

Journal of African Real Estate Research Volume 9, Issue 1



www.journals.uct.ac.za/index.php/JARER/

# Factors Affecting Investment in Purpose-Built Student Accommodation in Studentified Neighbourhoods of Tertiary Institutions

<sup>1</sup> Department of Estate Management, University of Cross River, Calabar, Nigeria

<sup>2</sup> Department of Estate Management, Obafemi Awolowo University, Ile Ife, Nigeria

**To cite this article**: Bassey and Olapade (2024) Factors Affecting Investment in Purpose-Built Student Accommodation in Studentified Neighbourhoods of Tertiary Institutions. *Journal of African Real Estate Research*, 9(1), pp. 68-80. DOI: 10.15641/jarer.v9i1.1477

# Abstract

This paper aims to increase the awareness of real estate investors and developers by providing a cross-country comparison of the factors affecting investment in purpose-built student accommodation (PBSA). The paper analyses both local and international literature to extract key findings pertaining to factors affecting investment in PBSA in studentified neighbourhoods of tertiary institutions. Through desktop review of the views and perspectives of past authors and based on specific content criteria, the paper analysed thematically, the main factors driving and hindering investment in purpose-built student accommodation. The paper identified demand-related, return-on-investment related, investment-related, and institutional-related factors as the main drivers of investment in PBSA, while e-learning facilities and potential oversupply of PBSA were identified as potential limitations affecting investment made in this real estate sub-market. It is therefore necessary that real estate investors consider these factors while investing in this asset class.

<sup>\*</sup> Corresponding author email address: <u>emmybassey2016@gmail.com</u>

 $<sup>\</sup>odot$ 2021 The Author(s). Published by UCT Library. This is an open-access article under the CC BY 4.0 license. https://creativecommons.org/licenses/by/4.0/

#### Paper type: Review paper

Keywords: Studentification, Studentified Neighbourhoods, Investment Asset Class and PBSA.

#### 1. Introduction

Amid alternative real estate investment options, purpose-built student accommodation (PBSA) has recently become an important real estate investment asset class for both private property investors and institutional property developers such as REITs, pension funds, and real estate mutual funds among others (Livingstone & Sanderson, 2021; Newell & Marzuki, 2018). PBSA is recognised and documented in property investment literature as an investment asset class (Lam & Chen, 2021; Livingstone & Sanderson, 2021; French et al., 2018), a commercial real estate subsector (Appau et al., 2023), with unique features in services provided, amenities, tenants' profile, and location-specific (Tiwari, 2022; Properties Partner, 2018). PBSA is designed to meet students' desire for privacy (McBride, 2017), with its major components such as independent room-spaces, facilities and services (Simpeh & Shakantu, 2019). The unique quality and scale of these PBSA properties are clearly shown in the current design pattern compared to old-styled university students' accommodation provided by tertiary institutions (Newell & Marzuki, 2018).

Traditionally, higher institutions of learning shoulder the responsibility of providing accommodation for their students (Newell & Marzuki, 2018), by adopting an on-balance sheet funding method that is internally generated or a debt financing approach in funding the construction of students' accommodation in their campuses (McCann et al., 2019). However, in recent times, students' enrolment into tertiary institutions of learning has grown geometrically and the inability of these tertiary institutions to provide adequate hostel facilities for their teeming student population has prompted a rapid investment opportunity in privately owned and operated PBSA (Kampamba et al., 2022). PBSA investment asset class is gradually informed through the process of tertiary institutions outsourcing the provision of students' accommodation to private real estate investors and institutional developers via tertiary institution-private sector partnership. Authors such as McCann et al. (2019) noted this partnership to include a stock transfer partnership in which the private investors shoulder full lease responsibility over existing students' accommodation, and a partnership in which the tertiary institution provides land, and contracts out the financing, building, and operation of the hostel facilities.

