economics. The analysis of the entrance characteristics equally reveals that majority of the students had West African Examinations Council (WAEC) results, that is, 69.5% of the students were admitted with WAEC and 19.86% were admitted with National Examinations Council (NECO) results. Analysis of the University Matriculation Examination (UME) scores indicates that one hundred and twenty one (121) students constituting 85.82% scored 200 and above. On the other hand, twenty (20) students had less than 200 scores in the UME results. The age distribution of the students shows that 120 (85.11%) were within the ages 18 and above, while 21 students (14.89%) were below 18 years of age.

Table 1

Entrance Characteristics of Students

Students characteristics	Category	Frequency	Percentage
Gender distribution	Male	78	55.32
	Female	63	44.68
Number of sitting	Once	108	78.60
	Twice	33	23.40
Two other subjects	Two Social Science subjects	31	21.99
	One Commercial subject	74	52.48
	One Arts subject	19	13.48
	One Pure Science subject	11	10.64
	Two Commercial subjects	4	
Age distribution	Below 18 years	21	14.89
	18 years and above	120	85.11
Type of examination	WAEC	98	69.50
	NECO	28	19.86
UME Scores	200 and above	121	85.82
	Below 200	20	14.18

Source: Computed by author from students records.

Distribution of first year academic performance

The impact of the entrance requirements on first year academic performance is examined in this section. The GPA at the end of 100 level is used to measure first year academic performance. The university regulation then was that any student whose GPA is less than one 1 point at the end of first year is said not to have Good–standing and hence, will be advice to withdraw. In other words, if a student's cumulative grade point average is less than 1 point at the end of first session of his/her study, he/she is withdrawn from the programme. Table 2 presents the summary of first year academic performance of all the students in the class.

Table 2

Summary of Students' Academic Performance after First Year

Performance	Frequency	Percentage
Above 4.5 [First Class]	1	0.71
3.50 - 4.49 [Second Class Upper]	22	15.60
Between 2.40 and 3.49 [Second Class Lower]	60	42.55
Between 1.50 and 2.39 [Third Class]	36	25.53
Between 1.0 and 1.49 [Pass Degree]	9	6.38
Below 1.0 [Withdrawn]	13	9.22

Source: Computed by author from students records.

Table 2 shows the distribution of first year academic performance at the end 2007/2008 academic session. This distribution shows that 23 students, representing to 16.31% of the students made a CGPA of 3.50 points and above withonly one having above 4.5, while, 60 students, an equivalence of 42.86% had their CGPA ranging between 2.40 and 3.49 points, 36 students (25.71% of the students) made between 1.50 and 2.39 points, 9 students, representing 6.43% of the total students made between 1.0 and 1.49 points, and the remaining 13 students, which is 9.22% of the students made below 1.0. These indicate that 16.31% of the students were found in the first and second class upper division category, 42.86%, forming the majority of the students were found in the second class lower category, 25.71% of the students were in the third class category, 6.43% of the students were in the pass category, and 13 students (9.22% of the total number of students) were withdrawn from the programme in the 2007/2008 academic session since they were not in academic good standings.

The Model, Data and Estimation Techniques

Regression analysis is carried out to investigate the impact of admission requirements and additional control variables on student academic performance. The regression model is specified as:

$$SAP_i = \beta_0 + \beta_j AC_i + \gamma_j CF_i + \epsilon_i$$

Where SAP Students Academic Performance, AC is Admission Criteria which include UME scores, number sitting O'Level examination, grades in O'Level English, Mathematics and Economics as well as whether the student has credit in additional two O'Level social science subjects. CF represents control variables which include credit in one O'Level Arts or Commerce or Social Science, high scores in UME, gender and age at entry. Subscript i stands for individual students, ϵ is the random error term that is assumed to be $iid \sim (0, \sigma^2)$, β_0 is the constant, β_j represents the coefficients of admission criteria variables, γ_j and represents the coefficients of control variables. The Cumulative Grade Points Average (CGPA) is used as measure for academic performance, a dummy variable called one sitting which is equal to one if the student submitted only one O'level result and zero otherwise. Grades in O'level English, Mathematics, and Economics are dummies that are equal to one if the student passed beyond Credit (that is, made B or A grades) in English, Mathematics and Economics respectively.

