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1. Introduction

Given that the need for quality education and training cannot be overemphasized, there is need to ensure that graduates can aptly fit into the dynamic global economy. As such, employers of labour are becoming desirous of graduates that will readily fit into their work-system and add value to firm. Thus, the globalization of businesses, driven by information technology as well as the advent of a knowledge based economy are important factors necessitating that graduates of institutions of higher learning are capable of responding to the changing demands of the market place and the real estate industry in particular. Meeting these contemporary needs of the industry however requires a thorough understanding of the courses that are taught in the universities. In other words, effective performance of the graduates in the industry can be related to their academic performance while in the University.

Real estate's academic curriculum is all-encompassing requiring students to audit and pass courses in economics, law and accounting, among others. Good performance in these courses by the students could be translated as the quality of knowledge and skills that will be available for use in the industry upon graduation. However, several factors such as course curriculum and content (Blundell, 1999; Newell and Eves, 2000; Yu Shin-Ming, 2001; Akinyemi, Ofem and Ikuenomore, 2012), learning environment (DeGregori, 2007; Frenzel, Pekrun and Goetz, 2007; Adedapo, Aderounmu and Aduwo, 2013), quality of training and the training process (Ditcher, 2000; Newell and Acheampong, 2003; Crews, 2004; Koulizos, 2006; Rangga, Ariffian, Norshishamuddin and Zarin, 2011) and socioeconomic background (Okioga, 2013; Kanagi et al, 2015) have been identified as potential contributors to the academic performance of students in higher institutions of learning. These factors often influence students' class of degree, quality of education received and the perception of graduates by industry employers.

Allen and Carter (2007) noted that both intellectual and non-intellectual factors serve as important predictors of students' level of academic achievement. Thus, students as recipients of the training process, not only play a major role especially at higher educational levels, the educational process cannot be said to be complete without them. The corollary of the foregoing is that, with increasing globalization, growing huge volume of investments linked to real estate assets and the investors' increasing level of sophistication, there is the need to have an insight into factors influencing the academic performance of real estate students'. This will help to ensure that real estate education remains relevant in an emerging economy like Nigeria.

The purpose of this paper is to examine the factors impacting on academic performance of real estate students in Nigeria. A study of this nature has important implication for both the universities offering real estate education and the stakeholders in the real estate industry, as it shows the perception of the students in relation to their socioeconomic and academic background. It is also important to relevant stakeholders as it provides them with necessary information on the factors that mostly impact on real estate students' academic performance.

2. Review of relevant literature

Several studies have investigated into factors influencing academic performance of real estate students. For instance Small and Karantonis (2001) underscored the importance of adequate practical training in real estate courses. The study of Newell and Acheampong (2003) investigated property education standards in Australia over a seven year period, by examining the perception of property graduates from seven universities in Australia over 1994 to 2001. Using survey conducted by Graduate Career Council of Australia, the study advocated improving the methodology adopted in teaching property degrees in Australia. Supporting the assertion of Small and Karantonis (2001), Callan and McCarthy's (2003) study surveyed final year students' and graduates of Biological and Biomedical Sciences in Massey University, New Zealand and industry employers. The result of the study showed that the graduates acknowledged the necessity for increased practical field work in their academic programme. Due to lack of professional real estate sales persons, Crews (2004) examined the effectiveness of real estate education and the need to create a learning environment that can meet the demand of adult students who do not have sufficient study time. The study concluded on the need for modern and adaptable mode of study for working class adults interested in pursuing a higher degree in real estate. Furthermore, the study of Boyd (2005) investigated the need to adapt current property education programme to suit the changing demands of real estate industry stakeholders. The author underscored the importance of an effective learning environment for the transfer of knowledge. The study further noted the increasing attention being placed on behavioural analysis and interdisciplinary skills through a re-examination of the existing body of knowledge and industry requirements.

Barry (2005) analysed the effect of factors such as peer influence, school and family on students' academic performance. Findings showed that socioeconomic status is one of the strongest predictors of students' academic performance. Hermino (2005) examined the factors influencing academic performance of first year accounting students in private and public universities in Puerto Rico. The findings revealed that internal classroom factors plays a major role in positively enhancing academic performance of students both private and public

universities. Noble, Roberts and Sawyer (2006) investigated factors influencing students' performance on the American College Test. The authors noted that students' scores were directly affected by their past academic records at high school. However, family income, parents' educational level and negative situations at home influenced students' scores indirectly. Kyoshaba's (2009) study examined factors affecting undergraduate students' academic performance at Uganda Christian University. Findings from the study showed that there exists significant relationship between students' academic performance and A-level and Diploma admission points, parent's socio-economic status and former school background. However, there was no relationship between students' age and academic performance.

The study of Kakulu and Plimmer (2009) analysed the balance between real estate education and practice in developing economies due to increasing globalisation. Following a comparative review of real estate education and practice in Nigeria and the UK, the study found that societal and cultural beliefs are gradually being incorporated into real estate education in Nigeria. The study concluded on the need to take cognisance of local employment market in the quest to internationalize real estate education. Bouillon and Carter (2009) investigated the level at which real estate courses influences real estate activities within the local market. The study affirmed the existence of a positive correlation between the number of real estate graduate courses and local real estate economy. Cornish, Reed and Wilkinson (2009) analyzed the usefulness of online technology as opposed to conventional classroom teaching and paper based assessment. The authors concluded that innovative technology ought to be embraced in the delivery of property courses in order to achieve efficiency and effectiveness. Hefferen and Ross (2010) examined factors compelling a change in real estate education and research in Australia. The authors concluded that professional bodies should assist universities in strategically positioning real estate education to meet up with changing demands. Victor (2011) evaluated factors impacting on academic performance of Biochemistry students at West Indies University. Amongst other influencing factors, the study found that age was an important determinant of students' academic performance as older students have difficulties with the course than younger students. Based on the premise that blended learning approach has more flexibility and it is believed to enhance learning outcomes, the study of Yam and Rossini (2012) compared the effectiveness of blended and online learning approaches, using first year undergraduates taking property valuation course. The study examined two study modes; the internal students exposed to the blended approach and external students exposed to only online approach. The study found that external students exposed to only online method performed better than internal students who adopted the blended mode of study.