The traditional students' accommodation provided by tertiary institutions is considered lacking in facilities and services to meet the present needs of tertiary students (McBride, 2017), which has given rise to PBSA investment within the neighbourhood of many tertiary institutions in Nigeria. For instance, within the radius of about 0.5km–5km of the University of Calabar, University of Cross River State, Obafemi Awolowo University, University of Port-Harcourt, Federal University of Technology Minna, University of Lagos, amongst other universities are characterised with the presence of PBSA. This has also resulted in the restructuring of the existing housing stock in these university neighbourhoods to accommodate the students' influx. The clustering of students living in PBSA has created a sense of students' community which has in turn, birthed studentification and studentified neighbourhoods (Adebowale & Simpeh, 2021; Hubbard, 2009; Ordor et al., 2011).

Studentification is a global phenomenon that refers to the process of converting an area or neighbourhood into a student-dominated area through the concentration of student housing (Smith, 2009; 2002). A process where the original residents, traditional residential and commercial properties within the radius of tertiary institutions are made to give way to PBSA due to the high influx of students (Nakazawa, 2017). He (2015) traced studentification to the UK context as gradually evolving from Houses-in-Multiple-Occupations (HMO) to PBSA which has fundamentally changed the physical form of many tertiary institutions' neighbourhoods. The spatial distribution of PBSA could be traced to studentification has certainly given rise to some elements of a specialised class of real estate investment that is tailored to cater for students' needs termed PBSA. Paradoxically, a pilot survey of the radius of many Nigerian tertiary institutions of learning indicates a number of factors affecting investment into PBSA. Few studies globally have researched PBSA. Locally, there is a lack of literature on the factors affecting investment in PBSA, hence, the need for this study to enlighten real estate investors and developers on the factors to consider while investing in this asset class.

2. Methodology

## 2.1 Search strategy

This study employed a systematic literature review, supported by meta-analysis, to synthesise and analyse the existing studies. This approach helps address specific research questions or gaps in knowledge by providing a comprehensive and objective summary of the existing studies. Accordingly, authors such as Mohammed et al. (2022); and Oluwunmi (2023) have adopted this approach, using five-step methodological procedures. These procedures include formulating research questions, identifying relevant published studies, evaluating previous studies, summarising, and interpreting study findings. The literature search strategy for this study focused on two core thematic areas: "investment in private hostels", and "purpose-built student accommodation". The search was conducted sequentially using interdisciplinary research databases such as Library Genesis, Google Scholar, and ResearchGate. The search results from these databases are summarised in Table 1, which shows the total number of articles retrieved from each database.

| Table 1. Total Number of Articles Ketricycu from the Efsteu Kescaren Databases |                 |                   |              |       |
|--|-----------------|-------------------|--------------|-------|
| Core thematic areas used in searching databases                                | Library Genesis | Google<br>Scholar | ResearchGate | Total |
| Investment in Private<br>Hostels   | 17              | 73                | 1637         | 1727  |
| Purpose-built Student<br>Accommodation   | 32              | 48                | 3122         | 3202  |
| Total  | 49              | 121               | 4759         | 4929  |

#### Table 1: Total Number of Articles Retrieved from the Listed Research Databases

Source: Author's compilation

#### 2.2 Criteria for Article Selection

Studies were selected based on journal articles, publication date, language, and relevance to this current study. Articles published before 2010 were excluded. The screening process involved a

two-stage approach: a review of article titles and abstracts against predefined inclusion and exclusion criteria. This initial step yielded 18 articles related to "*investment in private hostels*" and 25 articles related to "*purpose-built student accommodation*". These articles were then thoroughly evaluated for their eligibility to be included in the study, with a focus on factors influencing investment in PBSA. The inclusion criteria at this stage were based on three main considerations: the author's background, the study's relevance to this research, and the suitability of the research design. After applying these criteria, 6 articles out of the 18 articles related to investment in private hostels were found suitable for inclusion in this study, while 10 out of the 25 articles related to purpose-built student accommodation were selected as relevant and appropriate for inclusion. Therefore, a total of 16 articles were utilised to extract key factors affecting investment in PBSA.

## 2.3 Data extraction and synthesis

Key findings and other pertinent data were extracted to facilitate a comprehensive analysis. Upon the completion of the data extraction, the thematic analysis approach as reflected in Table 2 was employed to identify research perspectives, patterns and relationships within the extracted data. The synthesised data were analysed to draw meaningful conclusions and implications. This provides a coherent overview of the existing literature consensus and divergence.