The data is collected from students records at the Department and some are information collected by academic level adviser at point of entry. The data is analysed using descriptive statistics such as frequencies and percentages, while the regression model is estimated using the Classical Ordinary Least Squares with robust standard error.

Entrance requirement and first year academic performance

In this section, the impact of entrance requirements on first year's academic performance is analysed. The results of the regressions which consist of four different models are estimated and presented in Table 3 below. In model (1) first year GPA is regressed on admission requirement variables which include UME scores, number of sittings, grades in O Level English, Mathematics and Economics, and two social sciences. In this model only the admission criteria variables before 2007/2008 admission exercise are considered. In model (2) the new criteria since 2007 which candidates with just a credit in one social science should be considered for admission is captured by introducing one social science dummy, equally one commerce and one arts dummies are introduced. In model (3) best UME scores (200 and above) is controlled for and finally in model (4) age at entry and gender are introduced.

Table 3

Regression Results of Students' First Year Academic Performance

VARIABLES	(1) model 1	(2) model 2	(3) model 3	(4) model 4
UME Scores	0.00446	0.00523	-0.000495	-0.00115
	(0.00427)	(0.00429)	(0.00591)	(0.00575)
One Sitting	0.406**	0.378**	0.408**	0.407**
	(0.181)	(0.187)	(0.189)	(0.190)
O'level English	0.659***	0.624**	0.620**	0.605**
	(0.247)	(0.247)	(0.259)	(0.268)
O'level Mathematics	0.165	0.148	0.128	0.204
	(0.189)	(0.194)	(0.195)	(0.220)
O'Level Economics	-0.00264	-0.0396	-0.0442	-0.0995
	(0.183)	(0.191)	(0.186)	(0.181)
Two social Sciences	0.188	-0.293	-0.555	-0.489
	(0.170)	(0.619)	(0.677)	(0.682)
Arts	-	-0.454*	-0.765***	-0.542
		(0.258)	(0.279)	(0.333)
One Commerce		-0.740***	-1.020***	-0.828**
		(0.250)	(0.281)	(0.327)
One Social Sciences		0.209	0.249	0.135
		(0.546)	(0.563)	(0.551)
Best UME Scores (≥ 200)			0.523*	0.558*
			(0.305)	(0.293)
Gender				0.390**
				(0.188)
Age				-0.0378
				(0.0453)
Constant	1.207	1.559	2.636**	3.186*
	(0.923)	(0.963)	(1.304)	(1.630)
R-squared	0.134	0.153	0.175	0.209

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1, Source: Computed by author

The result of model (1) shows that only one sitting and students' score in O' level English significantly affect first year academic performance. The two significant variables have positive effects on first year academic performance with 0.406 and 0.659 magnitudes respectively. This implies that students who made their O' level results in one sitting relatively perform better than those who made it in two sittings with 0.406 CGPA on the average. Equally students who made above credit pass (that is, made B or A grades) in their O' level English perform better with 0.659 CGPA on the average than their counterparts who made just credit pass C grades).

In model 2, first year academic performance is regressed on entrance requirements as in model 1 while controlling for students who do not have credit in two additional social science subjects, but have either one commercial, one art

or one social science subjects. The result shows that in addition to One O' level sitting and students' scores in O' level English which both have significant positive impacts on first year academic performance (now with magnitudes 0.378 and 0.624 respectively), one art and one commercial subjects also have significant but negative impact on first year academic performance with magnitudes 0.454 and 0.740 respectively. This implies that students without two social science subjects in addition to English, Mathematics and Economics, but have either one art or commercial subjects do perform lesser in their first academic year in the Department of Economics.