Corroborating the finding of Newell and Acheampong (2003), Boyd's (2012) study examined the quality of the training process given to real estate students in Australia. The study recommended that lecturers and tutors should embrace innovative learning process. Hardin, Waller and Weeks (2012) analysing 102 universities offering real estate course, established benchmarks for real estate undergraduate course in the United States. The authors recommended the need for improved real estate education with greater focus on the demands of the immediate market and students. Okioga (2013) investigated the effect of socio-economic background on students' academic performance. The study analysed the views of 186 students in Kisii University College using analysis of variance, regression analysis and Likert scale. The author submitted that socio-economic background strongly influenced students' academic performance. Also, Dengra, Kalra and Malhotra (2013) analysed factors affecting students' academic performance. The study posited that extra-curricular activities, teaching methodology and class contact hours were important factors that determine academic achievements of students. While love relationships and lab facilities were identified as the least factors that impact on students' academic performance. Hayat *et al* (2013) examined factors affecting performance of topmost university students at the University of Agriculture and Institute of Management Science Peshawar. The results of the study showed that the level of students' involvement in their studies, quality of study, role conflict, relationship with fellows, and environmental indulgence were highly rated factors that would affect academic performance of topmost students enrolled at both universities. The study of Ganyaupfu (2013) investigated factors influencing academic performance of business students of private higher education in South Africa. The author noted that factors such as lecturer competence, teaching methods, and quality of learning had positive significant influence on students' academic performance. The study further submitted that mathematics aptitude and minimum admission requirements have no impact on students' performance.

Yeshimebrat, Alemayehu and Firew (2013) considered factors influencing female students' level of academic performance at Bahir Dar University in Ethiopia. The authors examined on and off campus factors such as personal related problem, university induced problems, academic and economic factors. The findings revealed that unconducive learning environment, peer influence, inadequate human and material resources and family background are major influences responsible for female students' low academic performance. Saginor, Weinstein and Worzala (2014) investigated the effect of the economic depression on graduate real estate programme. Using responses obtained from directors of graduate real estate programmes in the United States. Amongst other findings, the study revealed that there is an increase in competition from within universities, as more disciplines are hedging out real estate discipline in terms of ability

to attract students. Lee and Mallik (2015) investigated the effect of students' personal characteristics on academic achievement in a distance learning undergraduate real estate programme. Using a sample of 126 online graduates between 2007 and 2012, the study found that entry qualification and age contributed significantly to students' academic performance. Boyd's (2015) study reviewed previous researches on learning outcomes in Australian property education programmes. Kanagi *et al* (2015) analysed the effect of socioeconomic and academic background on academic performance of first year undergraduate students. Using cross-tabulation and multinomial logistic regression, the study showed that academic factors such as students' cumulative grade point average (CGPA) of entry qualification was an important determinant while socioeconomic factors such as gender and place of origin were considered less important factors contributing to students' academic performance. The study of Poon and Brownlow (2015) examined factors influencing real estate students' satisfaction in Australia and the effect of demographical variations on students' satisfaction. The study found that real estate students rated higher in their level of satisfaction when compared with other built environment students. The study further noted that students' age and mode of study impacted on the overall level of students' satisfaction.

While several studies have examined factors affecting students' performance in higher institutions of learning, there is however a dearth of studies examining the factors affecting academic performance of real estate students, especially from an emerging economy like Nigeria. Studies such as Oloyede and Adegoke (2007) examined the relevance of real estate curriculum and teaching techniques in Nigeria real estate practice. The study found that real estate graduates were deficient in areas of valuation, agency, feasibility and viability and property management. The authors suggested the need for computer based learning approach and a periodic review of teaching curriculum. Also, Gambo *et al* (2012) investigated the determinants of students' career choice of real estate as a field of study. Findings from the study showed that most students were fully informed about real estate as a course of study before admission. However, the authors suggested the need for increased career orientation for students' prior admission into the university. Udoekanem (2013) studied the perception of students towards the teaching and learning of plant and machinery valuation. The study showed that students understanding will be better enhanced through practical sessions as opposed to routine classroom lectures. The study recommended the need for the more field exercises and hands-on training for real estate students in Nigeria. Adedapo, Aderounmu and Aduwo (2013) investigated the perception of Architecture students to their learning environment and its influence on their academic performance. The study found that students' perception of the learning environment is related to the effectiveness of the teaching process. The recent study of

Oladokun and Ayodele (2015) assessed the relevance of Students Industrial Work Experience Scheme (SIWES) to real estate education in Nigeria. The study concluded that while SIWES helps real estate students acquire experience in private practice, it also enables them acquire requisite behavioral skills. Related skills of this nature are observed in real estate marketing assignment of firms which are determined by the knowledge base of the graduates from the tertiary institutions to the industry (Sani and Gbadegesin, 2015).

From the review of literature, factors impacting on academic performance can be grouped into six broad categories- parental and family background (Noble *et al,* 2006; Kanagi *et al* 2015; Kyoshaba 2009; Okoiga, 2013), students personal factors (Kanagi *et al,* 2015; Victor, 2011; Hayat *et al*, 2013; Dengra *et al*, 2013), school and academic environment (Yeshmerbat *et al*, 2013; Adedapo *et al*, 2013; Hermino, 2005), teaching techniques/methods (Udoekanem, 2013; Callan and McCarthy, 2003; Dengra *et al,* 2013; Small and Karantonis 2001), lecturers (Ganyaupfu, 2013; Dengra *et al,* 2013; Newell and Archeampong, 2003) and mode of assessment (Crews 2004). However, the perspective of real estate students especially from an emerging country like Nigeria, where issues and implications of socioeconomic variations, learning environment, economic influences and viable career choices are of paramount importance, the factors influencing real estate students' academic performance might pose different results. Thus, this study seeks to complement literature by examining the academic performance of real estate students' in Africa's emerging economy, with particular reference to Nigeria.