## 3. Discussion of Findings

## 3.1 The Concept of Purpose-Built Student Accommodation and its Prospects

Students' accommodation as an integral component of tertiary institutions plays an important role in promoting the primary objectives of tertiary institutions. PBSA is a form of student housing accommodation provided by tertiary institutions, tertiary institution-private sector partnerships, and private real estate developers "on" and "off" tertiary institution campuses (Attia et al., 2020; McCann et al., 2019). PBSA has been part of the international property debate since 2008, in countries such as the USA, UK, Ghana, Australia, China, Germany, France, Austria, and India amongst others. PBSA is a specialised form of modern housing units built specifically for tertiary students by private real estate investors, while the on-campus student accommodation is a type of PBSA provided and managed primarily by the host institution (Appau et al., 2023). The private sector provision of PBSA is designed and built by institutional developers and private real-estate investors to meet student's unique needs and preferences (Kenna, 2011). In many Western European and African countries, PBSA is an evolving property market that is underexploited and deserves more attention (French et al., 2018).

More recently, the swift investment in PBSA as recorded in some parts of Africa is in response to tertiary students' changing expectations and needs, who now demand higher-quality and fashionable accommodation that provides a range of modern amenities and services. Again, according to Hamnett and Butler (2015), the growth of tertiary institutions has contributed to the PBSA investment trend, with many students seeking accommodation near their institutions. PBSA is an ensuite residential unit in the form of cluster flats and furnished apartments (Property Partner, 2018). Real estate investors devise means of capturing the attention of tertiary students by providing ensuite studio-type accommodation with quality facilities and social programmes that enhance student-friendly living experiences (Lam & Chen, 2021).

Conventionally, many real estate investors have previously considered PBSA as a proxy to residential property, hence did not consider a separate allocation for it in their choice of property investment (Newell & Marzuki, 2018). However, French et al. (2018) noted the roles of private property investors to include, the ability to identify trends, supply gaps, and providing the assets that meet specific market requirements. This underlying link between supply and demand has led to a steady growth in PBSA investment. It could be observed that the educational industry is one of the influential industries that is essential in promoting investment into PBSA. PBSA has become progressively conventional due to its students' user-friendly location, proximity to tertiary institutions, and supportive modern facilities that meet students' preferences.

Recently, in Nigeria, PBSA has witnessed a sharp investment opportunity due to the supply and demand gap. The demand for student accommodation in Nigeria is expected to grow as the country's student population increases (National Bureau of Statistics, 2021). For instance, there are currently 62 federal-owned universities, 63 state-owned universities, and 149 privately owned universities, aside from other tertiary institutions of learning such as polytechnics, colleges of education and other specialised institutions (National University Commission (NUC), 2024). These institutions attract students into studentified neighbourhoods, which in turn drives the demand for PBSA. The overall number of students enrolled in Nigeria's tertiary education system exceeds 3.8 million, with roughly 950,000 slots available each year, while the projected annual student population growth rate is at 12% (NUC, 2023). The expansion in the growth of off-campus PBSA investment is informed by increased enrolment into tertiary institutions, and this among other factors, indicates good prospects in PBSA. Additionally, the Nigerian government has shown support for private investment in the educational sector, creating an enabling environment for PBSA development (Obayori, 2020).

Additionally, many students in Nigeria who live in off-campus HMOs are faced with challenges such as substandard living conditions, high rental payments, and long distances to campus (Oluborode, 2021). These conditions have helped drive the demand for PBSA due to its proximity to tertiary institutions. However, the demand trends for student accommodation have surpassed the supply side, leading to an increase in the cost of renting PBSA (Oluwakayode, 2018). This situation creates an opportunity for private investors to develop PBSA within the peripheral radius of tertiary institutions. PBSA offers several benefits to students, including proximity to campus, quality facilities, and a supportive student community (Knight Frank, 2021). Facilities that are embedded in PBSA provide a mutual composition and synergy among students (Hassanain, 2008).

