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Rental Analysis of Residential Properties in Close Proximity to the Federal University of Technology, Akure, Nigeria

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Abstract
This research analyzed the rental values of residential properties within the neighbourhood of the Federal University of Technology, Akure (FUTA). It examined among others the relationship between students' population off-campus and the rental values of proximate residential properties, and the factors that influence the rental values of residential properties within the neighbourhood of the institution. The data for the study was collected through structured questionnaires from twenty (20) registered Practicing Estate Surveyors and Valuers in Akure and from the Student Affairs Division of FUTA. The data collected were analyzed using Descriptive Statistics (Weighted Mean Scores and frequency tables and graph) and Inferential Statistics (Correlation Coefficient). The study revealed that the major factors often discovered from relevant literature to determine rental values of residential properties such as facilities and condition of repairs among others were the least ranked within the neighbourhood of FUTA. The study also revealed that there was a positive relationship between the population of students of FUTA living in the private rented sector and rental values of selected residential properties over the years. This indicates that demand pressure from students and residents contribute immensely to the changes in rental values within the area. It is therefore recommended that government and higher educational institutions should be encouraged to make a clear and definite statement concerning the provision of on-campus accommodation. Also, likely impacts of higher educational institutions on local rental market should be integral to the establishment and expansion plans of every higher institution.
Keywords: Higher Educational institution, Proximity, Residential Property, Rental Values.

1. Introduction

University is viewed as a magnet in the metropolitan area that attracts people and economic activity towards it (O'Flaherty, 2005). The siting and expansion of the Federal University of Technology, Akure has attracted academic and non-academic staff, students, parents and those providing support services to live close to their employment centers resulting in increased economic activities. This however has led to increased demand for residential accommodation within the neighbourhood of the Federal University of Technology, which used to be cocoa plantation in its early year of existence. Though there are various classes of people that demand for accommodation within the neighbourhood of FUTA, the effect of students' demand pressure is more significant compared to others. This development is expected as FUTA is not solely an on-campus institution where students are all accommodated within the institution. Therefore, with the burgeoning population admitted each year and increase in staff intake to meet the learning population, rental values of residential properties kept rising astronomically.

In the last few decades, successive governments have shown a strong commitment to growth in higher education sector by establishing more institutions and the liberalization of its ownership. However, there has been little or no attention given to housing the increasing students' and staff population. Although, Rug, Willington and Rhodes (1995) noted that there has been growth in the provision of accommodation by higher educational institutions, specifically for students, but this has not kept pace with the rapidly increasing population. According to Asaju and Olanrewaju (2002), one of the major problems of higher education management in Nigeria today is accommodation. Government has indeed regarded meeting student and staff housing needs as the responsibility of the institution management. It is this shortfall in staff and students'

housing in universities that has resulted in an increasing reliance on private sector by both staff and students for accommodations. This is exacerbated by the fact that students and workers of the institution tend to look for accommodation in the same geographical area close to their school of study and employment center. However, increased demand for residential accommodation around the campus by the students has resulted in the establishment of niche market because student's market appears to be robust. Peacocke (1999) opined that one of the major characteristics of students demand is that it monopolizes the market thereby reducing supply to other tenant groups. Observation shows that a large proportion of students' populations of the Federal University of Technology, Akure are living in privately rented accommodation. This has resulted in sharp increase in rents whereby students in particular may resolve to squat with friends irrespective of the quality of accommodation. With the rate at which population is growing around the Federal University of Technology, Akure and the relative supply of housing, there seems to be an imbalance. The landlords and investors exploit this situation and rents are arbitrary fixed, which is often outrageous. It is against this background that the study is undertaken to examine the rental values within the neighbourhood of the Federal University of Technology, Akure.

