

**INNOVATIONS IN STUDENT ACCOMMODATION IN KENYA**

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## DECLARATION

This research project report is my original work and has not been submitted to any university for any academic award.

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This research project report has been submitted for examination with my approval as the university supervisor.

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## **DEDICATION**

Dedicated to:

Samuel Opiyo Odera, My Father.

Caroline, My Significant Other.

Natasha, Ilka & Kristal, My All-Girls Crew.

My Family, My Beloved.

God, The Almighty.

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## **ABBREVIATIONS AND ACRONYMS**

<b>GOK</b>	Government of Kenya
<b>KNBS</b>	Kenya National Bureau of Statistics
<b>NACOSTI</b>	National Commission for Science, Technology and Innovation

## ABSTRACT

There are currently very few studies on residential life of college and university students in Kenya, whether on or off campus. Most studies have focused mostly on classroom and classroom-related activities, with a number on safety and security of students in off campus accommodation. Student residences in Kenya are not only scarce, but have limited sleeping, eating, study and entertainment. This study was to establish key innovations to be included in new student residences that cater to the needs and preferences relevant to the Kenyan student today. The research objective was to establish: the students' preferred accommodation; analyse the spatial distribution of college student accommodation; and identify the key innovations in student accommodation in Kenya. The study, based on the concept of innovation, attempted to approach innovation in student accommodation from four perspectives: product innovation (design and amenities); process innovation (management and administrative process); social innovation (community and residence life programs); and business model innovation (collaborative development models). The study adopted exploratory and descriptive survey. A sample of 392 students from five private and public universities and colleges in Nairobi was selected using stratified sampling. 392 questionnaires were administered and the 325 responses formed the basis for data analysis. The self-administered questionnaire was designed around eight key factors: location, safety and security, architectural appeal, facilities and amenities, privacy, community life, connectivity and rental cost, and comprised of both open-ended and close-ended questions. The research instrument was piloted for validity and reliability before it was fully administered to the respondents. Data obtained was analyzed using SPSS version 23 and was presented in the form of tables. Descriptive statistical method was then used to explain the data. Factor analysis was also performed to determine the influence the factors under investigation on students accommodation preferences. The study established that, compared to established student accommodation markets like the United Kingdom where the concept of purpose built student accommodation is established, tertiary institutions and private student housing developers in Kenya have not adequately factored in the needs and preferences of the student today, so as to build accommodation units that cater to their needs. From the findings, ranking highest in the 8-factor analysis as the most important is location (proximity to campus) and attributes of neighborhood, followed by safety and security. The study also found out that: various amenities previously seen as luxuries have become part and parcel of the student life in Kenya today, e.g. the internet, washer-dryer facilities, and convenience shops among others; rental cost is just as important; connectivity is crucial to the students desire to reach out to the world; students prefer to have few roommates and where possible stay alone; the Kenyan student prefers buildings with the latest architectural design that is appealing, trendy and homey. The study also found that student today has high regards for privacy and are willing to pay more just to have their privacy maintained. Lastly, the study also found that community experience is very important to modern student as witnessed by high number of students involved in community activities. The study recommends that while filling the current gaps in the accommodation provision, learning institutions and private accommodation providers must work independently or collaborate in putting up student housing that cater to the needs and preferences of students. The study also recommends that the Government of Kenya works with student accommodation stakeholders in creating policies to improve and standardize student accommodation in Kenya.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Introduction

There is evidence that accommodation, whether on-campus or off-campus plays an integral role in the social and academic life of college and university students (Rinn, 2004). According to Khozaei *et al*, (2010) student accommodation built with formal or institutional characteristics in a location where students have access to university recreational facilities can be called a hostel. Every individual has freedom to choose the physical setting of accommodation, and what happens in it, now and then. (Jennifer, 2011). It is in that line that Lanasa *et al* (2007) asserted that halls of residence influence student growth, behavior and study performance. While investigating shortage of accommodation on student performance in Botswana, Jairus and Douglas (2018) found that truancy and poor concentration in academic work is caused by lack of student accommodation.

It is therefore imperative that institutions of higher learning ensure that student accommodation, whether on-campus or off-campus is both fit-for-use and fit-for-purpose. Many universities now consider availability of adequate housing as a way to differentiate itself (College Board, 2010). According to a study conducted on nearly 14,000 students by Cain & Gary, (2006), quality of campus facilities was a priority to 75% of the respondents when choosing university. Campus residence halls ranked second with 53.1 percent behind course facilities. Cain (2006) further showed that the students ranked residential space so high when choosing university. The top reason for rejecting an institution was listed as poorly maintained and inadequate facilities. However, majority of student accommodation in Kenya currently provides very

limited space to sleep, eat, study and socialize. To many students, this situation is different from what they are used to at home and are forced to adapt to cope with their new environment (Amole, 2005). Although there is some research on student housing [Wesonga, Mwiria *et al*, (2007); Ndung'u, J. W. (2015); Gisesa (2012); Njagi (2008); Ileri (2006)], very little is available on students' accommodation preferences as these studies are mainly centered on the shortage and quality of student accommodation in Kenya. This means that institutions and private student housing providers have limited information on student's real needs and requirements.

The results of studies on the influence the living environment and quality of accommodation has on satisfaction of students with their university have shown strong relationship between hostel conditions and students' satisfaction and even performance. Research by Bekurs (2007) shows that excellent condition of hostels and student facilities in university campuses positively influence overall student enrollment.

However, research delving into students' satisfaction levels with the hostel environment have consistently have shown that a higher degree of satisfaction and increased individual performance is exhibited when the living environment meets the individuals' expectation. However, when the environment fails to meet the expectations of the students, dissatisfaction has been manifested in various ways (Mohit *et. al*, 2010). Understanding factors that make the students satisfied during their university stay is crucial in gauging their performance as well. Such findings can shine more light in assisting the universities to undertake changes that would increase satisfaction among students.

This study looks into the factors that considered by students in choosing accommodation and has been conceptualized around eight (8) factors: location, safety and security, architectural appeal, facilities and amenities, privacy, community, connectivity and cost.

Studies are increasingly showing students' dissatisfaction with hostels. This calls for a keen look into unique needs of the students in designing modern housing for students. According to Porter and Stern (1999), innovation is when knowledge is transformed into new products, processes and service. The same sentiments are espoused by Bessant & Tidd (2009) stating that innovation is a process of translating ideas into products, services or processes that are usable and useful. Innovation in student accommodation can be implemented in two levels: Incremental innovation involves making small improvements in existing physical buildings, the service delivery processes or the range of services offered, thereby improving the environment and conditions of the accommodation and facilities being offered. In the contrary, radical innovation involves complete overhaul of the products and services, causing a deep change in services, products or processes.

For Gunday et al. (2011), innovation is considered as an evolution and applications of new knowledge, in order to launch novelty to the market. It is simply transforming knowledge into commercial value. Innovation has become important in creating competitive advantage for companies, regions and countries. Schumpeter viewed development as a spontaneous and radical change that abruptly changes the status quo of the production flow, in an irreversible way.

## **1.2 Problem Statement**

Although there has been some research in the area of student accommodation in Kenya [Wesonga, Mwiria et al., (2007); Ndung'u, J. W. (2015); Gisesa (2012); Njagi (2008); Ileri (2006)], most of it has focused on the shortage of hostels. Gisesa (2012) and Ndung'u, J. W. (2015) have conducted research on private accommodation for undergraduate students. Ileri (2006) also discussed student accommodation and the spatial requirements of students' accommodation facilities.

While the above studies reveal the shortage, they also show that the existing student accommodation facilities especially in public tertiary institutions were built in the 60's and 70's with designs that suited the needs and trends of that time, and little or no effort has gone into renovations and upgrade to suit the needs and requirements of the modern student in Kenya today (Ndung'u, J. W., 2015). There is little or no evidence of research done locally to establish what students want their ideal accommodation to look like. Exploring the accommodation preferences of students in colleges and universities is critical in providing knowledge on what the students' needs and requirements are.

This study is seeking to fill this gap of information needed by institutions and private student accommodation developers as a basis for innovations required to meet the accommodation needs of the student today.

## **1.3 Purpose of the Study**

The aim of the study is to establish student preferences that can be innovatively applied to meet the accommodation needs of the modern student in Kenya.

## **1.4 Objectives of the Study**

Specifically, the study aims to:

- i. Identify students' preferred mode of accommodation;
- ii. Analyze the spatial distribution of college student accommodation in Nairobi;  
and
- iii. Identify the key innovations in student accommodation.

## **1.5 Significance of the Study**

Studying student accommodation preferences is critical as institutions of higher learning, governments, and private accommodation providers need to understand students' real needs and requirements to innovatively provide suitable housing. However, literature available in this area is under-developed. This research used the eight factors to establish the unarticulated and unmet accommodation needs and preferences of students in colleges and universities. The findings may form a basis for further research as well as provide knowledge that can be used by student accommodation providers to create new and improved accommodation products and services for the student accommodation market in Kenya.