## 3.2 Factors Driving Investment in PBSA

In recent years, studies have examined the effects of students' demand metrics such as accommodation preference, facilities and services requirements, accessibility and proximity to tertiary institutions (Sanderson & Ozogul, 2022; Appau et al., 2023; Khozaei et al., 2014). In light of this, Lawton (2017) examined the changing students' preference for PBSA over the traditional housing option available. The study observed that PBSA offers a range of benefits, such as the provision of high-quality services and facilities, proximity to campus and the opportunity to live independently in a community of like-minded individuals. In Malaysia, Khozaei et al. (2014) examined student housing preferences. The study noted privacy as

paramount among students' needs in renting off-campus PBSA. PBSA provides greater privacy and enhances personal space.

Sanderson and Ozogul (2022) conducted a study on the investment expansion dynamics into PBSA in Europe by examining transformations in PBSA investment landscapes. Using a record of PBSA from 2010–2020 in analysing the trend drivers of this investment class. The study adopted an in-depth interview with PBSA investors. The study identifies positive changes in the PBSA investment landscapes of five European countries with the highest number of PBSA investment transactions since 2010. These countries include the UK, Germany, Netherlands, France, and Spain. From the study findings, a high-yield premium was identified as one of the major drivers of PBSA investment. Again, Lam and Chen (2021) adopted a triangulation research approach in examining PBSA investment prospects in Sydney. A positive and solid trend in demand and rental growth was revealed to be the major drivers of PBSA investment in Sydney. Moreover, McCann et al. (2019) carried out a study in the UK to identify motivations that propel real estate investors into the PBSA market. The study adopted a qualitative research design, and it was noted that private real estate investors view the student housing submarket sector favourably due to its stable rental growth and students' demand.

This view is supported by Newell and Marzuki (2018); and McBride (2017) whose studies evaluate the emergence of PBSA as an institutionalised property sector to identify the drivers and risk factors in this real estate sub-sector. These studies found PBSA as a good investment asset class that produces high returns while comparing it to conventional residential properties. PBSA was further noted to be a good portfolio diversifier for real estate investors. Moreso, the supply gap, investor appetite, reliable lease term, attractive yields, low vacancy rates, resilience against a market downturn, and professional operating platform were also listed as factors driving investment in PBSA.

A separate study conducted by French et al. (2018) examines how mobile students' clientele places demand for PBSA during their course of studies in the universities. The study noted the peculiarity in terms of service availability as a major factor that influences students' choice of accommodation. The study identifies the supply gap and low investment risk as key drivers of PBSA investment. In the same perspective, Huston et al. (2015) documented high demand from mobile students and the limited supply of students' hostels by tertiary institutions of learning as factors driving investment in PBSA. This view is supported by Kampamba et al. (2022) whose study listed these drivers to include rapid expansion of tertiary institutions, inadequate on-campus hostel facilities, market resilience and tight letting market conditions as factors driving investment in PBSA.

## 4. Thematic Analysis of Findings

## 4.1 Thematic Analysis of Research Perspectives on Factors Driving PBSA Investment

In this section, studies on PBSA are divided into five thematic research perspectives. These include the emergence of PBSA, investors' participation in PBSA, the performance of PBSA, changing students' preferences/innovation diffusion effects on PBSA investment, and demand/growth of PBSA.

| Authors/year   | Thematic   | Findings  |
|--|--|---|
| Autions/year   | Research<br>Perspectives   | rinungs   |
| Newell and Marzuki<br>(2018); McBride<br>(2017); Manton<br>(2018).   | The emergence of PBSA as an investment asset class.                    | Good portfolio diversifier for real estate investors<br>and developers, supply gap, increased investor<br>appetite, attractive yields, low vacancy rates,<br>resilience against market downturn, professional<br>operating platforms and comparative higher<br>yield.   |
| Kampamba et al<br>(2020); McCann et al.<br>(2019).   | Investors'<br>participation in<br>PBSA.                                | Increased students' enrolment into tertiary<br>institutions, coupled with the effects of<br>urbanization and continuous population growth<br>provides opportunities for real estate investors to<br>venture into the PBSA market. In addition, the<br>inability of tertiary institutions to provide more<br>hostels for their teeming student population<br>creates a niche for property investors. |
| Lam and Chen (2021);<br>Huston et al. (2015)   | The performance of PBSA.   | Positive demand trends and rental growth.   |
| Appau et al (2023);<br>Khozaei et al. (2014);<br>Simpeh and Shakantu,<br>(2019); Lawton<br>(2017).                             | Changing students'<br>preferences/innova<br>tion diffusion<br>effects. | PBSA provide greater privacy and enhanced<br>personal space control, high-quality services and<br>facilities, proximity to campus and the<br>opportunity to live independently in a community<br>of like-minded individuals.  |
| Sanderson and Ozogul<br>(2022); French et al.<br>(2018); La-Roche et<br>al. (2010); McBride<br>(2017); Oluwakayode,<br>(2018). | PBSA demand and growth.  | Higher yield premium, increased student<br>population, and demand from foreign and local<br>students for PBSA outweigh its supply.  |