3. Research method and data

The study population for the paper included two tertiary institutions; Obafemi Awolowo University, Ile-Ife and Federal University of Technology, Akure, both in South-western Nigeria. The sample frame included final year real estate students in these Universities. The choice of the final year students is based on the notion that they have spent ample time in the university and their level of perception might better reflect the actual realities of factors influencing real estate students' academic performance. Thus, their level of academic experience and judgment could be considered higher in comparison to other lower levels. Responses were obtained through self-administered close-ended questionnaire. While a total of one hundred and fifty two (152) questionnaire were administered, only one hundred and twenty seven (127) were retrieved for analysis. This represents 83.5% response rate.

The questionnaire was structured into two sections. The first section asked questions about the socioeconomic and academic background of the respondents. The section contained items such as age, gender, marital status, family size and background, mode of admission, monthly

allowance, how they got to know about real estate, influence of family set up on performance, what influenced the decision to study real estate, whether their academic performance might have been better if admitted to their preferred course of study and so on. These, amongst other issues, were considered.

The second section obtained responses about the perception of students on factors affecting their academic performance. In examining the factors contributing to real estate students' academic performance, list of identified factors from literature were grouped into six (6) sub-sections. The first subsection is on parental and family background, the second focused on students personal factors, while school and academic environment, teaching techniques/methods, lecturers and mode of assessment were listed in subsections three (3) to six (6) respectively. Lists of factors were identified under each subsection and the students were asked to rank how these factors affect their academic performance. Ranking was done on a 7-point Likert scale of 1 - strongly disagree to 7 – strongly agree.

Data collected were analyzed using descriptive and inferential statistical tools. Descriptive statistical methods (frequency distribution, percentages and cross tabulation) were employed in analysing students socioeconomic and academic background while mean rating was used to rank the factors influencing students academic performance. The mean of each item in the subsection was used in ranking the items, while the mean response for each subsection was obtained and used as a benchmark against the individual item mean for items in the subsection. This was used to determine the important items under each subsection. Furthermore, the identified factors were subjected to factor analysis to identify components that impacted more on students' academic performance.

4. Research findings and discussions

In presenting the results of the study, the paper first examined the socioeconomic and academic characteristics of the respondents. Subsequently, the paper analysed the perception of the students with respect to factors contributing to their academic performance. The results of the analysis are presented in Tables I-VII.

4.1 Socio-economic background of respondents

Table I. Socio-economic background of Real Estate Students

	Frequency	Percentage (%)
Age		
24 and below	81	63.8
25-30	38	29.9
Above 30	4	3.1

No response	4	3.1
Gender		
Male	70	55.1
Female	57	44.9
Marital Status		
Single	118	92.9
Married	8	6.3
Others	1	0.8
Family Background		
Monogamous	109	85.8
Polygamous	16	12.6
No response	2	1.6
Type of parenting		
Divorced/single parents	1	0 .8
Living separately	27	21.3
Living together	87	68.5
Orphan	6	4.7
No response	6	4.7
Family size		
1 to 4	30	23.6
5 to 7	76	59.8
8 to 10	15	11.8
Above 10	4	3.1
No response	2	1.6
Influence of family setup/background		
Positively	100	78.7
Indifferent	26	20.5
Negatively	1	0 .8
*Range of Monthly Allowance**		
Less than USD$ 26	18	14.2
USD$ 26 – USD$ 51	53	41.7
USD$ 51 – USD$ 102	32	25.2
Above US$ 102	16	12.6
No response	8	6.3
Source of Monthly Allowance		
Solely from parents	69	54.3
Solely from relatives	11	8.7
Both parents/relatives	33	26.0
Self-financed	8	6.3
Others	6	4.7
Extracurricular activities		
Often	50	39.4

Sometimes	49	38.6
Rarely	25	19.7
Others	3	2.4

*Exchange rate of NGN ₦197.5 to USD $1 as at February 2015

Analysis of responses from Table I showed that majority of the students (63.8%) were below 24 years of age. While 29.9% of the respondents were between 25-30 years old, the remaining 3.1% were above 30 years. This suggests that most of the students gained admission quite at an early age to study real estate; given that most students possibly gained admission at an average of 18 to 19 years. The gender distribution of the students indicated that 55.1% are males and 44.9% are females. This perhaps is due to the perceived notion that the profession is male dominated as only few females are prominent in the real estate industry either as practioners or academics. Responses in respect of the marital status of the respondents showed that 92.9% were single while 6.3% were married.

The analysis of the family background showed that most respondents (85.8%) were from monogamous families while 12.6% were from polygamous families. This might be due to the increasing infiltration of the Western culture of monogamy and perhaps reinforced by religious beliefs. Furthermore, while 68.5% of the respondents had their parents living together, 21.3% had their parents living separately, perhaps due to the exigency of their work or as a result of other economic or personal reasons. 4.7% of the respondents were orphans and 0.8% had their parents divorced or living as single parents. These suggest that most of the students were from a relatively stable home in terms of family background and type of parenting. Thus, it should be expected that the students should apparently not have family distractions. Also, responses on the family size showed that most of the students (59.8%) were from a seemingly modest family size of 5-7 (parents inclusive) given the perception of most African cultures to child bearing and procreation, while 11.8% and 3.1% indicated a family size of 8 to 10 and above ten persons respectively. Since the importance of the family unit cannot be overemphasized, the evidences from the responses suggest that most of the respondents were from family setup that should positively impact on their academic performances. This was evidently depicted in the responses as 78.7% of the students indicated that their family setup and background had positive influence on their academic performance, while 20.5% of respondents were indifferent and 0.8% responded in the negative.