The Federal University of Technology, Akure which is one of the third generation universities came into legal existence in September, 1981 as one of full-fledged Federal Universities that now exist in the country. The university is located at the outskirt of Akure, the capital of Ondo-State. The neighbourhood of the institution which was occupied by cocoa plantation has been built up to take care of the influx of the people (students, staff, traders and artisans e.t.c.). However, it has been observed that increase in the population of staff, students and those providing support services to the institution has resulted in increased demand for residential properties that are in relative supply, leading to astronomical appreciation in residential properties' rental values, hence the need for the study. Investors have been diverting their funds into real property development especially in staff and student housing within the neighbourhood of the Federal University of Technology, Akure due to the profitability and stability of the market.

2. Literature Review

The real estate market is a highly complex and challenging one to understand, and housing is a multidimensional good differentiated into a bundle of attributes that vary in both quantity and quality (Marco, 2008). The provision of public housing in Nigeria has not been able to meet the demand for housing. It is well established that almost 90% of the nation's housing stock is provided by the formal and informal private sector (FGN, 2002; UN-HABITAT, 2006; Olatubara, 2007). This shows the level of non-commitment of the government and government-owned institutions toward housing provision in the country (Asaju and Olanrewaju, 2002). Institutions admit students without making available adequate housing to accommodate them. This can greatly influence the rent passing on residential properties in proximity to higher institutions as majority of the students move outside the campus to search for accommodations.

Residential property rental values have been discovered to depend on various factors. However, it is often difficult to identify the appropriate variables that will explain residential sale and rental values**.** Sirmans and Benjamin (1991) while carrying out a survey on rent determinants classified them into three categories. These are: property specific attributes (including location and socio-economic factors), management specific factors (rental concessions, property management and length of residency) and finally, vacancies. Studies by Gunterman and Norbin (1987), Jud and Winkler (1991) show that property specific factors affect rent significantly and positively. According to Robert (1996), rent varies with the quality of housing. Oduwaye (2004) revealed that access to good roads, drainages, electricity among others increase property values. Many factors interplay to create property value, this could be economic, institutional, environmental and infrastructural factors (Bello and Bello, 2006). Olujimi (2010) opined that infrastructural facilities are likely factors that may affect rental value of residential properties in Nigeria since they are regarded as booster to the social well-being of the city dwellers. Whereas Ibrahim (2011) revealed that the presence of facilities in a building cause high preference, keen competition for properties and thus, high rental values, while the absence of facilities results in low patronage, disincentive to people, attraction of poor tenants and consequently, low rental values.

However, the importance of accommodation type and location to the success of a residential property cannot be overemphasized. According to William and Berry (1980), a prospective occupier considers the nature and extent of the accommodation offered in terms of number and arrangement of bedrooms for convenience in use, water supply, electricity and the condition of repairs of all parts of the building. In respect of the situation, the prospective occupier will consider the property in general amenities of life, proximity to employment center, school and recreational facilities. But, this scenario occurs when there are enough options from which a would-be occupier can choose from. In a situation where demand is in excess of supply, the bargaining power shifts to the landlord, and the tenant who knows that he has little or no option will have to pay with or without the presence of facilities.

Prior to the creation of Ondo State in October, 1976, the residential property market in Akure was dull as rental values were generally low. However, with the creation of the State, and Akure being the state capital,

residential property rental values started to increase progressively over the years. From 1980s to early 1990s, residential properties in the core and transitional areas of Akure metropolis accommodated the majority of people living in Akure metropolis. It was also observed that tenants still enjoyed monthly payment of rents till early 1990s. The common types of residential properties then were tenement buildings and flats. The average rental value of a three bedroom flat and a room in the late 1980s and early 1990s was ₦120 and ₦20 per month respectively.