Table 2: Research Perspectives on Factors Driving PBSA Investment

Source: Authors' compilation

# 4.2 Thematic Analysis of Factors Driving Investment in PBSA

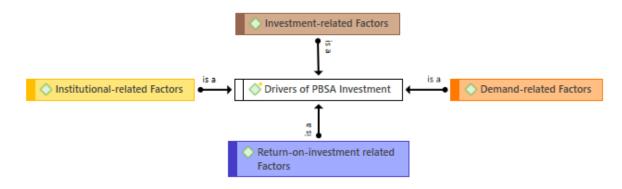
To identify factors driving investment in PBSA, several variables contributing to real estate investors' participation in PBSA provision were identified and extracted from several empirical studies. The factors chart below shows these variables that drive investment in PBSA as presented in Table 2. The variables were further classified into demand-related, return-on-

investment-related, investment-related and institutional-related factors. These themes entail a discussion of factors that have been identified in different studies to have a significant influence in driving PBSA investment.

| s/n | Theme                                   | Factors  |  |
|-----|---|--|--|
| 1   | Demand-related factors                  | High demand from students, and increased students' enrolment into tertiary institutions.   |  |
| 2   | Return-on-investment<br>related factors | Reliable lease term, attractive yield/comparative higher yield, alpha growth indices, and low vacancy rate.  |  |
| 3   | Investment-related factors              | PBSA is considered a good portfolio diversifier, with resilience against market turndown, and proximity to tertiary institutions.                                  |  |
| 4   | Institutional-related<br>factors        | Pluralization of tertiary institutions, and the inability of tertiary institutions to provide sufficient hostel accommodation to their teeming student population. |  |

**Table 3: Factors Driving PBSA Investment in Studentified Neighbourhoods** 

Source: Authors' compilation



# Figure: 1: PBSA Factors' Diagram

## 4.3 Hindrances to PBSA Investment

The advancement in Information and Communication Technology (ICT) has prepared the educational sector to imbibe the culture of e-learning facilities. E-learning employs ICT to improve students' performance by engaging tertiary students more effectively and actively in learning processes, through the provision of platforms for information dissemination and learning interface between participants (Michael & Joseph, 2014). E-learning is seen as a transition from the conventional classroom system of learning to a technological-based system. Halilovie et al. (2016) study on hybrid learning versus manual classroom learning at tertiary institutions level of education shows a high level of acceptance of hybrid learning among students. The growth in e-learning has reformed students' learning culture to a greater extent (Lam & Chen, 2021), as students prefer the use of virtual means in having lectures (McBride,

2017). This has revolutionised the traditional learning environment, making it possible for students to attend classes anywhere in the world (Halilovic et al., 2016). This development has an implicated concern on the future of on-campus and off-campus student housing. This in a few decades could discourage students from renting off-campus PBSA and on-campus accommodation.

The cost-effectiveness of e-learning over traditional classroom learning systems is a major indicator that real estate investors should consider. E-learning promotes virtual classes (Roebuck et al., 2013), therefore improved delivery strategies through technological means will only make this option more attractive (McBride, 2017), by eliminating the need for commuting to campuses and reducing transportation costs and time spent travelling (Newell & Marzuki, 2018). Students find it more affordable and convenient to live at home or with relatives instead of renting PBSA. This could affect the demand for PBSA in future due to its potential to cause a decline in the occupancy rate.