With respect to the students finances 14.2% of the students lived on less than USD$ 26.00 per month, 41.7% of the students had between USD$ 26-51 while only 12.6% had a monthly stipend of above USD$ 102.00. This apparently suggests that most students lived on less than

USD $1 a day, as such the students might not be financially sufficient and might have to manage the meagre allowances available to them while trying to get the best from their academics. Perhaps as a result the monogamous nature of the students' family, responses showed that 54.3% of the students had their finances solely from their parents, 8.7% solely from relatives. 26% got from both relatives and parents while 6.3% are self-financed. Responses regarding students' extracurricular activities showed that 39.4% of the students often engage in extracurricular activities while 38.6% sometimes engaged in extracurricular activities. The remaining 19.7% rarely engaged in extracurricular activities. This shows that most of the students were often engaged in other activities such as religious, sporting and other recreational activities.

Table II. Cross tabulation of marital status with gender and age

			Marital Status			
			Single	Married	Others	Total
Gender	Male	Frequency	67	3	0	70
		Percentage (%)	*96*	*4*	*0*	
	Female	Frequency	51	5	1	57
		Percentage (%)	*89*	*9*	*2*	
	Total		118	8	1	127
Age	24 and below	Frequency	79	1	1	81
		Percentage (%)	*98*	*1*	*1*	
	25 to 30	Frequency	31	7	0	38
		Percentage (%)	*82*	*18*	*0*	
	Above 30	Frequency	4	0	0	4
		Percentage (%)	*100*	*0*	*0*	
	No response	Frequency	4	0	0	4
		Percentage (%)	*100*	*0*	*0*	
	Total		118	8	1	127

Further examination of the effects of gender and age of students' academic performance, A further analysis of the respondents marital status was done by cross tabulating the responses from the marital status with gender and age as shown in Table II. This revealed that out of the eight (8) married respondents three (37.5%) were males and five (62.5%) were females. This showed that more females got married during the course of studying for their first degree. While seven (87.5%) of the married students were between 25-30 years, only one (12.5%) was 24 years below. This suggests that most of the married students perhaps decided to get married because of the age factor. However, with respect to the students' academic performance, the marital demands could possibly be a factor to be considered. It is expected that while maintaining a balance between the marital needs and academic schedule, there might be some trade-offs that might likely impact both on the students' academics and possibly their homes.

4.2 Academic background of respondents

Table III. Academic background of Real Estate Students

	Frequency	Percentage
Secondary School Background		
Commercial	28	22
Art	11	8.7
Sciences	88	69.3
Knowledge about Real Estate		
Through the media	7	5.5
Career Talk	7	5.5
Through Relatives	24	18.9
From Friends	12	9.4
During Admission Process	77	60.6
What Influenced respondent in studying Real Estate		
Friends	9	7.1
Relatives	16	12.6
Personal Interest	42	33.1
Parental Influence	8	6.6
Inability to get desired course	46	36.2
Others	6	4.7
Mode of Admission		
Pre-Degree	49	38.6
UTME	54	42.5
Direct Entry	22	17.3
No response	2	1.6
Study hours		
at most 3 hours	6	4.7
4-6 hours	86	67.7
Above 6 hours	35	27.6
Performance if given preferred course of study		
Most likely perform better	49	38.6
Quite unlikely perform better	10	7.9
No difference in performance	37	29.1
Not sure of what my performance would be	31	24.4

Analysis of responses from Table III relating to real estate students' academic background showed that most of the respondents (88%) had Science background while 28% and 11% had Commercial and Arts background respectively during their secondary school training. This suggests that only few students had Arts background, and perhaps were given real estate as an alternative course of study during the admission process. The analysis also showed that 60.6% of the students got to know about real estate as a discipline during the admission process, 9.4% from friends, while 18.9% had prior knowledge of the course though their relatives. Those that had the knowledge of real estate through career talk and the media were 5.5% each. This

suggests that though most of the students got informed about the course through their relatives and friends, the discipline is not having sufficient publicity through the media and career services to stimulate the interest of secondary school students in pursuing a career in real estate. Though the lack of students' interest in real estate discipline might also be attributable to the failure of the professional body to effectively promote the discipline at secondary school level, it might be further compounded by the general perception of secondary school students that medical and engineering courses are more lucrative, thus undermining the possibility of taking up a career in real estate. Besides, 36.2% of the students decided to study real estate due to their inability to get the desired course of study, 33.1% enrolled for the course based on personal interest, while 12.6% and 7.1% were influenced through their relatives and friends respectively. Other responses indicated that 6.6% were advised by their parents to enrol for the course. This perhaps further substantiates the previous finding that most students were not aware or interested in real estate as a course of study prior their admission into the university. Apparently, due to the lack of interest at the initial point of admission, academic performance of students might not be as excellent as it would have been if the students were given their preferred course of study.

The students were subsequently asked about their likely performance if offered their preferred course of study. The responses showed that 38.6% of the students believed that they will most likely perform better than their current academic performance, 29.1% responded that there might be no difference in their academic performance, while 24.4% were not sure of what their performance would be if given their preferred course of study. Responses regarding the students study hour showed that 67.7% of them studied for about 4-6 hours daily, while 4.7% studied for not more than 3 hours, while 27.6% studied for above 6 hours. This indicates that most of the students devote reasonable amount of time to their studies in the pursuit of better academic performance. Underlying factors such as the cumbersome nature of the programme and the fact that most of the students got to study real estate as an alternate course might be responsible for the reason while some of the students do not consider having more study hours.