Model 3 is an extension of model 2 with incorporation of additional control which is students with the best UME scores. The best UME is a dummy that is equal to 1 if student had 200 and above score in UME and 0 otherwise. The result shows that best UME result has a significant positive effect on first year academic performance with 0.523 magnitude, in addition to One O' level sitting and students' scores in O' level English which both have significant positive impacts (now with magnitudes 0.408 and 0.620 respectively), and one art and one commercial subjects still show significant negative impact on first year academic performance (now with magnitudes of 0.765 and 1.020 respectively). This implies that students with UME score of 200 and above perform better in their first year in the university than those with UME score below 200.

Model 4 extends model 3 by introducing students' age at entry and gender which is equal to 1 if a student is male and 0 otherwise. The result shows that out of these two additional variables, only the male gender has a significant effect on first year academic performance. The result shows a significant positive effect of male gender on first year academic performance with 0.390 magnitude. This implies that male students on the average perform better than their female counterparts in the department. Also in model 4, it can be seen that the effect of students with one Art subject became insignificant, thus, leaving One O' level sitting, students' score in O' level English, best UME result and male gender, with significant positive effect, and one commercial subject with significant negative effect.

Entrance requirements and final academic performance

In this section analysis of the impact of entrance qualification on final year academic performance is presented. The summary statistics of final year grades in presented in Table 4, while the regression results are presented in Table 5.

Table 4

Summary of Final Year Academic Performance

Performance of Graduating Students	Frequency	Percentage %
3.5 and above	33	35.87
Between 2.40 and 3.49	50	54.35
Between 1.50 and 2.39	8	8.70
Between 1.0 and 1.49	1	1.09

Source: Computed by author from students records
Key: 1.0 – 1.49, 1.50 – 2.39, 2.40 – 3.49, 3.5 – 4.49, 4.5 & above, represent Pass Degree, Third Class, Second Class Lower, Second Class Upper, and First Class respectively.

The distribution of final year academic performance of the group of students in the case study is displayed in Table 4. This distribution shows that 33 students, equivalent to 35.87% of the students made a CGPA of 3.50 points and above which falls in the Second Class Upper Division category, 50 students, an equivalence 54.35% of the students had their CGPA ranging between 2.40 and 3.49 points, 8 students (8.70% of the students) made between 1.50 and 2.39 points, and only 1 student, representing 1.09% of the population made between 1.0 and 1.49 points. These indicate that 35.87% graduated with either Second Class (upper division), 54.35%, forming the majority of the students graduated with Second Class (lower division), 8.70% of the students graduated with Third Class, and only 1.09% of the students graduated with Pass.

Table 5

Regression Results of Final Year Academic Performance

VARIABLES	(1) model 1	(2) model 2	(3) model 3	(4) model 4
UME Scores	0.00541*	0.00612**	0.00586	0.00468
	(0.00315)	(0.00300)	(0.00388)	(0.00378)
One Sitting	0.428**	0.441**	0.442**	0.438**
	(0.186)	(0.196)	(0.196)	(0.188)
O'level English	0.279	0.314	0.314	0.280
	(0.221)	(0.229)	(0.230)	(0.237)
O'level Mathematics	-0.0863	-0.112	-0.111	-0.00486
	(0.141)	(0.144)	(0.145)	(0.168)
O'Level Economics	-0.129	-0.160	-0.161	-0.149
	(0.139)	(0.145)	(0.149)	(0.149)
Two social Sciences	0.0799	-1.002***	-1.015***	-0.892***
	(0.136)	(0.279)	(0.321)	(0.295)
Arts		-0.818***	-0.834**	-0.685**
		(0.232)	(0.331)	(0.333)
One Commerce		-0.767***	-0.783***	-0.645**
		(0.199)	(0.286)	(0.298)
One Social Sciences		-0.327	-0.324	-0.312*
		(0.210)	(0.214)	(0.186)
Best UME Scores			0.0268	0.0642
			(0.269)	(0.256)
Gender				0.167
				(0.177)
Age				0.0253
				(0.0311)
Constant	1.708**	2.638***	2.685***	2.144**
	(0.709)	(0.685)	(0.877)	(1.003)
R-squared	0.137	0.162	0.163	0.190

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1, Source: computed by authors

The regression results are presented in the Table 5. As in Table 3 results of four different models are displayed in the table. In model 1, final year academic performance is regressed on entrance requirements which consist of UME scores, One O' level sitting, and students' scores in the required five O' level subjects which consist of English, Mathematics, Economics, and other two social science subjects.