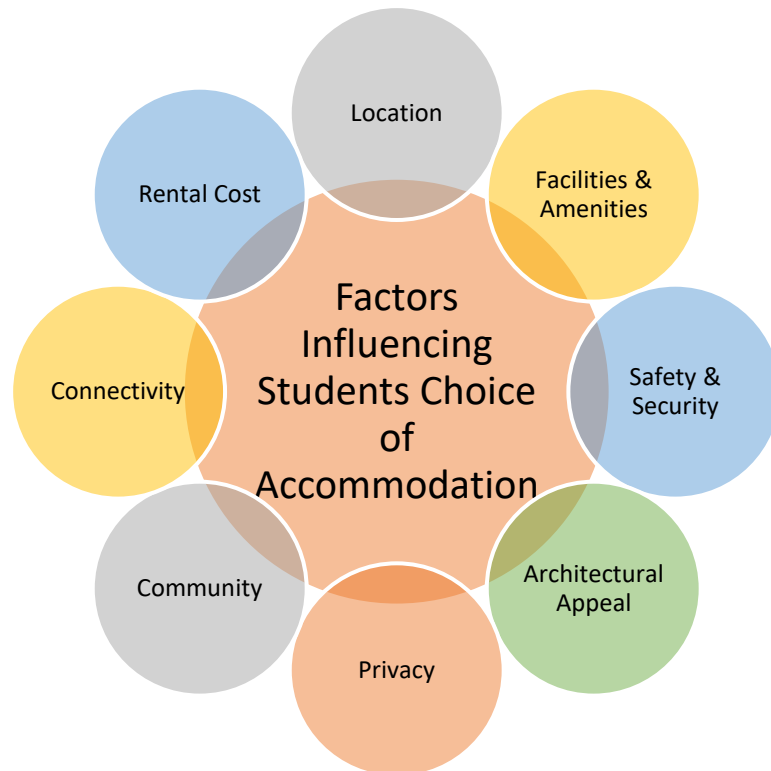
## **1.6 Assumptions of the Study**

Assumptions were first, that most students stay in on-campus or off-campus accommodation that needed improvement to make students feel more at home; and secondly, that the respondents will cooperate and give true information about themselves, their current accommodation, and their needs and preferences.



## 1.7 Conceptual Framework

The study was conceptualized around eight (8) factors perceived to influence the students choice of accommodation namely: location, safety and security, architectural appeal, facilities and amenities, privacy, community, connectivity and rental cost.



**Figure 1.1: Factors Influencing Students Choice of Accommodation**

Several elements in each factor were tested to measure their effect on students' choice of accommodation if some innovative changes/provisions were made to their current accommodation.

## **1.8 Definition of Terms**

A number of terms were used in this research and are defined in context of their use:

*On-Campus Accommodation* - accommodation provided by the institutions of higher education (private and public) within the campus premises.

*Off-Campus Accommodation*- Accommodation provided by the private developers in close proximity to the institutions of higher learning.

*Centralized-Catering* - students take their meals from a central catering unit on a pay as you eat system or pre-arranged meal plans.

*PAYE* - Pay As You Eat system, a catering in institutions of higher learning (public and private) (introduced in public universities in 1991/92 academic year) where students pay for their meals in cash from a central catering unit within campus.

*Pastoral Care* – help with personal needs and problems given by a teacher, or counselor.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Background of Student Accommodation in Kenya

Free primary schooling was introduced by Government of Kenya in 2013 (Basic Education Act, 2013), leading to the increase in secondary school enrolment as shown in Table 2.1 below. The high numbers of high school graduates meant an increase in demand for university and college admission, resulting in rapid rise in number of colleges and universities. Presently, there are 35 government universities (30 chartered and 5 Constituent Colleges), 23 private universities (18 chartered, 5 constituent colleges), with 13 having Letters of Interim Authority (LIA) (Commission of University Education, 2017).

**Table 2.1: Secondary School Enrolment by Year**

Academic Year	Secondary Enrolment
2002	778,601
2003	882,513
2004	926,150
2005	934,149
2006	1,030,080
2007	1,180,267
2008	1,382,110
2009	1,507,546
2010	1,653,300
2011	1,767,700

**Source: Economic Survey (2006); (2009)**

As shown in Table 2.2 below, higher enrolments in secondary schools led to gradual increase in enrolment (3 times more in 2010/2011 than academic year 2001/2002) at the university level. This decision by GOK to fund basic education instead of

university education (Sawyer, 2004) put pressure on non-core services like catering and accommodation. Kenyatta University, for example, had an undergraduate student population of 50,425 against a total capacity of 10,086 (KU Accommodation Services, 2013). This left a deficit of approximately 30,339 students seeking private accommodation (KU Data Section, 2013).

**Table 2.2: University Enrolment by Year**

<b>Academic Year: 2001 - 2011</b>	<b>Estimated Enrolment</b>
01 – 02	59100
02 – 03	71300
03 – 04	81000
04 – 05	82000
05 – 06	92300
06 – 07	112200
07 – 08	118200
08 – 09	112800
09 – 10	177700
10 – 11	198200

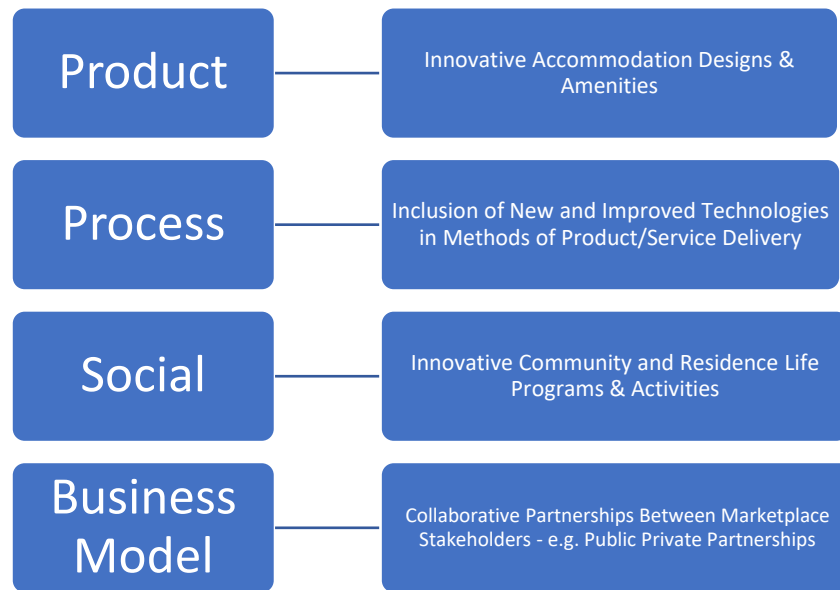
**Source: ICEF Monitor 2015; Ministry of Education, 2012**

The few studies available locally pertaining to student accommodation [such as Wesonga, Mwiria et al., (2007); Ndung'u, J. W.(2015); Gisesa (2012); Njagi (2008); Ileri (2006)] shed some light on various aspects of accommodation for college and university students in Kenya, particularly on shortage of student accommodation, and the state of facilities in institutions of higher education. Unfortunately, little information is available on student accommodation needs and preferences in relation to type of accommodation, location, room size and amenities, recreational facilities, live-learn spaces, sustainability features, technology, security and privacy, gender segregation.

A study by Gisesa (2012) reveals an acute shortage of on-campus accommodation in Kenya, saying this has seen students seek alternative accommodation in most cases in dingy, awkward and insecure sides of Nairobi City. These insecure locations expose students, especially female students to sexual harassment. Such findings paint an appalling picture of accommodation situation in the country that is in dire need of urgent intervention to remedy the situation. The findings show that for Kenyan students to enjoy the academic and social benefits of quality student accommodation, stakeholders in the student accommodation sector must innovatively factor in global best practices in the efforts to plug in the current shortage of student accommodation in the country.

## **2.2 The Concept of Innovation**

Innovation is the process of transforming available knowledge to new products, processes or services (Porter & Stern, 1999). The study attempts to approach the concept of innovation in student accommodation from four perspectives: product (innovative design and amenities); process ( innovative management or administrative processes); social (innovative community and residence life programs); and business model innovation (collaborative accommodation development models) as depicted in Figure 2.1.



**Figure 2.1: Model of the Concept of Innovation in Student Accommodation**

### **2.2.1 Product Innovation: Accommodation Design and Amenities**

According to the Cambridge Dictionary, a product is innovative when it is completely new, or has undergone a process to improve it. For many students in colleges and universities in Kenya, choice of accommodation is based on accessibility: closeness to food outlets, closeness to campus, and access to public transport. However, the millennial student is quickly moving beyond matters of convenience and considering factors such as community, technology, sustainability, and flexibility.

### **2.2.2 Process Innovation: Residence Management and Administration**

The OSLO Manual (2005, page 49.) says that a production process is innovative when it adopts new technology or uses improved methods to produce goods and services. This research seeks to provide developers with the knowledge of what students need

and require to be provided in student residences, and give ideas to developers and operators on how to create value for which students will pay.