Table IV. Cross tabulation of knowledge of real estate and what influenced studying real estate

		Friends	Relatives	Personal interest	Parental influence	Inability to get desired course	Others	Total
Through the media	Frequency	1	1	5	0	0	0	7
	Percentage (%)	*14.3*	*14.3*	*71.4*	*0*	*0*	*0*	

Career talk	Frequency	0	2	4	0	0	1	7
	Percentage (%)	*0*	*28.6*	*57.1*	*0*	*0*	*14.3*	
Through relative	Frequency	0	9	9	4	2	0	24
	Percentage (%)	*0*	*37.5*	*37.5*	*16.7*	*8.3*	*0*	
From friends	Frequency	6	0	5	0	1	0	12
	Percentage (%)	*50*	*0*	*41.7*	*0*	*8.3*	*0*	
During admission process	Frequency	2	4	19	4	43	5	77
	Percentage (%)	*2.6*	*5.2*	*24.7*	*5.2*	*55.8*	*6.5*	
Total		9	16	42	8	46	6	127

A further analysis by cross tabulating how the students got to know about real estate as a course of study and what influenced the students choice of real estate discipline as shown in Table IV showed that out of those that got to know about real estate during the admission process, 55.8% of them decided to study real estate due to their inability to get the desired course of study, while 24.7% decided to accept the course due to personal interest after being offered the course as a result of their inability to get the desired course of study.

4.3 Factors influencing students' academic performance

4.3.1 Mean ranking of influencing factors

Table V shows the mean standard deviation, mode as well as aggregate ranking of respondents' perception of factors influencing real estate students' academic performance.

Table V. Factors influencing students' academic performance

S/N	FACTORS	MEAN	SD	MODE	RANK
Parental and Family Background					
1	Parents interest in my academics	3.98	1.95	4	5
2	Parent's occupation and level of education	4.06	2.03	6	4
3	My position and family size	5.82	1.50	7	1
4	Availability of Finances	4.78	1.84	6	3
5	Family pressure to excel in the field of study	3.20	1.87	2	6
6	Family background/set-up	4.94	1.92	7	2
		4.46			
Personal Factors					
7	Unavailability of preferred course of study	3.33	2.12	1	6
8	Maturity/Age	4.35	2.06	7	2
9	Difficulty in understanding the courses being taught	3.93	1.88	2	3
10	Study hours	3.17	1.71	2	7
11	Clear understanding of the field of study	3.93	1.80	4	3
12	Personal interest in the course of study	5.00	1.64	6	1
13	Involvement in extra-curricular activities	3.41	1.89	2	5
		3.87			
School and Academic Environment					
14	School's academic calendar	4.36	1.71	3	1

15	Accommodation type	4.06	1.96	5	2
16	Conducive lecture theaters	2.54	1.56	1	4
17	Adequate lecture theaters	2.47	1.49	1	5
18	School's general environment	3.97	1.80	5	3
		3.48			
Teaching Techniques					
19	Use of ICT methods in teaching	2.62	1.71	1	5
20	Students' participation in class	4.71	1.58	5	1
21	Tutorials and workshops	3.39	1.83	1	3
22	Field trips	3.18	1.74	1	4
23	Contact hours	4.49	1.64	5	2
24	Use of practical and less of theories	2.52	1.66	1	6
		3.49			
Lecturers					
25	Lecturers knowledge and depth	4.09	1.70	3	5
26	Lecturers being accessible	3.96	1.74	3	3
27	Commitment of the lecturers	4.83	1.57	5	2
28	Ability of lecturers to explain difficult concepts	4.03	1.64	5	4
29	Sufficiency/adequacy of lecturers	4.20	1.72	3	6
30	Mode/method of teaching	4.86	1.51	5	1
		4.33			
Mode of Assessment					
31	Fairness in class assessments	4.88	1.70	7	3
32	Efforts put in preparation being reflected by the grades	5.74	1.43	7	1
33	Adequate study materials	4.10	1.74	3	5
34	Sufficient time to understand and assimilate before being assessed	4.13	1.73	5	4
35	The lecturers seem to be more interested in testing what I had memorized than what I truly understood of this field of study	5.39	1.65	7	2
		4.84			

From the analysis, the first subsection on parental and family background had an average of 4.46. Using this as a benchmark for the subsection, major factors having mean values above the benchmark include students' position and family size with a mean value of 5.82, availability of finances and family background/setup with mean values of 4.78 and 4.94 respectively. Most of the students agreed that their position and family size enhance their academic performance. This could be as result of the students' socioeconomic background where most (85.8%) are from monogamous homes and majority of the students' are also from family size of not more than seven (7) persons. This could also be attributable to the fact that most of the students' (68.5%) have their parents living together. This underscores the importance of the family background as an integral part of students' academic success. The third most important factor identified in the subsection is availability of finances. This is apparently evident as most of the students (55.9%)

live on less than USD$ 2.00 per day (USD$ 51.00 per month) and most of them depend solely on parents for their monthly stipend. This perhaps underscore the need for institutions of higher learning especially in developing countries to initiate a more robust work study initiative for financially challenged students with the aim of improving their academic performance and compete favourably with their counterparts globally.

Findings from the second subsection on students' personal factors with a mean benchmark of 3.87 showed that the students' interest in real estate as a field of study (5.00), age and maturity (4.35) are major factors affecting students' academic performance. Given that 81% of the students are age 24 and below, it is expected that they are mature to decide on issues pertaining to their lifestyles and reading habits. Also, perhaps because most of the students were offered real estate as an alternative course to their desired course of study, the students identified lack of clear understanding of the field of study and difficulties in understanding the courses as factors influencing their academic performance. These two factors had mean values of 3.93 each.

The third subsection on school and academic environment had a subsection mean of 3.48, while the topmost factors based on the benchmark mean value are school's academic calendar (4.36), accommodation type (4.06) and school's general environment (3.97). The prevalence of students' unrest and incessant interruption of academic calendar due to activities of academic and non-academic unions portends a serious negative effect for the academic performance of students in tertiary institutions. This most times result in shortening/compression of academic calendar and consequently there might not be adequate time to attend to some academic necessities that might have improved the learning experience of real estate students in these institutions. Also, overcrowding and stretching of existing hostel facilities could hamper on students effectiveness. The pattern of responses showed that most of the students perceive that the school academic calendar, accommodation type and school's general environment impact more on their performance than the lecture rooms in terms of adequacy and conduciveness. This pattern of response seems to go contrary to conventional perspective where it is expected that the lecture room should have substantial impact of student academic performance, as opposed to school's general environment. However, the reason for this might not be farfetched, perhaps the students were of the opinion that any venue where lecturer-student interaction can take place might just be good enough, thereby deemphasizing the impact of adequate and conducive lecture venues.