The result shows that only UME scores and One O' level sitting significantly affect final year academic performance. The result shows that both have positive effects on final year academic performance with 0.00541 and 0.428 magnitudes respectively. This implies that the final year CGPA increases with UME scores, that is, the higher the UME result, the better the final year result. However, UME scores is significant at 10% and the coefficient (0.00541) is low. On the other hand, students who made their O' level results in one sitting

relatively perform better with 0.428 CGPA on the average than those who made it in two sittings.

In model 2, final year academic performance is regressed on entrance requirements as in model 1, however, additional control variables such as one commercial, or one art or one social science subjects are introduced. The result shows that in addition to UME scores and One O' level sitting which both have significant positive impacts on final year academic performance (now with magnitudes of 0.00612 and 0.441 respectively), having two social science subjects, one art and one commercial subjects also have significant but negative impact on final year academic performance with magnitudes 1.002, 0.818 and 0.767 respectively. This implies that having either two social science subjects or one art or one commercial subjects in addition to English, Mathematics and Economics, influence final year academic result negatively.

In model 3 final year academic performance is regressed on all the variables in model 2 plus best UME result as additional control. Like in the first year performance regression results, best UME score is also measured by a dummy which is equal to 1 if student had 200 and above in UME result and 0 otherwise. The result shows that best UME result does not have any significant impact on final year academic performance. Model 3 result also shows that UME scores seized to be a significant determinant of final year academic performance, leaving One O' level sitting with a significant positive impact, and having two social sciences, one art and one commercial subjects with a significant negative impact on final year academic performance. This implies that final year grades of students who scored 200 and above in UME is not significantly different from the final grades of those who scored below 200.

Model 4 extends model 3 by introducing students' age and gender. The result shows that none of the two additional variables, – gender and age – has significant effect on first year academic performance. However, the result shows that only one sitting has significant positive effect on final year academic performance with 0.438 magnitude, while two social sciences, one arts, one commerce and one social sciences have significant negative effects.

Conclusion

This paper examines impact of admission requirements on first and final years students' academic performance, using 2007 admission cohort in the Department of Economics, University of Ilorin. From the results a number of conclusions can be drawn: first, students who made at least five credits in one sitting of O'Level examination had relatively better academic performance both at first and final year of study. Second, students with high grades in O'Level English only perform better than their counterpart at the first year, while their performance is no difference from others at the final year. Third, surprisingly,

high grades in O'Level Mathematics and Economics do not have significant influence on students' academic performance both at first and final year. Fourth, UME scores do not influence first year academic performance, though does influence final year performance. On the other hand, students with best UME scores perform better at first year, though their performance is not different from other at final year. Fifth, students with credit in one Art or one Commerce had relatively lower academic performance both at first and final year. In addition credit in two social sciences do not influence performance at first but surprisingly negatively does at final year. Finally, age does not influence student academic performance both at first year and final year, male student had better academic performance at first year but their performance is not different from performance of female at final year.

Implication of findings

Since the relevance of admission criteria is to allow the admission officers to select candidates that who succeed in their chosen programs variables that did not show any significant effect through the analysis should be deemphasized, while variable that came out significant in most of the results should be focus on. Specifically, one sitting which is not part of the current admission requirement should be include and high UME scores should also be emphasized. Credit in one O'level Art or Commerce subjects should be discouraged.

Suggestions for further research

Though, this paper unraveled the impacts of admission requirements on student academic performance, the impact of university factors are missing in the analysis. This could not be captured in this paper because the students used as case study have graduated long before this study, therefore, further study that will use students on the program currently should be carried out so as to capture the impact both the admission and university variables.