### **2.2.3 Social Innovation: Community and Residence Life Programs**

In a social context, there is also a chance to realize the benefits of contemporary social innovation with the PBSA concept. According to Stanford University's Center for Social Innovation, social innovations are a result of systemic development and deployment of changes that solve social challenges or support social good. Modern PBSA will encourage students from different universities and colleges, from different parts of Kenya, Africa and the world to live together and exchange ideas and values; to take on new roles and create new relationships thereby integrating students in public and private universities and colleges. The relationships built while in college can benefit the student later in life or their careers.

### **2.2.4 Innovation in Business Models: Collaborative Models for New Accommodation Development**

In his theory of entrepreneurship and innovation, economist Schumpeter (1942) suggested industries must continuously change their internal financial structure, and find better or more efficient processes and products. This calls on institutions and private accommodation providers must constantly apply new ideas, create new market-responsive products either as, or by improving existing services. With this approach, the accommodation developers enable students' satisfaction in the accommodation sector.

With new information from studies about the student accommodation sector, universities and colleges can have a better understanding of the output good student accommodation adds to student development, allowing the institutions to have better structured partnerships with developers and other private accommodation providers to create suitable accommodation developments which meet the demands of the modern college student.

## **2.3 Factors Influencing Students' Choice of Accommodation**

The student today has different tastes and preferences for accommodation while in college. This is partly because of exposure to different forms of modern student accommodation locally and in other parts of the world. Some of the factors and trends that drive Student's choice of accommodation include:

### **2.3.1 Location and Neighborhood**

Studies have shown that some students consider the location of accommodation and the attributes of the neighbourhood as more important than the residence itself (Wang and Li, 2006). The residential halls should be in close proximity (walkable distance) to the campus, catering, and entertainment facilities (Hassanain, 2008 p.127).

Khozaei et al.(2010) studied the level of satisfaction with student accommodation at UniversitiSains Malaysia and found that 48% lived in on-campus hostels and 52% outside the main campus. For students living on campus, distance from campus facilities, safety of room, size of room and security within the hostels were key factors. The significant difference for students living off campus was conditions of exterior of building, transport and internet network.



Sirgy et al. (2005) studied three universities in the USA to shed light on the quality of life of students in colleges and satisfaction with accommodation facilities influenced the level of satisfaction. They found that residential hostels are much closer to campus than off-campus apartments. The study showed that closeness to campus was a key determinant of the decision of where to live, more particularly for first year students.

### **2.3.2 Architectural Appeal: Layout and Design**

Many studies reveal that students would prefer campus accommodation to be similar to their home environment (Thomsen, 2007). Thomsen further says that where a student strongly feels like a sense of home, they try to personalize their campus rooms to create a perception of home. It is therefore important that architects factor in the influence of similarity with home when designing and laying out student residences so as to create a perception of home. For most female students, adding attributes found at home especially physical facilities, comfort, privacy and security make the residence halls similar to home (Khozaei et al., 2010).

It is apparent that millennial students are creating real life and virtual communities (Sherer, 2003) and want to interact with each simultaneously in these environments. Student accommodations providers must therefore consider when planning a residential design to create a critical aspect of a 21st-century college experience (Macintyre, 2003).

Baum et al. (1979) in a study concluded that accommodation with wide and long corridors gave students a sense of less crowdedness, compared to shorter and narrow ones. In another study, Kaya and Erkip (2001) observed increased competitiveness, social withdrawal and uncooperativeness among students living in dorms with long corridors.

### **2.3.3 Privacy and Personalization**

A study of residence halls in Nigeria found that lack of privacy contributed a negative perception on satisfaction with student rooms (Amole, 2005). Thus, private space is a key factor to students when choosing accommodation. Personalization of space by decorating the room to make it look like home was also noticed among majority of students in a study by Hansen and Altman (1976).

Kaya and Erkip (2001) theorized that students who perceived their accommodation private had an increased level of satisfaction with their living environment. Ankara Karlin, et al (1979) while conducting a similar study at Bilkent University affirmed that the size of room influenced student's level of satisfaction. The study found that students staying three per room were highly dissatisfied compared to those who were living two per room.

These findings echo what other researchers have gone to a great length to show: students are demanding more privacy in their accommodation. In an online study, Balogh et al (2005) interviewed 284 students, revealing that students preferred apartments to traditional residence halls (p. 55) because of a high perception of privacy. A variety of recent studies say privacy, crowdedness and control over personal space determine overall satisfaction (Walden et.al, 1981; Vinsel et al., 1980).

### **2.3.4 Facilities and Amenities**

Studies have suggested that convenience facilities within student residences and in the neighbourhood contribute to satisfaction with the accommodation provided, claiming that adequate provision of these facilities make the accommodation environment feel like home (Gea and Hokaob, 2006; Mohit et al. 2010; and Salleh, 2008). Several

scholars advocate for residential facilities that support studying and social life of students. Inclusion of social spaces that can be used for games, entertainment as well study rooms, computer rooms, and libraries can transform residential halls into a community (Riker and Decoster, 2008, p.81).

More students today expect to have amenities similar to home while at college, thus making apartment style options more popular (Marcus & Millichap, 2009). It further posits that traditional campus residence halls of two in a room and common bathrooms at the end of the hall are increasingly becoming unpopular. The trend of offering apartment style accommodation for senior students is conspicuously prevalent. Accommodation with apartment style living is now more fashionable, triggering demand for off-campus housing.

Angelo & Rivard (2003) identified privacy, luxury, privatization, safety and security, live-learn spaces and going green as six modern inclinations in student housing in the last decade. However, student needs and preferences of students have significantly evolved and amenities once considered as luxuries – rooms with private bath, communal spaces, kitchens, private bedrooms – have become necessity (Desoff, 2007). Laundry facilities, internet connectivity, a safe and secure environment, in-room ACs gyms and multi-use communal spaces for study or entertainment have become expectations. Literally speaking, students want everything fixed in their own spaces so as to have an active academic, extracurricular, cyber, and social lives (Miller, 2004).

### **2.3.5 Safety and Security**

With the recent security threats the world over, the security sector has embraced technology in solving the traditional access challenges. New student accommodation developments have moved away from the standard lock and key access found in older halls of residence, embracing wireless technology and use of card access systems. These technological developments have addressed most safety and security concerns of students and parents, adding access control and CCTV cameras to human presence in most residences. At Boston University, students use their student ID cards to access accommodation, although this is supplemented by physical presence of guards on watch at the lobby (Angelo & Rivard, 2003).

Joan (2010) found out that students who live or reside in poor environment are likely to have poor academic performance compared to those in a good environment. For instance, the academic performance of students living in insecure areas was adversely affected. These findings are echoed by Oladiran (2013) who also noted that the condition of accommodation facilities have serious impact on academic performance of students, especially poor facilities and overcrowding. This makes the students to consider security so serious in choosing accommodation facility.

### **2.3.6 Connectivity: Mobile Connectivity, Internet, Wireless**

#### **Technology**

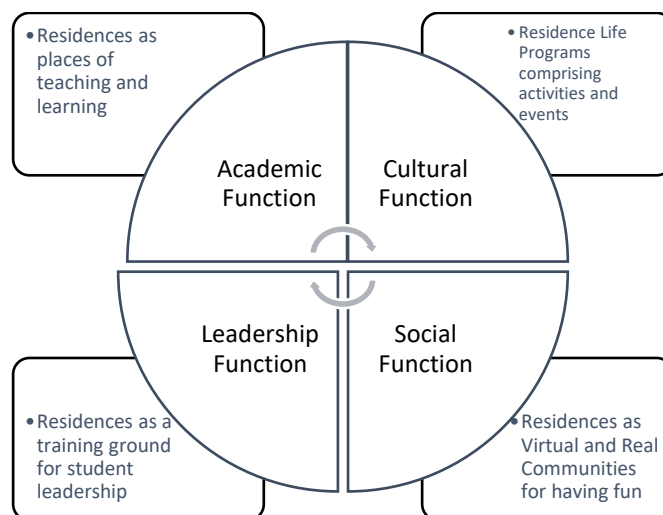
Clark Nexsen, a US based firm that provide design solutions and expertise to a wide range of markets, in a recent student accommodation trends analysis stated that student accommodation providers need to seek new living arrangements for the millennial student. Technology has transformed the way the student of today lives, works, play and communicates. The academic life of the millennial student is

intertwined with their social life. Because of this, technology needs to be core to their accommodation, especially internet/Wi-Fi speeds and mobile phone coverage.

Students that live in private accommodation recommended by institutions in the United Kingdom consider it essential to their student life experience (University of Westminster, 2012). Price et al., (2003) found that availability of quality accommodation was of high importance to first year students in the United Kingdom when making a choice of university to study. The study further found availability of eating choices, internet and mobile connectivity within the living environment important.