The subsection on teaching techniques having a mean value of 3.49 showed that the students identified class participation and contact hours, each with mean values of 4.71 and 4.49 respectively, as factors influencing their academic performance. This apparently suggests that

the students believe that learning through class discussion/interactive sessions and sufficient contact periods would have major impact in positively influencing their academic performance. With a mean value of 4.33, the subsection on lecturers' revealed that commitment of lecturers' (4.83) and mode/method of teaching (4.86) as the topmost two factors based on the subsection mean value. The responses might be linked to the fact that the students believe that with high level of commitment from the lecturers and enhanced mode/method of lecture delivery, knowledge would be better impacted, thus resulting into better academic performance. The subsection on mode of assessment had a mean of 4.84. The responses showed that fairness in class assessment (4.88), grades reflecting students' level of preparation (5.74) and lecturers being interested in memorizing as opposed to understanding (5.39) were ranked as top factors. This indicates that the students believed that their academic performances could be better enhanced when hours spent studying and efforts put into preparation are justified by good grade points, and lecturers are less interested in regurgitating answers as opposed to students understanding of the course.

Examining the mean values of the subsections showed that the subsection on mode of assessment had the highest mean value of 4.84, followed by the sub section on parent and family background with a mean value of 4.46. While the sub sections on lecturers, students personal factors, teaching methods and techniques and school and academic environment each with mean values of 4.33, 3.87. 3.49 and 3.48 respectively. This shows that issues bothering on academic assessment and parent and family background are the topmost two ranked subsections affecting the students' academic performance. While teaching methods and techniques and school and academic environment are the least two ranked subsections impacting on students' academic performance. This perhaps shows that the students might be better encouraged when results obtained conform to their expectations. Though this might be difficult to achieve as most student often have false impressions of their performance during class assessments, however, openness regarding the basis and methods of assessment may assuage students' misgivings and help them perform better in subsequent assessments. Also, given the importance of parent and family background, the responses underscore the fact that stability in the homes and provision of adequate financial resources to meet the academic demands of students could go a long way in ensuring good academic performance.

4.3.2 Factor analysis of influencing factors

In identifying important factors impacting on real estate students' academic performance, the total of 35 items under the six (6) subdivisions was subjected to factor analysis. To verify the suitability of the data for factor analysis, an initial analysis was done to ascertain the Kaiser-

Meyer-Olkin (KMO) value and Bartlett's tests of significance. The KMO value was 0.674, exceeding the benchmark value of 0.600 (Tabachnick and Fidell, 2007), while the Bartlett's test is significant (p= 0.000), thereby indicating the suitability of the data for factor analysis.

The analysis as shown in Table VI indicates three components explained a total of 37.015% of the variance; the first, second and third components contributing 16.503%, 13.833% and 6.679% respectively.

Table VI. Total variance explained for identified factors

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5.776	16.503	16.503	5.776	16.503	16.503	5.531
2	4.842	13.833	30.336	4.842	13.833	30.336	4.898
3	2.338	6.679	37.015	2.338	6.679	37.015	2.938
4	1.809	5.169	42.184				
5	1.682	4.805	46.989				
6	1.530	4.373	51.362				
7	1.359	3.883	55.245				
8	1.184	3.383	58.628				
9	1.113	3.181	61.809				
10	1.053	3.008	64.817				
11	.943	2.695	67.512				
12	.900	2.570	70.082				
13	.867	2.477	72.559				
14	.820	2.343	74.901				
15	.778	2.224	77.125				
16	.741	2.118	79.243				
17	.716	2.045	81.288				
18	.623	1.781	83.068				
19	.604	1.726	84.794				
20	.561	1.603	86.397				
21	.551	1.575	87.972				
22	.521	1.489	89.460				
23	.453	1.293	90.754				
24	.411	1.176	91.929				
25	.381	1.090	93.019				
26	.378	1.079	94.098				
27	.339	.968	95.066				
28	.307	.878	95.943				
29	.287	.820	96.763				
30	.271	.773	97.536				
31	.221	.631	98.168				
32	.198	.567	98.735				
33	.189	.541	99.276				
34	.131	.373	99.649				
35	.123	.351	100.000				

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
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33	.189	.541	99.276				
34	.131	.373	99.649				
35	.123	.351	100.000				

Note: Extraction Method: Principal Component Analysis.

Table VII shows the loading patterns in the rotated component matrix. The main factors on the first component are lecturers knowledge and depth, lecturers ability to explain difficult concepts, students' participation in class, lecturers accessibility and tutorials and workshop. All the items are related to teaching techniques and lecturers skills and attitude. This apparently implies that with use of improved teaching methodologies and techniques, real estate students' academic performance might be better enhanced. This finding supports the assertion of Cornish et al

(2009) and Boyd (2012) that there is need for a departure from the conventional/traditional methods of teaching real estate courses. This will ultimately help to aid efficency and effectivenss in the knowledge acquisition process. Under the second component, main factors identified are involvement in extra-curricular activities, students' position and family size, family pressure to excel in the field of study, unavailability of preferred course of study and availability of finances. These items are related to personal factors and parental/family background and it further underscore the need for candidates admitted into the programme to be students who show genuine interest in the course and the importnace of good parentsal and family set up in achievng academic success. This corrobortaes the findings of Okioga (2013) and Kanagi et al (2015) which underscroes the importance of scioeconomic and family background on students academic perofrmance in higher insituions of learning. While the third component showed fairness in class assessment, lecturers seems to be more interested in testing memorized concepts as opposed to genuine understanding of the field of study, sufficiency and adequacy of lecturers, and mode/method of teaching. This item relates to mode of teaching and assessment, thus supporting the findings of Small and Karantonis (2001), Callan and MaCarthy (2003) and Ganyaupfu (2013). Thus, it is expected that with openss and fainrness in studnets assessment, acadmeic performance will be enhanced though not compromising the requite acadmeic standard.