Again, looking through the lens of market oversaturation. Over the past few years, there has been a significant increase in the development of PBSA across many countries. Studies by Lam and Chen (2021) and Colliers (2019) show that the UK PBSA market is experiencing a decline in rental yields from 5% - 6% to 4% - 5% in some market locations due to the effects of market saturation. Oversupply of PBSA leads to a decline in the demand and occupancy rates. According to a report by Knight Frank (2021), the global PBSA market is expected to slow down in the short term due to the oversupplied effects of PBSA in some markets. PBSA is specifically designed and constructed to meet students' needs and the alteration of this asset class to fit other classes of users in the event of a decline in demand would result in a difficult situation.

## 5. Conclusion and Recommendations

This study provides information on factors affecting investment in PBSA that could assist real estate investors and institutional developers in making informed investment decisions. The result shows that demand-related, investment-related, return-on-investment-related and institutional-related factors are major factors affecting the provision of PBSA. Also, the findings of this study direct real estate investors to consider the potential risks associated with PBSA investment. Prominent among these risk factors are the potential oversupply of PBSA in some studentified neighbourhoods and an increase in the adoption of e-learning facilities. To mitigate these risks, investors should develop strategies to diversify their investment portfolios. Furthermore, governments and tertiary institutions should formulate policies that promote infrastructural development within studentified neighbourhoods to support PBSA development. Researchers should prioritise research initiatives focused on the risk-returns performance of PBSA in studentified neighbourhoods.

## 6. Policy Implications and Limitations to the Study

To address the identified drivers and hindrances of PBSA investment, policy should focus on balancing supply and demand to prevent market oversaturation. This can be achieved through regular assessment of student housing needs and coordinated planning between tertiary institutions and real estate developers. Additionally, policymakers should encourage sustainable design and construction practices in PBSA developments that will promote flexibility to adapt to potential changes in demand due to trends such as e-learning, while the urban planning strategies should be updated to integrate PBSA development into the existing neighbourhoods.

Finally, policies should aim to ensure PBSA remains accessible to a diverse student population. This may involve implementing measures to maintain affordability, supporting the specific needs of students, and encouraging research into PBSA trends and student preferences. By addressing this area, policymakers can create a framework that will enhance the growth of PBSA, while mitigating potential risks and ensuring its long-term viability as an investment asset class and housing solution for students. Finally, this study's findings are based on theoretical evidence, which is the major limitation of the study.

#### References

- Adebowale, O., and Simpeh, F. (2023). Exploring the effects of studentification on neighbourhoods in Nigeria. *Journal of Facilities Management, 21*(1), 30-49. <u>https://doi.org/10.1108/jfm-05-2021-0050</u>
- Appau, M., Attakora-Amaniampong, E., and Yakubu, I. (2023). Innovation diffusion effects on student housing investment in Ghana. *Property Management*, *41*(2), 169-190. https://dx.doi.org/10.1108/PM-06-2022-004
- Attia, S., Alphonsine, P., Amer, M., and Ruellan, G. (2020). Towards a European rating system for sustainable student housing: Key performance indicators (KPIs) and a multi-criteria assessment approach. *Environmental and Sustainability Indicators*, 7(2), 23-35. <u>https://doi.org/10.1016/j.indic.2020.100052</u>
- Central Bank of Nigeria. (2019). Guidelines for the Operations of Private Hostels in Tertiary Institutions in Nigeria. Retrieved from https://www.cbn.gov.ng/out/2019/bsd/guidelines%20for%20the%20operations%20of %20private%20hostels%20in%20tertiary%20institutions%20in%20nigeria.pdf
- Colliers (2019). UK student accommodation: The investment outlook. Retrieved from <u>https://www.colliers.com/en-GB/Research/UK-Student-Accommodation-The-Investment-Outlook</u>.
- French, N., Bhat, G., Matharu, G., Guimaraes, F. and Solomon, D. (2018). Investment opportunities for student housing in Europe. *Journal of Property Investment & Finance*, 36(6), 578-584. <u>https://doi.org/10.1108/JPIF-08-2018-0058</u>
- Halilovie, N., Litwin, S., Gliem, A., and Hipp, C. (2016). The hybrid learning university: Insights, challenges and lessons learned from best practice at Brandenburg UniversityofTechnology. *InternationalJournalofLearningandTeaching*, 2(2),148-155. <u>https://doi.org/10.18178/ijlt22148155</u>
- Hamnett, C., and Butler, T. (2015). Gentrification and the middle-class remaking of inner London. Urban Studies, 40(12), 2401-2426.