### 2.3.7 Community Experience

Derek Swartz, Vice Chancellor of Nelson Mandela Metropolitan University, suggested that student residences ought to be where student can live and learn as well. He suggested four key functions of student accommodation: academic, cultural, social, and leadership (Swartz, 2010) as illustrated in Figure 2.1:



**Figure 2.2: Suggested Multi-Functions of Student Residences**

Source: Researcher (2019)

Figure 2.1 shows that innovative learning models have recently emerged globally with new student accommodation developments, creating spaces that make learning an around-the-clock pursuit. Developers can create residential communities with classroom spaces, designed with the idea of improving student learning, and spaces that encourage students to spend more time on academics.

Pike (2009) studied 502 first year students and reveals that those living within campus were highly open to diversity when compared to those living off campus. Moos and Lee (1979) reinforces Pike's findings. He found that in private accommodation, students are highly independent and support each other to achieve, thus developing a high degree of intellect.

### **2.3.8 Rental Cost**

A study by Claire, Mary, & Kenneth (2010) revealed that millennial students expect more from their accommodation and will pay more for certain facilities and conveniences than their parents did. However, a recent survey by Gawlik *et al*, 2017 revealed that rental cost the primary concern for students. This means that student accommodation providers must provide a range of price options that suits the different categories of students.

One of the popular trends is Bundle Pricing where all utilities are included in the monthly rent, thus helping students with predictability and therefore budgeting for expenses. The approach also allows parents to write one check for the same amount for every month instead of multiple checks for varying amounts every month.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter enumerates the logical steps adopted by the researcher in the course of studying the research problem and discusses the design of the research, population targeted, the technique used to select the sample size, the instrument, procedure for data collection and analysis, and variables adapted by the researcher.

#### **3.2 Design of the Study**

Exploratory method is used in this study. As recommended by Wisker (2001), this design captures detailed information without manipulation of variables. This study used descriptive survey method to collect, summarize, present and interpret information. (Orodho, 2005).

#### **3.3 Population Targeted**

The primary target population were students in universities and colleges in Nairobi, Kenya, with a selection spread between government and private institutions.

#### **3.4 Population Sample & Sampling Procedures**

This research used a deliberate/purposive sampling method to select 4 universities and 2 colleges based in Nairobi to be involved in the study as presented in Table 3.1. University of Nairobi and Kenyatta University were purposely chosen because they represented the biggest institutions of higher learning, so the small sample was representative of the university students in Kenya (Mugenda & Mugenda, 1999).

**Table 3.1: Student Population in Tertiary Institutions**

<b>Institutions</b>	<b>Enrolment</b>
University	565,500
TVET Colleges	202,600
<b>TOTAL</b>	<b>768, 100</b>

**Source: KNBS Economic Survey 2017**

As recommended by Yamane (1967), the sample size was drawn from the population presented in Table 3.1 using the formula  $n = N/1+(e)^2$  (where n represents the sample size, N the population size and e is the level of precision). Using this formula, a sample of 392 students from a total enrolment of 786,100 students in tertiary institutions (KNBS, 2017) was used.

To achieve gender representation from the subgroups of the sample population at each institution targeted (Mugenda & Mugenda, 1999), stratified random sampling was applied, as shown in Table 3.2. The total sample population of 392 students was categorized into male and female students on a 60:40 scale to ensure gender representation. Finally, individuals to administer the instrument to were chosen randomly.

**Table 3.2: Sample Size – Institution and Gender Representation**

<b>College/University</b>	<b>Size</b>	<b>Male</b>	<b>Female</b>
University of Nairobi – Main Campus	132	80	52
Kenyatta University	100	60	40
USIU - Africa	60	36	24
Strathmore University	60	36	24
ADMI	20	12	8
IHTI	20	12	8
<b>Total</b>	<b>392</b>	<b>236</b>	<b>156</b>

**Source: KNBS (2017); Researcher**



### **3.5 Procedure for Data Collection**

To obtain a permit to conduct the field research within Kenya, NACOSTI requires that an introduction letter from University of Nairobi be presented (*Appendix II*). A visit to the targeted universities and colleges to administer the questionnaire was done. The respondents were then led through the instrument, given assurance of confidentiality, and given time to fill in the questionnaires. A set of questions constructed with codes, was asked to the respondents and the answers recorded accordingly. The instrument also contained open-ended questions. The instrument item asked the respondents where they currently lived, what type of accommodation, the amenities and facilities offered, and what they liked and didn't like about the accommodation.

### **3.6 Research Instruments**

Questionnaire was used to gather information from the students. Mugenda and Mugenda (1999) suggested that researchers use a professional to design the questionnaire before discussing with the project supervisor on whether the questionnaire represents the concept of the study. The suggestions should then be incorporated. The draft for this project was discussed with the project supervisor to make recommendations. Recommendations were incorporated into the final instrument administered to the respondents. Orodho (2005) noted that questionnaires are most appropriate to gather data in a descriptive survey. As suggested by Gay (1992) descriptive questions in the questionnaire gives respondents freedom of expressing views and opinions on the subject matter. Questionnaires are cost effective to administer (Walker, 1985), and are a popular data collection method used in education and behavioural sciences (Nkapa, 1997).

After conducting a desktop review of local and global literature, a questionnaire was developed (*Appendix 1*) to be administered by methods of interviews to students in selected tertiary education institutions in Nairobi. The questionnaire sought for quantitative and descriptive data to establish the tastes and preferences of Kenyan students. The questionnaire is structured in line with conceptual framework and seeks to confirm the relevance of innovative global student accommodation preferences to the Kenyan student today. The eight (8) factors included in the study were: location, safety and security, architectural appeal, facilities and amenities, privacy, community, connectivity and rental cost.

Section one collected information on student demographics such as college or campus, year of study, male or female. Section two consisted of structured questions on accommodation information including location, safety and security, architectural appeal, facilities and amenities, privacy, community, connectivity and rental cost and how these affects the decision on where to stay. Section three consisted of questions on residence life, satisfaction with current accommodation, etc. Observation was also used to gather data especially on private accommodation providers in regards to proximity to campus, safety and security, architectural appeal, facilities and amenities, privacy, community, connectivity and rental cost.

### **3.7 Piloting of the Instruments**

The instrument was then subjected to a validity process to find out if the test questions fully represented the items in the conceptual framework (Orodho, 2005). The pre-testing of instrument involved 46 students living at Qwetu Residences on Outering Road – a mixed gender PBSA that hosts students from different universities and colleges was used to evaluate the instrument. The questionnaires were then distributed randomly to the 46 students, 24 male and 22 females. The 46 represented 12% of the sample population (Pett et al, 2003). The sample population was part of a segment of students affected by limited on-campus student accommodation forcing them to seek alternative accommodation off-campus. However, they were not included in the final data analyzed.

### **3.8 Location of Study**

Nairobi City County was used to select the private and public institutions. The universities and colleges chosen provided a good representation of students' accommodation preferences across the Nairobi City. Nairobi City County was chosen because of its diversity of institutions of higher education, diversity of students and because it is accessible and familiar (Singleton et al., 1993).

### **3.9 Procedure for Data Analysis**

Qualitative data collected was analyzed according to pre-determined factors while the descriptive percentages was used to analyze quantitative data. The information was presented using tables (Bell, 1993).

# **CHAPTER FOUR**

## **DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION**

### **4.1 Introduction**

Responses and response rates are contained in the first section of this chapter, followed by the profiles of respondents. The third section analyses, presents and interprets the relationship between factors under investigation. The presentation and interpretation were in line with the objectives of the study. Tables showing frequencies and percentages are used to present the findings. Descriptive analysis by use of percentiles and frequencies has been used for each research objective in line with requirements of a descriptive research design adopted in this study.

### **4.2 Response Rate**

392 university and college students were selected as sample size, with 236 being males and 156 females on an assumptive ratio of 60:40. 392 instruments were administered, with 325 fully responsive, registering a questionnaire return rate of 83%. Generally, 30 to 50 percent response rate is considered reasonable for making statistical generalizations (Sanders et al., 2003).

### **4.3 Profiles of the Respondents**

Profiles of respondents relating to gender, religion, age, and year of study are presented in this section. Profiling of the respondents was informed by the items in the research instruments used.

### 4.3.1 Gender Distribution

The instrument collected data on whether respondents were males or females. Responses from respondents on gender are as shown in Table 4.1

**Table 4.1: Gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Male	200	62
Female	125	38
<b>Total</b>	<b>325</b>	<b>100</b>

The results in Table 4.1 certify the 60:40 gender assumption within  $\pm 2$  margin of error and therefore capable of giving a fair representation of each gender concerning their accommodation needs. With these findings developers would know the ratio of rooms that would cater for the unique needs of both male and female, students.

### 4.3.2 Religion

Respondent's religion was considered important in this study in respect to responding to unique accommodation needs that may be influenced by religious beliefs.

**Table 4.2: Religion**

<b>Religion</b>	<b>Frequency</b>	<b>Percentage</b>
Christian	255	78
Muslim	60	18
African traditional	8	3
None	2	1
Other (specify)	0	0
<b>Total</b>	<b>325</b>	<b>100</b>

The findings of this study presented in Table 4.2 confirms data available at KNBS showing that Christians are nearly 70% and 25% adhere to indigenous religions, while 6% are Muslim. The study encompassed various groups and each group has specific needs regarding profession of faith which affects accommodation priorities. Student accommodations should therefore endeavor to cater to the needs of all religions. Student accommodation providers in the United Kingdom have incorporated multi-faith spaces. (Dinham and Jones, 2010).