Before and some years after the establishment of the Federal University of Technology, Akure, most areas around the institution were bushy and cocoa farms. Residential property market around the Federal University of Technology, Akure started booming in the mid-1990s. With the expansion of the University and subsequent increase in staff and students' population, residential property's market sprang up in response to the increasing demand of staff and students for accommodation within the neighbourhood of the Federal University of Technology, Akure causing residential property values to be on the increase. The residential properties in low and medium density areas such as Ijapo, Alagbaka and Okuta Elerinla government residential areas are known to command high rental values in Akure metropolis primarily because of the quality of the properties. However, it has been observed that residential properties in the neighbourhood of the Federal University of Technology that are of lower quality command same and sometimes higher rental values than rental residential properties in the government residential areas.

3. Methodology

The data for the study was collected from practicing Estate Surveyors and Valuers in Akure. There are Twenty (20) practicing Estate Surveyors and Valuers according to the list of registered and practicing Estate Surveyors and Valuers in Akure obtained from the Secretariat of The Nigerian Institution of Estate Surveyors and Valuers (NIESV), Ondo State Branch (Record Book of Registered Estate Surveyors and Valuers, 2010). This constitutes the sample frame which was also adopted as the sample size as suggested by Israel (2002) for small population of 200 or less. However, out of the twenty (20) Estate Surveyors and valuers, only seventeen (17) responded representing 85% of the sample size. Furthermore, some data for the study were also collected from the Students' Affairs Division of FUTA.

Descriptive Statistics such as Weighted Mean Scores and Inferential Statistic such as Correlation Coefficient analysis were used to analyze the data collected. The Weighted Mean Score was used to identify the factors that determine the rental values of the residential properties within the neighbourhood of the institution. Frequency tables and charts were used to analyze the population of the students of the institution and the rental values of selected residential properties within the neighbourhood of FUTA over the years. Correlation Coefficient analysis was also employed to ascertain the nature of relationship between the population of students living in the private rented sector and the rental values of selected residential properties within the neighbourhood of FUTA between 2001/2002 and 2011/2012 academic sessions.

4. Data Analysis and Discussion of Results

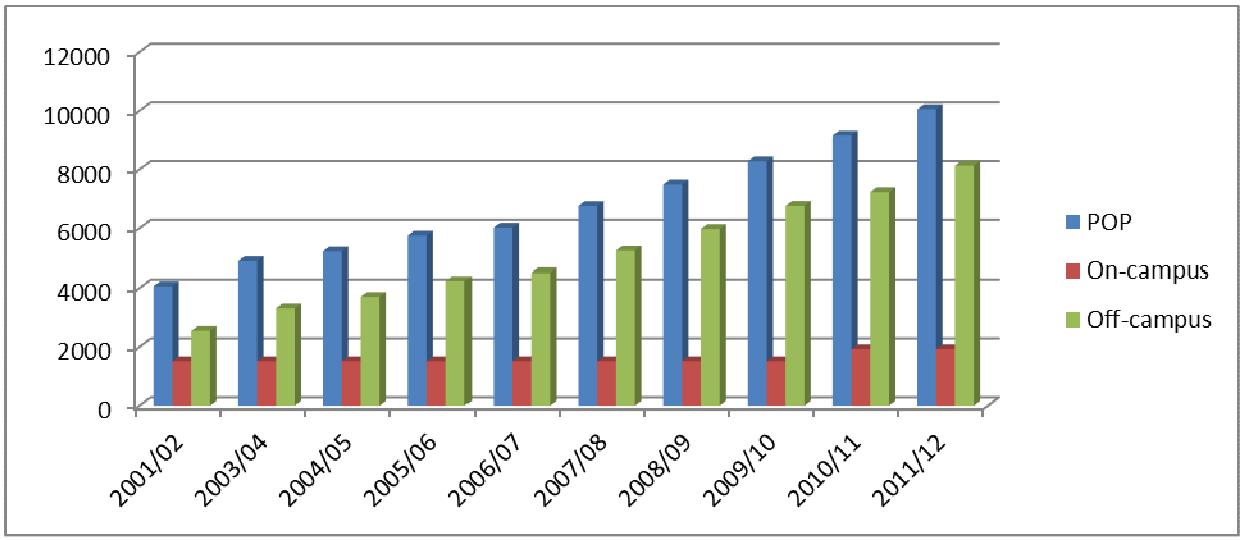
This section of the study presents analysis of data collected from the study area and the discussion of results. The analysis was structured to examine the rental trend of residential properties within the neighbourhood of FUTA, the relationship between students' population and rental values of proximate residential properties and the factors affecting the movement of such rents.