Table VII. Rotated component matrix for identified factors

	Component		
	1	2	3
Lecturers knowledge and depth	.769		
Ability of lecturers to explain difficult concepts	.711		
Students' participation in class	.704		.474
Lecturers being accessible	.659		.332
Tutorials and workshops	.657		
Sufficient time to understand and assimilate before being assessed	.619		
Field trips	.616		
Use of practical and less of theories	.580		
Conducive lecture theaters	.527		
Personal interest in the course of study	.509		
Use of ICT methods in teaching	.455	.401	-.392
Adequate lecture theaters	.430		
School's general environment	.410		.351
Contact hours	.392		

Efforts put in preparation reflected by the grades	-.371		.322
Involvement in extra-curricular activities		.694	
My position and family size		-.603	
Family pressure to excel in the field of study		.591	
Unavailability of preferred course of study		.578	
Availability of Finances		-.572	
Adequate study materials		.537	
Family background/set-up		-.533	
Study hours		.530	
Clear understanding of the field of study		.509	
School's academic calendar		-.483	
Difficulty in understanding the courses being taught		.459	
Accommodation type		.415	
Parent's occupation and level of education		.408	
Parents interest in my academics	.315	.342	
Maturity/Age		.321	
Commitment of the lecturers		.318	
Fairness in class assessments			.669
The lecturers seem to be more interested in testing what I had memorized than what I truly understood of this field of study			.593
Sufficiency/adequacy of lecturers			.510
Mode/method of teaching		.330	.487

Note: *Extraction Method: Principal Component Analysis.*
Rotation Method: Oblimin with Kaiser Normalization.

5. Conclusion

Given the important role being played by university education and the real estate industry in the economy of developed and emerging nations, the need to adequately equip real estate graduate becomes germane. However, several factors contribute to the academic performance, the quality of training and the subsequent perception of these graduates by industry stakeholders. The study complements the body of knowledge on real estate education by providing an insight into important factors that affect academic performance of real estate students from the perspective of the Nigerian emerging economy. The findings from the study revealed that there is a link between students' family background students' academic performance, however, more important is the influence of the teaching method and mode of assessment employed.

An important conclusion from this study is the need to re-evaluate the means/mode of teaching and assessment to align with innovative and international best practice. Also, consequent upon the issue of finance, the universities could be encouraged to ensure a more robust and flexible work-study programme that would ameliorate the financial challenges being encountered by the students. Furthermore, the real estate professionals and academics should be encouraged to

undertake more rigorous publicity and public awareness programmes in secondary schools with the aim of stimulating students interest in the course, thereby reducing the number of *"accidental"* real estate students who get admitted to study the course due to lack of admission into their choice course of study.

Limitation and further research

The results of the study must be interpreted with caution, as the study is limited to two of the three public universities in South Western Nigeria offering real estate as a course. Also, the paper did not explore learning outcomes and their relationships with the influencing factors identified.

Further research could be conducted across other public universities offering real estate across the nation's geopolitical zones and other emerging economies to get more representative result. Although the findings herein presented could still serve as a reflection of what might be expected at a more general level. Also, further research could explore learning outcomes and their relationships with factors influencing students' academic performance.

References

Adedapo, A.O., Aderonmu, P.A. and Aduwo, E.B. (2015), "Architecture students' perception of their learning environment and their academic performances", *Learning Environments Research,* Vol. 18, pp.129-142.

Akinyemi, S., Ofem, I.B. and Ikuenomore, S.O. (2012), "Graduate turnout and graduate employment in Nigeria", *International Journal of Humanities and Social Science,* Vol. 2 No 14, pp. 257 -265.

Allen, M.T. and Carter, C.C. (2007), "Academic success determinants for undergraduate real estate students", *Journal of Real Estate Practice and Education*, Vol. 10 No 2, pp. 149 – 160.

Barry, J. (2005), "The effect of socio-economic status on academic Achievement", *A Thesis submitted to the Department of Sociology Wichita State University.*

Blundell, L. (1999), "Learning curve", *Property Australia*, Vol. 14 No 2, pp. 34-39.

Bouillon, M. and Carter, R. (2009), "University real estate programs and local real estate economies", *Journal of Real Estate Practice and Education,* Vol. 12 No. 2, pp. 123-136.

Boyd, S. (2012), "Functional learning for property students", *18th Annual Pacific-Rim Real Estate Society Conference*, Adelaide, Australia, 1-18.

Boyd, S. (2015), "Learning outcomes and opportunities in property education through constructive alignment", *LEARNING*, *18*, 21.

Boyd, T. (2005), "Stakeholder impact on property education programs", In *Proceedings 11th Pacific Rim Real Estate Society Conference, pp.23-27*.

Callanan, J. and McCarthy, I. (2003), "Property education in New Zealand; industry requirements and student perceptions", *Journal of Real Estate Practice and Education*, Vol. 6 No. 1, pp. 23-32.

Cornish, S., Reed, R. and Wilkinson, S. (2009), "Incorporating new technology into the delivery of property education", *Pacific Rim Property Research Journal*, Vol. 15 No. 3, pp. 303-320

Crews, G.L. (2004), "Real estate education on the run: the classroom comes to town", In *the 10th Pacific Rim Real Estate Society Conference*, *Bangkok, Thailand*.

DeGregori, A. (2007), "Learning environments: redefining the discourse on school architecture*", A thesis submitted to the Faculty of New Jersey Institute of Technology*.