### 4.3.3 Distribution by Age

To better understand how age affects accommodation needs, respondents indicated their age group under five categories: under 16 years; 16 – 20 years; 21 – 25 years; 26 – 29 years; and over 30 years. The data is summarized in Table 4.3.

**Table 4.3: Distribution by Age Group**

<b>Age group</b>	<b>Frequency</b>	<b>Percentage</b>
Under 16	0	0
16 – 20 years	126	39
21 – 25 years	164	50
26 – 30years	30	9
Over 30 years	5	2
<b>Total</b>	<b>325</b>	<b>100</b>

Results in Table 4.3 show that 39% of respondents were below 20 years, pointing to a much younger generation of students. As referenced in the literature review, many students leave the comfort of home to go to college at a very young age, and therefore validates the finding elsewhere in this study that they prefer their accommodation to have a homey feel. Accommodation providers must therefore include the accommodation needs of the younger student of today.

## 4.4 Accommodation

The questionnaire was also used to determine the preferences of students in choice of accommodation. The data is contained in Table 4.4 to Table 4.27.

### 4.4.1 Current Location

When asked about the current residence, respondent data is as shown in Table 4.4.

**Table 4.4: Current Location**

Current Location	Frequency	Percentage
On-campus	138	42
Off-campus	187	58
<b>Total</b>	<b>325</b>	<b>100</b>

Results in Table 4.4 reveal that 42% of students live on-campus while 58% were off-campus residents. Majority of the student live outside the campus. This can be associated with limited accommodation within the campus and preference by some students to stay outside campus.

### 4.4.2 Location Options

The study sought data on location preference by the students who were on-campus residents whether they preferred to remain on-campus residents or to becoming off-campus residents. The results were as presented in Table 4.5.

**Table 4.5: Location Options**

Location Options	Frequency	Percentage
On-campus	60	43
Off-campus	78	57
<b>Total</b>	<b>138</b>	<b>100</b>

Table 4.5 reveals that 43% preferred to be on-campus residents while 57% preferred being off-campus residents. This finding almost tallies with the 58% of students in Table 4.4 above who preferred to be outside the campus, mainly because of the unmet needs leading to a feeling of dissatisfaction. This shows that the students' needs have evolved and no longer just need the usual amenities but need much more which the institutions are not providing.

#### 4.4.3 Pay More Off Campus

The study sought data on whether the respondents who preferred off-campus to being on-campus residents were willing to pay more to live off-campus if all factors were held constant. The data is shown in Table 4.6.

**Table 4.6: Pay More Off Campus**

<b>Pay More Off Campus</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	45	58
No	33	42
<b>Total</b>	<b>78</b>	<b>100</b>

The data summarized in Table 4.6 show 58% of students were willing to pay more while 42% were not willing to pay more. This can be interpreted to mean students are prepared to pay more for accommodation that satisfies their needs. The modern students put their accommodation satisfaction first regardless of the cost and would not mind paying more to have what they need.

#### 4.4.4 Current Accommodation

Table 4.7 presents results of data on the current nature of accommodation of the students who were off-campus residents.



**Table 4.7: Current Accommodation**

<b>Current Accommodation</b>	<b>Frequency</b>	<b>Percentage</b>
Live-at-home	32	17
Parent-owned residence	3	2
Student Apartment - Furnished	40	21
Student Apartment - Unfurnished	49	28
Shared Multiple Roomed Housed	35	19
Single Room – Unfurnished	24	13
<b>Total</b>	<b>187</b>	<b>100</b>

The data presented in Table 4.7 show that 17% of students lived at home and majority (89%) live in various types of student accommodation outside of home. Nearly a third of students prefer furnished student apartments. This preference can be attributed to such residences having a home appeal. A third of students prefer apartments as such houses are designed to have a home appeal even though most of them are not furnished.

#### **4.4.5 Monthly Rent**

This element was to find out the monthly rent paid by students. The results are presented in Table 4.8.

**Table 4.8: Monthly Rent**

<b>Monthly Rent (KES)</b>	<b>Frequency</b>	<b>Percentage</b>
Up to 4,000	50	17
4,001 - 8,000	126	43
8,001 - 10,000	72	24
10,001 - 15,000	32	11
15,001 - 20,000	8	3
20,001 - 25,000	3	1
25,001 - 30,000	2	1
Above 30,000	-	-
<b>Total</b>	<b>293</b>	<b>100</b>

Results in Table 4.8 show that none of the students paid above KES 30,000 rent. Most students (71%) pay between KES 4,001 and KES 10,000 as such residences are pocket friendly though about 16% would pay more as witnessed by those who are willing to pay up to KES 30,000 just to have their needs met. The findings show that student accommodation providers, while coming up with housing that meet student needs and preferences, must also that the rental cost is affordable and within their financial reach.

#### **4.4.6 Inclusions in the Rent**

The data shown in Table 4.9. was to find out what was included in the rent paid.

**Table 4.9: Inclusions in the Rent**

<b>Inclusions in the Rent</b>	<b>Frequency</b>	<b>Percentage</b>
Backup Generator	138	78
Cleaning of Common Areas	178	100
D-STV in Common Room	148	83
Garbage Collection	178	100
Parking	10	6
Security	145	81
Water	150	84
Wi-Fi	148	83
Other Things (Please Specify)	0	0

As data in Table 4.9 show, the majority of current student accommodation provided uninterrupted power supply (78%) and communal TV (83%). All the students had cleaning of common areas and garbage collection included in the rent. 81% and 84% had security and water included in the rent while 83% had Wi-Fi included. The respondents who had majority of these services included in rent were residing within the campus. Even though the universities seem to provide basic amenities and facilities, the residence halls remain a source of dissatisfaction for the students, given that 58% would prefer to stay off-campus. Accommodation providers especially private developers must therefore design a rental model which includes the basic amenities and facilities in the rent cost.

#### 4.4.7 Furnished or unfurnished

The study sought data on whether the respondents stayed in furnished or unfurnished residence and the results are as shown in Table 4.10.

**Table 4.10: Furnished or Unfurnished**

<b>Furnished or Unfurnished</b>	<b>Frequency</b>	<b>Percentage</b>
Furnished	217	67
Unfurnished	108	33
<b>Total</b>	<b>325</b>	<b>100</b>

From Table 4.10, 67% lived in furnished residence with some form of basic amenities and facilities provided. However, a good percentage of houses have not provided any amenities or facilities to the students. This indicates an up to 33% population of students with unmet needs that student accommodation providers need to address.

#### 4.4.8 Furnishing

When asked what was provided in the furnished houses, students gave the information shown in Table 4.11.

**Table 4.11: Furnishing**

<b>Furnishing</b>	<b>Frequency</b>	<b>Percentage</b>
Bed	217	100
Bedside table	34	12
Mattress	217	100
Study chair	200	68
Study table	200	68
TV Unit	5	2
Kitchenette	6	2
Cooker (Gas/Electrical)	4	1
Microwave	6	2
Refrigerator	3	1
Other items (please specify)	0	0

Table 4.11 data clearly shows that all the furnished residence had beds and mattress. Majority of the residence also had study chair and study table. However, they lack kitchen appliances and electronic devices such as refrigerator, TV unit, etc. Thus, most hostels are concerned with just the basic necessities and do not cater for the unique needs of modern students. Therefore, the accommodation providers should consider giving more amenities and facilities to the students.

#### 4.4.9 Reasons for Selecting Current Accommodation

As to why the respondents chose their current accommodation, the students responded as shown in Table 4.12.

**Table 4.12: Reason for Current Accommodation**

<b>Why Current Accommodation</b>	<b>Frequency</b>	<b>Percentage</b>
Ample Parking	0	0
Availability of Lift	0	0
Availability of Wi-Fi	10	9
Clean Common Areas	3	3
Rental Cost	12	11
Easy Access – Near Major Roads, Good Roads	5	4
Good Neighborhood	10	9
Good Security	13	12
Near College	30	28
Near Family/Friends/College Mates	6	6
Near Public Transport	0	0
Near Shopping Centers	3	3
Presence of Backup Generator	0	0
Presence of Borehole Water	0	0
Quality of House (Finish, Fittings)	10	9
Recommended by Others	4	4
Someone Else Decided E.G. Parent/Guardian/College	2	2
Spacious House	0	0
Provision of Meals	0	0
Other Reasons (Please Specify)	0	0
<b>Total</b>	<b>108</b>	<b>100</b>

From results in Table 4.15, the top priority for majority of students is to stay near the college as much as possible. This is followed with security and rental cost at 12% and 11% respectively. While many insecurity involving campus students have been on the increase off campus, developers must innovatively look for ways to give both students and parents peace of mind e.g. high perimeter fencing, security lighting, guards, electronic access cards, etc. The Kenyan student today is also concerned with staying in good neighbourhood and has a taste for good house quality as supported by 9%. Thus, modern accommodation providers need to consider these top priority factors when putting up students' residence.