The population of undergraduate students of FUTA between 2006/07 and 2010/11 was gotten from the students' affairs unit of the institution so as to determine the number of the students that were serviced by the private sector for housing. The observation is detailed in table 1 below.

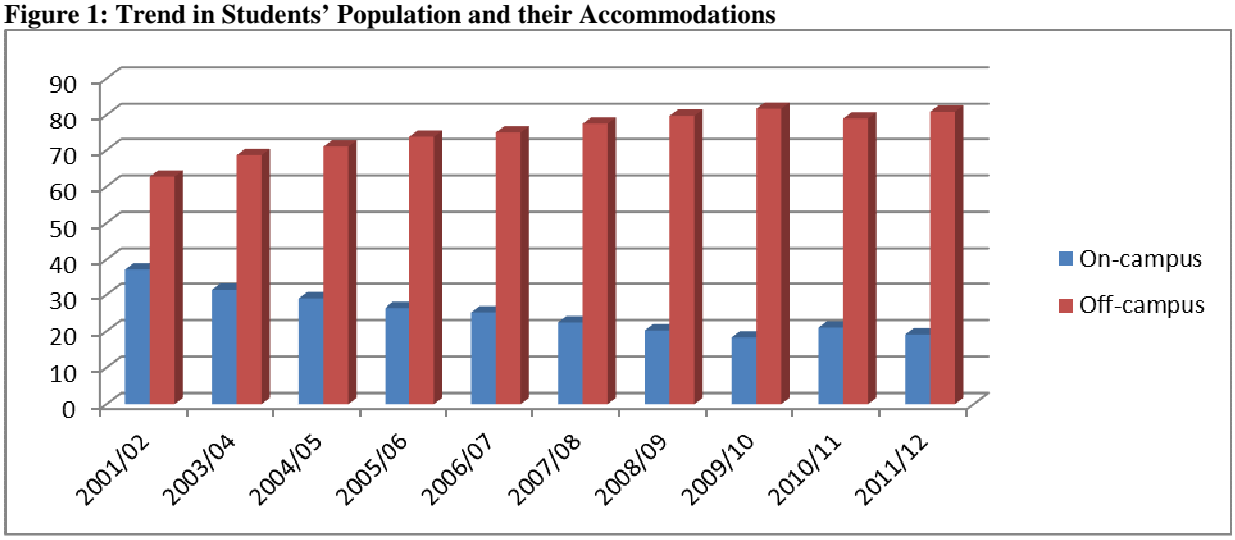
Table 1: Analysis of Undergraduate Students' Population in FUTA

Academic Year	POP (100%)	On-Campus (%)	Off Campus (%)
2001/02	4066	1515 (37.26)	2551 (62.74)
2003/04	4829	1515 (31.37)	3314 (68.63)
2004/05	5220	1515 (29.02)	3705 (70.98)
2005/06	5750	1515 (26.35)	4235 (73.65)
2006/07	6025	1515 (25.15)	4510 (74.85)
2007/08	6764	1515 (22.40)	5249 (77.60)
2008/09	7491	1515 (20.22)	5976 (79.78)
2009/10	8282	1515 (18.29)	6767 (81.71)
2010/11	9158	1923 (21.00)	7235 (79.00)
2011/12	10057	1923 (19.12)	8134 (80.88)
Average Growth Rate	**9.5%**	**2.4%**	**12.3%**