References

Altonji, J. G., Elder, T. E., & Taber, C. E. (2005). Selection on observed and unobserved variables: Assessing the effectiveness of catholic schools. *Journal of Political Economy*, 113 (1), 151-184.

AndersonG., Benjamin D. &M. A. Fuss (1994), The Determinants of Success in University Introductory Economics Courses, *The Journal of Economic Education*, 25 (2), 99-119

Dayioglu M. & S. Turut-Asik (2007), Gender Differences in Academic Performance in a Large Public University in Turkey, *Higher Education*, 53 (2), 255-277

Dunlap, K. M., Henley, H. C. & M. W. Fraser (1998), Research Notes: The Relationship Between Admissions Criteria and Academic performance in an MSW Program, *Journal of Social Work Education*, 34 (3), 455-462

Epple, D., Figlio, D., & Romano, R. (2004). Competition between private and public schools: Testing stratification and pricing predictions. *Journal of Public Economics*, 88, 1215-1245.

Gbore, L. O. (2013), Relationship between Cognitive Entry Characteristics and the Academic Performance of UniversityUndergraduates in South West, Nigeria, *Journal of Educational and Social Research, 3 (1), 19 – 24*

Gregory C. W. & M. E. Engberg (2010), Academic Achievement in the First Year of College: Evidence of the Pervasive Effects of theHigh School Context, *Research in Higher Education*, 51 (5), 451-467

Hansen M. N. & A. Mastekaasa (2006), Social Origins and Academic Performance at University, *European Sociological Review*, 22 (3), 277-291

Horowitz, J. B., & Spector, L. (2005). Is there a difference between private and public education on college performance? *Economics of Education Review*, 24, 189-195.

Julian R. B. & D. Morell (1999), The Determinants of Undergraduate Grade Point Average: The Relative Importance of Family Background, High School Resources, and Peer Group Effects, *The Journal of Human Resources*, 34 (2), 268-293

Millimet, C. R., & Flume, M. E. (1982). Estimating graduate admission standards in psychology. *Research in Higher Education*, 17(2), 125-137.

Mohammad H. J. Y. & M. A. H. Almahmeed, (1988), An Evaluation of Traditional Admission Standards in Predicting Kuwait University Students'Academic Performance, *Higher Education*, 17 (2), 203-217

Nunnally,J. C., & Bernstein, I. (1994). Psychometric theory. (3rd ed.). New York: McGraw-Hill.

Oladokun, V.O., Adebanjo, A.T., & O.E. Charles-Owaba, (2008), Predicting Students' Academic Performance using Artificial Neural Network: A Case Study of an Engineering Course, *The Pacific Journal of Science and Technology*, 9 (1), 72 – 79

Powers, D. E., & Lehman, J. (1983). GRE candidates' perceptions of the importance of graduate admission factors. *Research in Higher Education*, 19(2),231-249.

Robert M., Sarmistha P.& S. Peter (2002), Gender Differences in Educational Attainment: The Case of University Students in Englandand Wales, *Economica*, 69 (275), 481-503

Salahdeen H. M. &B. A.Murtala (2005), Relationship between Admission Grades and Performances of Students in the First Professional Examination in a New Medical School, *African Journal of Biomedical Research, 8, 51 - 57*

Smith, J., & Naylor, R. (2005). Schooling effects on subsequent university performance: Evidence for the UK university population. *Economics of Education Review*, 24, 549-562.

Tolson, E. R. (1986). Changes in enrollment and applications to graduate schools of social work: 1972-1982. *Journal of Social Work Education*, 22(2), 82-97.

Uwaifo, V. O. (2012),The Effects of Family Structures on the Academic Performance of Nigerian University Students, *Global Journal of Human Social Science*, 12, (5) 51 – 57

Wallace, M. J., & Schwab, D. P. (1976). A cross validated comparison of five models used to predict graduate admissions committee decisions.*Journal of Applied Psychology*, 61(5), 559-563.