#### 4.4.10 Amenities Available

When asked which amenities were available in the accommodation, the responses are presented in Table 4.13.

**Table 4.13: Amenities Available**

Amenities Available	Frequency	Percentage
Backup Generator	138	42
Borehole Water	33	10
Convenience Shops (M-PESA Shop, ATM, Salon/Barber, Minimart)	325	100
Pay TV (DSTV, ZUKU, Star Times)	143	44
Garbage Collection	150	46
Lifts	3	1
Parking	6	2
Security Access Cards	3	1
Wi-Fi	250	77
Social Spaces i.e. Recreational Lounge (s)	140	43
Gym	138	42
Swimming Pool	138	42
Others (Please Specify)	0	0

As indicated in Table 4.13, all students (100%) had some form of convenience shops within their accommodation. A good number have access to backup generator, pay TV, garbage collection, social space gym and swimming pool. A majority of respondents (77%) had an access to Wi-Fi which has become part and parcel of modern student. However, the residences have not fully embraced modern security technologies like electronic access cards, lifts and have limited parking for self-drive students as represented by 2% or below.

#### 4.4.11 Roommates

When asked how many roommates they currently had, the students responded as shown in Table 4.14.

**Table 4.14: Number of Roommates**

<b>Number of Roommates</b>	<b>Frequency</b>	<b>Percentage</b>
Live Alone	116	36
1 Roommate	73	22
2 Roommates	60	18
3 Roommates	58	18
4 Roommates	12	4
5 or more Roommates	6	2
<b>Total</b>	<b>325</b>	<b>100</b>

The data for number of roommates preferred is presented in Table 4.14 and shows that 36% stayed in live alone, showing preference for privacy. Perhaps to share cost, 58% lived with 1 - 3 roommates. This shows that the students value their privacy so much and would prefer to stay alone, or as few as possible. The accommodation

providers must build houses which cater for privacy as much as possible to enhance students' satisfaction.

#### 4.4.12 Ideal Number of Roommates

After revealing the current number of roommates, the instrument further probed on the ideal number of ideal roommates the respondent preferred to have. Table 4.15 tabulates the findings.

**Table 4.15: Ideal Number of Roommates**

<b>Ideal number of Roommates</b>	<b>Frequency</b>	<b>Percentage</b>
None (0)	197	61
One (1)	67	21
Two (2)	46	14
Three (3)	8	2
Four (4)	4	1
Five (5) or more	3	1
<b>Total</b>	<b>325</b>	<b>100</b>

The results in Table 4.15 reinforces the privacy factor presented in Table 4.14, showing that 61% value their privacy and would not wish to share a room if the conditions permitted. Very few considered sharing room and even those who would, prefer to share want only 1 or 2 roommates. This explains why most students stay alone or have few roommates. Thus, accommodation providers should put up more rooms for single occupancy or with few occupants. Even where there is shared apartments, each student will prefer their own bedroom.

#### 4.4.13 Proximity to College

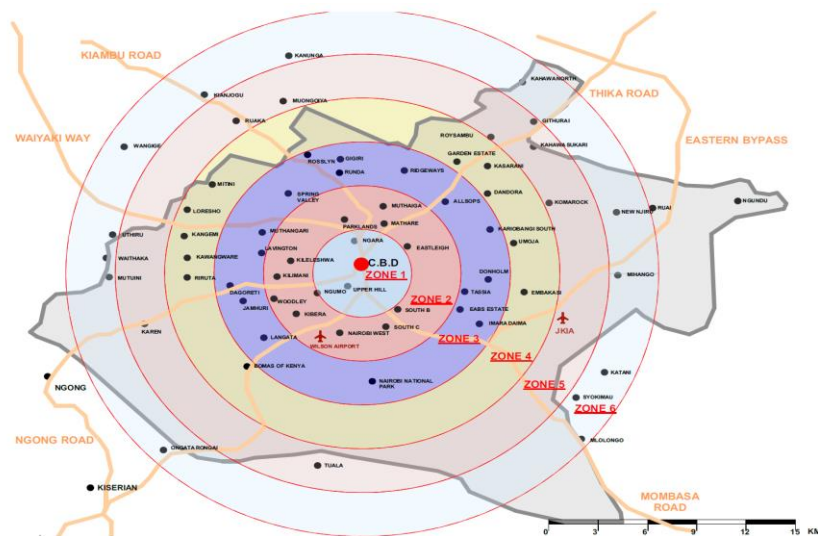
The distance of accommodation from college was put to test and respondents indicated in Table 4.16 their preferred distance when considering where to live.



**Table 4.16: Proximity to College**

Proximity to College	Frequency	Percentage
Under 3 km	219	67
3-5 km	75	23
6-10 km	18	6
11-15 km	10	3
Above 15 km	3	1
<b>Total</b>	<b>325</b>	<b>100</b>

Table 4.16 shows 67% of students surveyed prefer to live within 3KM from the college. Figure 4.1 shows distances preferred by students studying in universities and colleges within the defined zones as 3KM in Nairobi City and its environs. Innovative ownership models could emerge, where developers partner with private landowners in proximity to the college to ensure as many student housing developments are within this preferred distance.



**Figure 4.1: 3KM Zoning of University and College Catchment for Nairobi (Qwetu, 2018)**

#### 4.4.14 Ideal Apartment

The study sought to find out which would be an ideal apartment for the respondents without considering rental cost. The data is presented in Table 4.17.

**Table 4.17: Ideal Apartment**

<b>Ideal Apartment</b>	<b>Frequency</b>	<b>Percentage</b>
Off-campus, Cluster Bedrooms (sharing kitchen, dining & lounge), Multiple Roommates	30	9
Off-campus, One Bedroom Units, Single Occupancy	120	37
On-campus, Apartments Style Units with multiple Roommates	5	2
Off-campus, Student Style Units, Single Occupancy	68	21
On-campus, Dorm Style Units, Single Occupancy	72	22
On-campus, One Bedroom Units, 2 sharing	20	6
On-campus, Dorm Style Units, 2 sharing	10	3
Others (Please Specify)	0	0
<b>Total</b>	<b>325</b>	<b>100</b>

Table 4.17 demonstrates that while 37% preferred to stay in off-campus one-bedroomed houses alone, 22% preferred to stay on-campus but in single occupancy while 21% preferred off-campus single occupancy. This shows that 80% of students prefer to stay alone to enjoy their privacy. However, it is worth noting that even though they want single occupancy they want to have modern apartments as opposed to dorm or student style units. Accommodation providers should put up modern apartments with preferably single occupancy units.

#### 4.4.15 Activities When in the Room

The study went out to establish what the students surveyed were likely to be doing while in the room and presented the results shown in Table 4.18.

**Table 4.18: Activities When in the Room**

<b>Activities When in the Room</b>	<b>Frequency</b>	<b>Percentage</b>
Gaming	60	18
Studying	119	37
Sleeping	19	6
Eating	58	18
Hanging Out	40	12
Partying	29	9
Other (Please Specify)	0	0
<b>Total</b>	<b>325</b>	<b>100</b>

The results in Table 4.18 indicate that as much as studying takes a big chunk of the respondent's time while in the room, entertainment and socializing seem to be key activities as well (57%). This is evidence that developers need to develop houses that cater for various entertainment and social needs of students, and install amenities and infrastructure needed for gaming and eating in the rooms. Thus, the accommodation providers must build spacious rooms and furnish them with the necessary amenities and facilities to host friends, either for study or hanging out.

#### **4.4.16 Study Location**

Respondents were asked where they studied most, and the data is as shown in Table 4.19.

**Table 4.19: Study Location**

<b>Study Location</b>	<b>Frequency</b>	<b>Percentage</b>
In the room, on the desk	62	19
In the room, on the bed or sofa	78	24
On Campus, in the Library	159	49
In the Study Room, in my apartment block	6	2
In the Café, Common Room, Garden or Terrace within the residence	0	0
Off Campus, with friends	20	6
Other (Please Specify)	0	0
<b>Total</b>	<b>325</b>	<b>100</b>

As presented in Table 4.19, even though 49% of the respondents mainly study in the library, a good proportion enjoy studying in the room (43%) while on the desk, bed or sofa. This indicates that studying is not limited to the library or the confines of the university. Thus, the individual rooms should be conducive for studying and provided with the necessary amenities. The accommodation providers must make the apartments and its surroundings conducive for learning, for example, adding in study benches and reading rooms.

#### **4.4.17 Room Size**

Room size was perceived as important when students are determining where to live. The sample population was asked to show how important room size was to them, on a scale of 0-10 (0 = not important at all, 10 = extremely important) and data presented in Table 4.20.