Source: Students' Affairs Division, FUTA, 2012
(**POP** = Total Population of Undergraduate Students of FUTA, **On-campus** = Population of Students Living on-Campus and **Off-campus** = Population of Students in the Private Rented Sector)



Analysis of Survey Data, 2012
Figure 1: Trend in Students' Population and their Accommodations



Analysis of Survey Data, 2012
Figure 2: Percentage Number of Students' Population Residing Off-campus and On-campus

The table reveals that the percentage of students residing off-campus out of the total students' population increased from 62.74% in 2001/2002 session to 80.88% in 2011/2012 session. On the other hand, the percentage of students living on campus as compared to the total population of the students consistently decreased over the period under study because there was no significant increase in the available on-campus

hostel accommodation. Figure 1 also shows the relationship between total students' population and the number of them that resides on and off-campus. There is a direct relationship between the population of the students who reside off-campus and the total students in FUTA, indicating that most of the students in FUTA per time are housed outside the campus. As there is a steady increase in the number of students admitted between 2001/02 and 2011/12 academic session, one expects that there should be a corresponding increase in the number of accommodation provided by the institution. However, the number of students' bed spaces remained at 1515 between 2001/02 and 2009/10 academic session, and only an additional 408 bed spaces were provided in the year 2010/11 totaling 1923. This implies that the student's population growth rate greatly out-do the accommodation expansion programme of the institution. As the percentage of the students who reside off-campus (PSFPRS) is increasing as shown in figure 2, the percentage of the on-campus dwellers (PSFC) is in decrease. As more students are being admitted into the University, there are no proper plans for facilities to cater for their housing. Whereas the average population growth rate of students in FUTA is 9.5%, the average growth rate of the students living on the campus is 2.4% while that of the off-campus dwellers is 12.3% indicating the need for more accommodation provision on the campus. This result corroborates the findings of Asaju and Olanrewaju (2002) that higher institutions are bedeviled with inadequate on-campus accommodation provisions. This can be seen in the number of the students that have to look for accommodation outside the campus, thereby increasing the demand pressure for residential properties in the neighbourhood of FUTA. This may influence the type of accommodation the students will settle for and the rent those properties will command due to the fact that negotiation advantage would be on the side of the landlords who will dictate the amount they want whether there is facility in such properties or not.

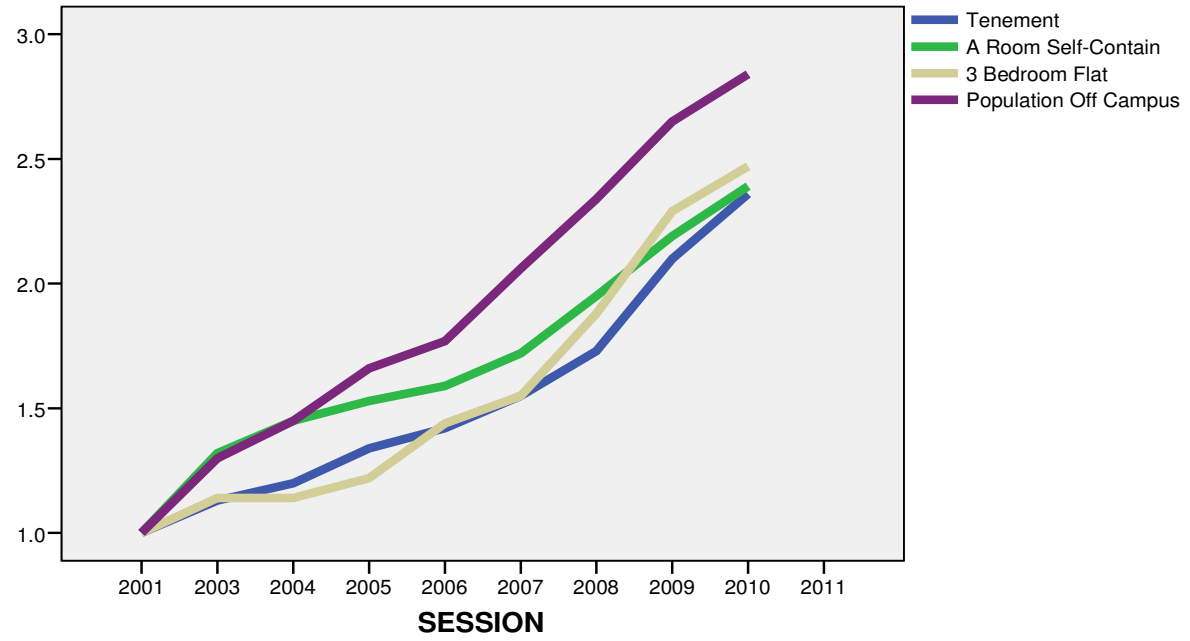
The average population of students living in the private rented sector and the average rental values of tenement, a self-contained room and three bedroom apartments (dominant residential property types) within the neighbourhood of the Federal University of Technology, Akure between 2001 and 2011 were measured to show the relationship between them as shown in Table 2