- Hassanain, M. (2008). On the performance evaluation of sustainable student housing facilities. *Journal of Facilities Management*, 6(3), 212–225. <u>http://dx.doi.org/10.1108/14725960810885989</u>
- He, S. (2015). Consuming urban living in 'villages in the city: Studentification in Guangzhou, China". Urban Studies, 52(15), 2849-2873. https://doi.org/10.1177/0042098014543703
- Hubbard, P. (2009). Geographies of studentification and purpose-built student accommodation: leading separate lives? *Journal of Environment and Planning*, *41*(1), 1903-1923.
- Huston, S., Jadevicius, A., and Minaei, N. (2015). Talent and student private rented sector bottlenecks: a preliminary UK investigation. *Property Management*, *33*(3), 287-302. <u>https://doi.org/10.1108/PM-09-2014-0039</u>
- Kampamba, J., Kachepa, S., and Seketeme, K. (2022). Factors influencing property developers' minimal participation in student housing provision in Gaborone. *International Journal of Housing Markets and Analysis*, 15(1), 55-79. <u>https://doi.org/10:1108/IJHMA-06-2020-0074</u>
- Kenna, T. (2011). Studentification in Ireland? Analysing the impacts of students and student accommodation on Cork City. *Irish Geography*, 44(2), 191-213. <u>https://doi.org/10.1080/00750778.2011.618073</u>
- Khozaei, F., Hassan, A., Kodmany, K., and Arab, Y. (2014). Examination of student housing preferences: Their similarities and differences. *Facilities*, *32*(11), 709-722. <u>https://doi.org/10.1108/F-08-2012-0061</u>
- Knight-Frank (2021). *Global student property report*. Retrieved from <u>https://content.knightfrank.com/research/3369/documents/en/global-student-property-report-20218435.pdf</u>.
- Lam, T., and Chen, C. (2021). An investigation into the investment potential of purpose-built student accommodation in Sydney. *International Journal of Housing Markets and Analysis*, 15(4), 852-874. <u>https://doi.org/10.1108/IJHMA-05-2021-0054</u>
- La-Roche, R., Flanigan, M. (2012). Student use of technology in class: Engaged or Unplugged? *Journal of College Technology*, 10(1), 47-53. <u>https://doi.org/10.19030/tlc.v10i1.7537</u>
- Lawton, R. (2017). The rise of purpose-built student accommodation: A study of changing student preferences. *Journal of Further and Higher Education*, 4(5), 601-613. https://doi.org/10.1080/0309877X.2017.1178086
- Livingstone, N., and Sanderson, D. (2022). All grown up? Market maturity and investment in London's purpose-built student accommodation sector. *Journal of Property Investment* and Finance, 40(6), 571-587. <u>https://doi.org/10.1108/JPIF-08-2021-0072</u>
- Manton, R. (2018). Understanding the purpose-built student accommodation phenomenon. *Journal of property investment and finance, 36*(1), 20-30. <u>https://doi.org/10.1108/JPIF-07-2017-0054</u>