**Table 4.20: Size of Room**

Size of Room	Frequency	Percentage
1	3	1
2	3	1
3	5	2
4	20	6
5	39	9
6	20	9
7	33	10
8	43	13
9	90	28
10	69	21
<b>Total</b>	<b>325</b>	<b>100</b>

The results in Table 4.20 indicate that 62% gave room size a rating of between 7 - 10, showing room size as a very important factor in by students when considering where to stay while in college. The students want accommodation providers to build spacious rooms that can easily accommodate their belongings, wired for their electronic gadgets, enough for individual study and for hosting and entertaining small groups of friends (corroborating findings presented in Table 4.18 and Table 4.19).

#### 4.4.18 Type of Building

When surveyed on the type of building the respondent would like to stay, responses were as shown in Table 4.21.

**Table 4.21: Type of Building**

Type of Building	Frequency	Percentage
Highrise Apartment Tower	74	23
Mid-rise Apartment Complex	146	45
Townhouse Apartments	50	15
Micro-apartments suitable for one resident	38	13
Family House	17	4
<b>Total</b>	<b>325</b>	<b>100</b>

The data shown in Table 4.21 reveal that 68% of students preferred high-rise and mid-rise apartment. Most students preferred to stay in the apartments as they provide a good opportunity to socialize and exchange ideas with a wider community of students. These high rise apartments usually provide many communal spaces amenities where individual and group activities can be held. Such student communities call for institutions and private developers to include social innovation models in the development of student accommodation to enable socio-cultural diversity to thrive (Swarz, 2010).

#### **4.4.19 Architectural Design Style**

Given that students like modern trends, the study was also seeking to establish which type of architectural designs appeal to the respondents. The data is shown in Table 4.22.

**Table 4.22: Architectural Design Style**

<b>Architectural Design Style</b>	<b>Frequency</b>	<b>Percentage</b>
Funky & Eclectic	74	23
Sleek, Clean & Modern	143	44
Traditional & 'Homey'	72	22
No Preference	36	11
<b>Total</b>	<b>325</b>	<b>100</b>

Table 4.22 reveals that 23% preferred funky and eclectic designs while 44% preferred sleek, clean and modern designs. Majority of the students are trendy and want to enjoy the latest designs available in everything including houses. This explains why majority prefer to stay in modern apartments. The accommodation providers should put up sleek and modern houses which are both eclectic and homey.

#### 4.4.20 Design Feature

The research sought to identify the top three (3) most important design features considered by the respondents for an ideal apartment and presents the data shown in Table 4.23.

**Table 4.23: Design Feature**

Design Feature	Frequency	Percentage
Large Room/Living Room	86	26
Open Floor Plan	24	7
Spacious Kitchen	70	22
Study Space	86	36
Wall-to-Wall Carpet in the Room	54	17
Wooden Floor in the Room	40	12
Large Windows with pleasant view of natural surrounding	70	22
Modern/High-end Appliances in the Room	120	37
Large Wardrobe/Storage Space	78	24
Extra Shelving in the Room	32	10
Pin Board in the Room	23	7
Beautiful Exterior Façade	90	28
Beautiful Landscaping & Surrounding	103	32
Good Looking Common Spaces with Stylish Furniture	88	27

The results in Table 4.23 indicate that 37% wanted modern appliances in the room, 36% wanted a big study space, strongly agreed, 32% wanted beautiful landscaping and surrounding, 28% wanted beautiful exterior façade, 27% wanted stylish furniture and 22% wanted spacious kitchen as well as large windows for pleasant viewing. Obviously the modern are up to date with new developments in other parts of the world and want such development included in their residence. They want modern

amenities, spacious rooms, good neighbourhood and modern housing designs. The accommodation providers should incorporate such factors and put up houses which satisfy the students' needs.

#### 4.4.21 Ideal Amenities

When asked what they consider as top three (3) most important amenities for an ideal apartment, the results were as shown in Table 4.24.

**Table 4.24: Ideal Amenities**

<b>Ideal Amenities</b>	<b>Frequency</b>	<b>Percentage</b>
Keyless Access /High-tech Security System for Room & Building	58	18
Ability to paint the room in your favourite colour	26	8
Big Fridge	23	7
Washer-Dryer Facilities in the Building	65	20
Green Features – recycling, door-to-door trash pick-up, etc.	30	9
Each Roommate with own bathroom	55	17
Cable Internet/Wi-Fi Included	69	21
<b>Total</b>	<b>325</b>	<b>100</b>

Confirming the modern trend of internet, mobile connectivity and technology, the results shown in Table 4.24 indicate that 21% needed cable internet/Wi-Fi included, 20% needed washing machines and 18% wanted keyless access. 17% wanted bathroom in each room. The findings show that modern students prioritizes internet as one of the ideal amenities to keep up with friends and for study. The houses should have modern access technologies, amenities and connectivity such as internet provided.



#### 4.4.22 Use of Communal Spaces

The respondents were also asked what communal spaces they would most likely use and the data is in Table 4.25.

**Table 4.25: Use of Communal Spaces**

Use of Communal Spaces	Frequency	Percentage
Study Room	64	20
Game Room	52	16
Fitness Center/Gym	35	11
Quiet Lounge/Reading Area	32	10
Coffee Shop	26	8
Comp-Lab/Cyber Café	61	19
Movie Theater/Cinema Room	21	6
Clubhouse	10	3
Swimming Pool	21	6
Parking	3	1
<b>Total</b>	<b>325</b>	<b>100</b>

The results in Table 4.25 indicated that 20% would use study room, 19% would use cyber café, 16% would use game room. The statistics are evenly distributed showing the various needs of modern students within the student residence. Many student use study locations available and also enjoy social amenities at their disposal. However, majority of the student would not use the parking mainly because they don't own cars. The houses should be built where students are able to enjoy community experience (Swarz, 2010).

#### 4.4.23 Number of Communal Activities Attended

The use of communal spaces was studied, with respondents asked the number of communal activities attended, with results indicated in Table 4.26.

**Table 4.26: Communal Activities Attended**

<b>Communal Activities Attended</b>	<b>Frequency</b>	<b>Percentage</b>
None (0)	8	3
One (1)	24	7
Two (2)	46	14
Three (3)	72	22
Four (4)	97	30
Five (5) or More	78	24
<b>Total</b>	<b>325</b>	<b>100</b>

The results in Table 4.26 indicated that 90% had attended two or more communal activities within the student residences. Majority of the students want to be part and parcel of the community and do not want to be left out on the happenings in the society. This is supported by the high percentage of involvement in communal activities. This makes the students to embrace diversity and become more independent as well as global citizens. Student accommodation developers must therefore incorporate functional and modern social spaces within the residences to meet the socio-cultural development needs of the students today.

#### 4.4.24 Cell-phone Reception

As part of the investigation of modern trends, the study tested, on a scale of 0-10, how important cell-phone reception was when determining where to stay. The data is presented in Table 4.27.

**Table 4.27: Cell-phone Reception**

Cell-phone Reception	Frequency	Percentage
1	0	0
2	2	1
3	13	4
4	25	8
5	35	11
6	60	18
7	70	21
8	65	20
9	30	9
10	25	8
<b>Total</b>	<b>325</b>	<b>100</b>

70% of respondents (Table 4.27) gave cell-phone reception a rating of between 5 and 8, meaning that ability to receive good telephone was important when planning on where to stay. The students need to keep in touch with their peers and with relatives concerning their educational and social life. Being out of reach due to poor network seems catastrophic to the students; they stand to miss out on various activities due to lack of information. Thus, they rank highly the cell-phone reception as a key factor while choosing accommodation. The houses should be built in areas with mobile networks.

#### 4.4.25 Wi-Fi Reception/Internet Bandwidth

Students want to stay connected to the internet. The study sought to find out on a scale of 0-10, how important Wi-Fi reception/internet bandwidth was when determining where to live and presented the data in Table 4.28.

**Table 4.28: Wi-Fi Reception**

Wi-Fi Reception	Frequency	Percentage
1	36	11
2	24	7
3	56	17
4	45	14
5	35	11
6	60	19
7	30	9
8	20	6
9	12	4
10	7	2
<b>Total</b>	<b>325</b>	<b>100</b>

The data in Table 4.28 reveals 61% gave an average rating of between 3 and 6 for importance of internet/wi-fi connectivity. This is could be due to the fact that as long as the cell-phone reception is good, Wi-Fi network connectivity is not highly important. As compared to Table 4.67 above, having a good cell-phone reception is highly important. The housing should therefore be in areas where the students can access internet.

#### 4.4.26 Parent Influence

The importance of the parent in determining where to stay was also tested on a scale of 0-10 and the responses are presented in Table 4.29.

**Table 4.29: Parent Influence**

Parent Influence	Frequency	Percentage
1	0	0
2	4	1
3	5	1
4	35	11
5	66	20
6	84	26
7	64	20
8	32	10
9	20	6
10	15	5
<b>Total</b>	<b>325</b>	<b>100</b>

The results in Table 4.29 show that 66% of respondents gave parental influence a rating of between 5 and 7 while 21% indicating it is highly important (rating of 8-10). This shows that parental opinion counts in the decision on where a student will live. Concerns with proximity to college, security, type of neighbourhood are typical issues with any parent. Parents are the financiers of the students' accommodation; therefore, the students listen to parents concerns and demands when choosing accommodation. Developers therefore must therefore consider parents' financial capability as it determines how much the students will pay for accommodation (as shown in Table 4.8) and hence determines the kind of house the students are likely to stay in.