Table 2: Students' Population and Rent Passing on Proximate Residential Properties

Academic Session	**Students' Population Off-campus**	**Average Rental values per annum (₦)**		
		Tenement	**Self-contained Room**	**3 Bedroom flat**
2001/02	2551	15000.00	27500.00	61666.00
2003/04	3314	17000.00	36250.00	70000.00
2004/05	3705	18000.00	40000.00	70000.00
2005/06	4235	20130.00	42000.00	75000.00
2006/07	4510	21333.00	43750.00	89000.00
2007/08	5249	23200.00	47300.00	97500.00
2008/09	5976	26000.00	53500.00	116000.00
2009/10	6767	31467.74	60263.15	141250.00
2010/11	7235	35400.00	65800.00	152083.33
Average Growth Rate	**12.3**	**10.0**	**10.2**	**10.6**

Source: Field Survey, 2012

Table 2 reveals that all the observed rental values are increasing with population over the period under consideration. The result shows that reliance on the private rented sector by the students has grown over time due to the low levels of accommodation provision by the institution. This in turn has resulted in sharp increments in neighbouring residential property rental values as shown in figure 3, and evolvement of niche market for the students (supplies being adapted to meeting the needs of a specialized group and is reluctant to meeting demand from another source). As the population of off-campus dwellers grew at an average rate of 12.3%, the residential properties' rental values grew at an average of 10.3%. The figure further revealed that the trend in property rental values picked up in 2006 as a result of change in the trend of students population. This is in conformity with Peacocke's (1999) statement that students' housing demand monopolizes the rental sector of a neighbourhood.



Source: Analysis of Survey Data, 2012

Figure 3: Trends of Students' Population and Rental Values of Residential Properties in FUTA Environs

Table 3: Correlation Coefficient of Rental Values of Residential Properties and Populations

		Students Population	Tenement Room	Self-contained Room	3 Bedroom Flat
Students Population	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	9			
Tenement Room	Pearson Correlation	.981(**)	1		
	Sig. (2-tailed)	.000			
	N	9	9		
Self-contain Room	Pearson Correlation	.992(**)	.983(**)	1	
	Sig. (2-tailed)	.000	.000		
	N	9	9	9	
3 Bedroom Flat	Pearson Correlation	.977(**)	.992(**)	.971(**)	1
	Sig. (2-tailed)	.000	.000	.000	
	N	9	9	9	9

Source: Field Survey, 2012

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows the correlation of rental values of tenement, self-contain and three bedroom apartments with the students' population living in the private rented sector. All rental values have very significant positive correlation with PSFPRS which confirms the observation in figure 3. The table reveals that there is a high positive correlation between population growth of students in the private rented sector and rental values. The correlation coefficients between population of students living in the private rented sector and tenement, self-contained and three bedroom apartments are 0.981, 0.992 and 0.977 respectively, and all are significant at 0.000 levels. This therefore implies that as the population of students living in the private rented sector increase, the rental values of tenement, a room self-contain and three bedroom apartments increase.