- McBride, Y. (2017). Future of student housing: Meeting emerging student needs. On the Horizon. <u>https://doi.org/10.1108/OTH-05-2017-0026</u>
- McCann, L., Hutchison, N., and Adair, A. (2019). Student residences: Time for a partnership approach? *Journal of Property Investment & Finance, 38*(2), 128-146. https://doi.org/10.1108/JPIF-11-2019-0140
- Mohammed, A., Ukai, T., and Hall, M. (2022). Towards a sustainable campus-city relationship: A systematic review of the literature. *Regional Sustainability*, *3*(1), 53-67. <u>https://doi.org/10.1016/j.regsus.2022.03.004</u>
- Michael, P., and Joseph, W. (2014). Mobile-based system for cost-effective e-learning content delivery in resource and bandwidth-constrained learning environments. *Journal of Knowledge Management and E-Learning, 6*(4), 57-63. https://doi.org/10.34105/j.kmel.2014.06.030
- Nakazawa, T. (2017). Expanding the scope of studentification studies. *Geography Compass, 11* (1), 32-41.
- National University Commission (2024). Nigerian Universities Accreditation Report. https://www.nuc.edu.ng/project/accreditaion/
- National Bureau of Statistics (2021). Nigeria's Population to Hit 400 million by 2050 UN. *Retrieved from*<u>https://nigerianstat.gov.ng/news/37</u>
- Newell, G., and Marzuki, M. (2018). The emergence of student accommodation as an institutional property sector. *Journal of Property Investment and Finance, 36*(6), 523-538.
- Obayori, J. B. (2020). An assessment of the Nigerian education sector and the prospects for investment. *Journal of Business and Economic Development*, 5(1), 1-12. <u>https://doi.org/10.11648/j.jbed.20200501.11</u>
- Oluborode, O. (2021). Housing challenge in Nigeria: Insights for sustainable livelihood. Journal of Sustainable Development, 14(1), 1-16.
- Oluwakayode, O. (2018). An evaluation of students' housing demand and supply in Nigeria's tertiary institutions. *International Journal of Scientific Research and Management, 6*(6), 414-423. <u>https://doi.org/10.18535/ijsrm/v6i6.08</u>
- Oluwunmi A. O. (2023). Leveraging on blockchain technology for the sustainability of real estate practice: A systematic review. *Journal of African Real Estate Research*, 8(1), 67–86. <u>https://doi.org/10.15641/jarer.v8i1.1345</u>
- Ordor, U., Cattell, K., Michell, K., and Bowen, P. (2011). *The effects of studentification on the residential neighbourhood of a university suburb: A study of the University of Cape Town in Rondebosch.* International conference paper on facility management. 543-556

Accessed

from

https://www.google.com/url?q=https://www.irbnet.de/daten/iconda/CIB21568.pdf&sa =U&ved=ahUKEwiX8KCB4fb7AhVTVaQEHd1fBcEQFnoECAIQAg&usg=AOvVa w2LvapnkM3Es4ZA\_CyhThkK

- Property Partner (2018). Property type: What is purpose-built student accommodation? Knowledge Base Home. <u>https://help.propertypartner.co/hc/en-us/articles/115004563173-What-is-Purpose-Built-Student-Accommodation-PBSA-</u>
- Roebuck, D., Samia, M. and Reginald, L. (2013). Faculty usage of social media and mobile device: Analysis of advantages and concerns. *Interdisciplinary Journal of e-Skills and Lifelong Learning*, 9, 171-192. <u>https://doi.org/10.28945/1914</u>
- Sanderson, D., and Ozogul, S. (2022). Key investors and their strategies in the expansion of European student housing investment. *Journal of Property Research*, 39(2), 170-196. <u>https://doi.org/10.1080/09599916.2021.1993315</u>
- Simpeh, F., and Shakantu, W. (2019). On-campus university student housing facility services prioritization framework. *Facilities*, 38(2), 20-38. <u>https://doi.org/10.1108/F-10-2018-0129</u>
- Smith, D. P. (2009). Student geographies, urban restructuring, and the expansion of higher education. *Environment and Planning Economy and Space*, *41* (8), 1795-1804. http://journals.sagepub.com/doi/10.1068/a42257
- Smith, D. P. (2002). Studentification and the city: An exploration of the distinctive geographies of studentification in Brighton, England. *Environment and Planning Journal*, 34(3), 385-404. <u>https://doi.org/10.1068/a3412</u>
- Tiwari, A. (2022). An exploration of off-campus private student housing in Praygaraj, India. *International Journal of Housing Markets and Analysis*. <u>https://doi.org/10.1108/IJHMA-01-2022-0016</u>