Dengra, M., Kalra, A. and Malhotra, G. (2013), "Study on factors affecting student quality of academic performance in colleges - with special reference to Indore", *Altius Shodh Journal of Management and Commerce*, Vol. 2 No 1, pp. 288-294

Ditcher, K.A. (2000), "Effective teachings and learning in higher education with particular reference to undergraduate graduate education of professional engineers", *International Journal of England Education*, Vol. 17 No 1, pp. 24-29

Frenzel A.C., Pekrun R., and Goetz T. (2007), "Perceived learning environment and students' emotional experiences: a multilevel analysis of mathematics classrooms", *Learning and Instruction,* Vol. 17, pp. 478-493

Gambo, Y.L., Osagie, J.U., Saliu, M.M. and Ogungbemi, A.O. (2012), "Student perception of career choice in estate management in Nigeria", *Global Journal of Management and Business Research*, Vol. 12 No 14, pp. 67-71.

Ganyaupfu, E.M. (2013), "Factors influencing academic achievement in quantitative courses among business students of private higher education institutions", *Journal of education and practice*, Vol. 4 No 15, pp. 57-65

Hardin, W.G., Waller, B.D. and Weeks, H.S. (2012), "Undergraduate appraisal education in the United States", *Journal of Real Estate Practice and Education,* Vol. 15 No. 1, pp. 19-31.

Hayat, Y., Ali, W., Hayat, S., Rahman, A., Shahzad, S. and Hussain, Z.. (2013), "Studying behavior attributes and student's academic performance", *Sarhad J. Agric,* Vol. 29 No. 3, pp. 461-467

Hefferan, M. and Ross, S. (2010), "Forces for change in property education and research in Australia", *Property Management,* Vol. 28 No. 5, pp. 370-381.

Hermino, R.P. (2005), "Factors influencing students' academic performance in the first Accounting course: a comparative study between public and private universities in Puerto Rico", *A dissertation submitted to the Faculty of Argosy University Sarasota.*

Kakulu, I.I. and Plimmer, F. (2009), "Real estate education vs real estate practice in emerging economies-a challenge for globalization", *16th Annual European Real Estate Society Conference*, Stockholm, Sweden.

Kanagi, R., Tan C.H., Sarimila, K., Lim, K.S., Haslina, K. and Dariush, K. (2015), "Factors affecting first year undergraduate students academic performance", *Scholars Journal of Economics, Business and Management*, Vol. 2 No. 1A, pp. 54-60.

Koulizos, P. (2006), "Property education: how should it be taught?", *Twelfth Annual Pacific Rim Real Estate Society Conference,* Auckland, New Zealand, pp. 1-33.

Kyoshaba, M. (2009), "Factors affecting academic performance of undergraduate students at Uganda Christian university", *Dissertation submitted to graduate school Makerere University.*

Lee, C. L. and Mallik, G. (2015), "The impact of student characteristics on academic achievement: Findings from an online undergraduate property program", *Pacific Rim Property Research Journal,* Vol. 21 No. 1, pp. 3-14

Newell, G. and Acheampong, P. (2003), "The quality of property education in Australia", *Pacific Rim Property Research Journal*, Vol. 9 No. 4, pp. 361-378.

Newell, G. and C. Eves. (2000), "Recent developments in property education in Australia", *Australian Property Journal*, Vol. 36 No. 4, pp. 275-278.

Noble, J.P., Roberts, W.L. and Sawyer, R.L. (2006), "Student achievement, behavior, perceptions, and other factors affecting ACT scores", *ACT Research Report series*.

Okioga, (2013), "The Impact of Students' Socio-economic background on academic performance in universities", *American International Journal of Social Science,* Vol. 2 No. 2, pp. 38-46.

Oladokun, T.T, Ayodele, T.O. (2015), "Students' perception of the relevance of work experience scheme to real estate education in Nigeria", *Property Management*, Vol. 33 No. 1, pp. 4 - 18

Oloyede, S.A. and Adegoke, O.J. (2007), "Relevance of real estate education to practice in Nigeria", *Journal of Land Use and Development Studies,* Vol. 3 No. 1, pp. 50–59

Poon, J. and Brownlow, M. (2015), "Real estate student satisfaction in Australia: what matters most?", *Property Management,* Vol. 33 No. 2, pp. 100-132.

Rangga, W.A.J., Ariffian, A.B., Norhishamuddin, W.R. and Zarin A.H. (2011), "The Acquisition of Soft Skills in Real Estate Education – A Review", *International Conference on Sociality and Economics Development,* Vol. 10, pp. 231-234.

Saginor, J., Weinstein, M., and Worzala, E. (2014), "Graduate real estate education: a survey of programs after the great recession", *Journal of Real Estate Practice and Education,* Vol. 17 No. 2, pp. 87-109.

Sani, K. and Gbadegesin, J.T. (2015), "A survey of important attributes for marketing real estate developments in metropolitan Ibadan property market, Nigeria", *European Journal of Business and Social Sciences,* Vol. 4 No. 4, pp. 25 – 40.

Small, G. and Karantonis, A. (2001), "Property education, training and phenomenalism", A *paper presented at Pacific Rim Real Estate Society Conference*, Adelaide.

Tabachnick, B. G., & Fidell, L. S. (2007), "*Using multivariate statistics",* Boston, MA: Allyn & Bacon, 5th ed.

Udoekanem, N.B. (2013), "Students' perception of the teaching and learning of plant and machinery valuation in a Nigerian university", *Ethiop. J. Educ. And Sc.,* Vol. 8 No 2 pp. 69-85

Victor, M. (2011), "An analysis of some factors affecting student academic performance in an introductory biochemistry course at the University of the West Indies", *Caribbean Teaching Scholar,* Vol. 1 No. 2, pp. 79-92.

Yam, S. and Rossini, P. (2012), "Online learning and blended learning: experience from a firstyear undergraduate property valuation course", *Pacific Rim Property Research Journal,* Vol. 18 No. 2, pp. 129-148.

Yeshimebrat, M., Alemayehu, B. and Firew, T. (2013), "Factor affecting female students achievement at Bahir Dar university, Ethiopia", *Journal of International Cooperation in Education*, Vol. 15 No. 3, pp. 135-148.

Yu-Shi-Ming, (2001), "New Paradigms in real estate education", *Pacific Rim Property Research Journal,* Vol. 7 No. 2, pp. 80-82.