The need to establish the factors that influence rental trend of residential properties within the neighbourhood of FUTA necessitated the opinion sought from the Estate Surveyors and Valuers in Akure, and this is detailed in Table 4.

Table 4: Perceptions of Estate Surveyors and Valuers on the Factors that Determine Rental Values of Residential Properties within the Neighbourhood of FUTA

Factors	SA (5)	A (4)	U (3)	D (2)	SD (1)	Mean Score	Rank
Proximity to FUTA	82.4	17.6	0.0	0.0	0.0	4.82*	1
Location	61.9	38.1	0.0	0.0	0.0	4.61*	2
Level of demand and supply	22.7	74.4	0.0	2.8	0.0	4.16*	3
Accessibility	6.8	67.6	18.8	3.4	3.4	3.67	4
Condition of repairs	2.8	47.7	29.5	17.0	2.8	3.30	5
Size of the rooms	13.1	45.5	15.3	7.4	18.8	3.27	6
Security	3.4	55.1	16.5	13.6	11.4	3.25	7
Facilities	12.5	22.7	21.6	31.2	11.9	2.92	8
Age of the property	0.0	23.3	51.7	16.5	8.5	2.89	9

Source: Field Survey, 2012

(SA = Strongly Agreed, A = Agreed, U = Undecided, D = Disagreed, SD = Strongly Disagreed)

The result indicates that factors such as proximity to FUTA, location, and level of demand and supply out-ranked others having mean scores of 4.82, 4.61 and 4.16 respectively while facilities provided and age of the property ranked eighth and ninth with mean scores of 2.92 and 2.89 respectively. The result from the table therefore implies that factors such as proximity to FUTA, location, level of demand and supply, accessibility are the major determinants of rental values of residential properties within the neighbourhood of FUTA while factors such as facilities provided, condition of repairs which are ordinarily expected to be the major determinants of rental values are the least ranked. This is because most tenants do not mind whether the residential properties have adequate facilities and are in good condition of repairs or not. This is attributable to the high demand on the properties due to their proximity to the university. This finding corroborates the findings of Adewusi and Akinbogun, (2009) which found out that location of and demand pressure for rented apartments are responsible for sustained increase in rents of properties around FUTA, but contrary to the findings of William et al. (1980), Olujimi (2010) and Ibrahim (2011) that facilities provision is a major determinant of rental values of residential properties. Most of the students, due to the demand pressure on residential housing outside the campus do not often consider the facilities provided in the building before making their choice as long as they find where to put their heads and in close proximity to the institution. This could however, have effect on their academic performance.

5. Conclusion and Recommendation

This paper has examined the rental values of the residential properties within the neighbourhood of FUTA. The average population growth rate of students on campus is seen to be 9.5%, while the average growth rate of the students living on the campus and off-campus dwellers are 2.4% and 12.3% respectively. It revealed that expected major determinants of rental values of residential properties such as facilities and conditions of repairs were the least considered within the neighbourhood of FUTA. The major factors responsible for the sustained increase in rents are location and demand pressure as a result of growth in the population of students and staff engagement over the years without a corresponding increase in on-campus accommodation. Therefore, the government and higher educational institutions should be encouraged to make a clear and definite statement concerning the provision of corresponding on-campus accommodation in tandem with increasing students' intakes thereby reducing the demand pressure on the private rented sector. Furthermore, analysis of the likely impacts of higher educational institutions on local rental market should be integral to the establishment and expansion plans of every higher institutions.

Finally, further research could focus on comparative analysis of the effect of students' population and those of other classes of dwellers living in close proximity to FUTA on residential properties' rental values.

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