#### **4.4.27 Factor Analysis**

Factor analysis summarized and presented in table 4.30 was carried out on factors highlighted in the conceptual framework, so as to establish the degree to which each influenced student satisfaction with their accommodation.

**Table 30: Factor analysis**

<b>Variable Factors</b>	<b>Components</b>							
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
Factor 1 – Location And Neighbourhood	0.842	0.432	0.566	0.534	0.654	0.653	0.548	0.421
Factor 2 – Architectural Appeal	0.753	0.435	0.623	0.614	0.725	0.554	0.654	0.453
Factor 3 – Privacy and Personalization	0.783	0.586	0.532	0.734	0.693	0.665	0.674	0.498
Factor 4 – Facilities and Amenities	0.832	0.462	0.554	0.678	0.569	0.776	0.659	0.542
Factor 5 – Safety and Security	0.834	0.548	0.472	0.341	0.455	0.437	0.576	0.490
Factor 6 – Connectivity Factor – Community Experience	0.791	0.446	0.662	0.578	0.598	0.479	0.654	0.232
Factor – Rental Cost	0.641	0.772	0.722	0.583	0.762	0.291	0.234	0.345
	0.801	0.614	0.562	0.685	0.442	0.590	0.567	0.375

In the interpretation of the estimated coefficients, the analysis shows that all the 8 factors have positive coefficients. Therefore, they all have positive influence on student satisfaction. A high value of coefficient indicates the factor has a higher probability to influence student satisfaction with the accommodation. Location and neighbourhood has the greatest influence on the choice and perception of satisfaction while safety and security and facilities and amenities come second and third respectively.

#### **4.5 Discussion of Findings**

The study was carried out to establish student preferences that can be innovatively applied to meet the accommodation needs of the modern student in Kenya. As expected, the findings confirm that institutions and private student housing developers have not adequately factored in the needs and preferences of the Kenyan student today, so as to build accommodation units that cater to their needs. However, in the

United Kingdom and other parts of the world, the sector has been quicker and innovative in incorporating student needs in their housing developments. It seems that the sector in Kenya is not responding to the accommodation needs of this age group as fast as it should.

The study found out that location and neighbourhood is very important to the students while considering accommodation. These findings confirm Wang and Li (2006) assertions that the attributes of the neighbourhood are more important than the residence itself. The study also reflects the conclusion by Hassanain (2008) that the residential halls should not only be in close proximity to the campus but also have catering and entertainment facilities. The study has shown that, having a good neighbourhood gives the students sense of belonging, and that a short distance enables the students' access the lecture halls. This explains why most students' accommodation is found around the learning institutions.

The study has showed that the modern Kenyan student has a desire for the latest architectural design that is appealing and trendy. The finding affirms Thomsen (2007) that students would prefer campus accommodation to be similar to their home environment. The modern students want to have sleek, clean, modern, eclectic houses which should at the same time be homey. The student today has high regards for privacy; they are willing to pay more just to have their privacy maintained. The study also reinforces Kayas and Erkip (2001) assertion that students who perceived their accommodation as private exhibited a higher level of satisfaction with their living condition.

The study has shown that the room size is very crucial for students when choosing accommodation. The study has further shown that students prefer to have few roommates and where possible stay alone. Such findings mirror findings by Karlin, et al. (1979) that concluded that room size and the number of room occupants can influence the students level of satisfaction with their living conditions. This explains why many students are willing to pay more just to have single rooms.

The study found out that various amenities previously seen as luxuries have become part and parcel of the student in Kenya today, e.g. the internet, washer-dryer facilities, and convenience shops among others. These findings ascertain the findings of Mohit et al. (2010) that convenience facilities within student residences and in the neighbourhood contribute to satisfaction with the accommodation provided as they make the accommodation environment feel like home.

The study has shown that students consider safety and security as a major factor when choosing their accommodation. Students take safety and security seriously, explaining why it comes ahead of rental cost in decision making. Such findings share in the Joan (2010) assertion that security is very important in choosing residence as it has serious impact on the student performance.

The study also demonstrated that the student today takes connectivity whether mobile or internet seriously, such that they would avoid areas with poor network reception. This is also confirms Price et al. (2003), view that students considered mobile and internet connectivity in their hostels very important.



The study showed that community experience is very important to modern student as witnessed by high number of students involved in community activities. These findings compliment Pike (2009) argument that staying with other students promotes openness to diversity. The study also has shown that rental cost is very important in choosing accommodation. As found by Gawlik et al. (2017), rental cost is one of the primary concerns of students when choosing where to live. The study further finds that even though the rental cost is a primary concern, an increasingly high number of students are willing to pay more for modern amenities and conveniences (Claire, Mary, & P. Kenneth, 2010).

This study has shown that the Kenyan student today wants sleek and homey mid-rise or high rise apartments built in safe areas and around the learning institution. Moreover, the study found out that the rental cost is highly important and connectivity has become part and parcel of students to reach out to the world.

#### **4.6 Discussion of Innovations in Student Accommodation in Kenya**

As suggested in the definition of innovation by Porter & Stern (1999), the new knowledge in the findings of this study can be transformed by student accommodation providers into new developments, or be used in transforming and improving existing hostels. The current gaps created by inability of accommodation providers to incorporate student needs and preferences call for innovative ways in which the learning institutions and private accommodation providers can collaborate together in putting up student housing that would be much more appealing to the students.

As the findings show, for many students in Kenya, and many parts of the world, the decision on where a student wants to live is influenced by accessibility: closeness to food outlets, closeness to campus, and ease of access to public transport. However,

the millennial (22 – 37 years old) and post-millennial (0 – 22 years) student is quickly moving beyond matters of convenience and considering factors such as community, technology, sustainability, and flexibility. Many or all public institutions will require to use the new knowledge in this study to invest in partial or full renovations of current hostels in keeping with the tastes and preferences of the Kenyan student today.

Student accommodation can be an excellent funnel for social innovation and encourage social progress. Building of modern purpose built student accommodation that incorporates needs and preferences of the student today will encourage students from different institutions, from different parts of Kenya and the world, to live together in one residential community, to and exchange ideas and values, and create new relationships thereby integrating different cultural and social backgrounds. The relationships and connections built while in college can benefit the student later in life or their careers.

Business process innovations will emerge when student accommodation providers, both institutional and private, adopt new and collaborative business models in order to build new and modern student accommodation or improve current ones so as to incorporate the student needs and preferences contained in this study. In his theory of entrepreneurship and innovation, economist Schumpeter (1942) suggested that industries must continuously change their internal financial structure, and find better or more efficient processes and products.

The findings of this study show that institutions and private accommodation providers must constantly implement new ideas, create dynamic student residences or improve existing accommodation and related services. With this approach, the accommodation developers enable students' satisfaction in the accommodation sector.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 Introduction**

This chapter presents the summary of the study, offering a conclusion and recommendations as well as suggestions for further research.

#### **5.2 Summary**

The study was to establish student preferences that can be innovatively applied to meet the accommodation needs of the modern student in Kenya. The study found out that 42% of the respondents were on-campus residents while 58% were off-campus residents. Majority of the student leave outside the campus because of limited accommodation within the campus and out of their own volition. The study also found out that 43% preferred to be on-campus residents while 57% preferred being off-campus residents. The study further showed that 58% were willing to pay more to have their desired amenities.

The study revealed that majority of students (89%) live in student apartments and 71% pay between KES 4,001 and KES 10,000. 81% and 84% had security and water included in the rent respectively while 83% had Wi-Fi included. However, only 6% had parking included in the rent. The study showed that 67% lived in furnished residence while 33% lived in unfurnished residence. Most furnished houses had at least single amenity like bed and mattress provided.

Furthermore, the study showed that the top priority of most students is to stay near the college as indicated by over 90%. This is followed with security and rental cost as 12% and 11% respectively. The study also showed that all the respondents have

convenience shops around and a good number have access to backup power, pay TV, garbage collection, social space gym and swimming pool. A majority of respondents (77%) had an access to Wi-Fi which has become part and parcel of modern student. Most students want some form of privacy as supported by 80% of the respondents.

The study found that students engage in various activities while in the room as supported by even distribution of respondents, and that 45% of students prefer to stay in spacious mid-rise modern apartments with modern amenities fitted in their rightful places. In addition, majority of the students are neither provided with car parking nor uses them. The study has further shown that majority of the student are involved in communal activities and are influenced by their parents.

### **5.3 Conclusion**

Student accommodation plays a vital role in student education. Thus, their role especially in developing economies like Kenya cannot be ignored. However, the existing student accommodation in the institutions is not adequate to cope up with the high demands. This has led to an increasing number of seeking accommodation outside the campus. For this reason, private accommodation providers have emerged to fill the gap providing accommodation to students who are unable to have residence within the campuses.

However, the Kenya student today is one who wants to be up to date with every new technology, facilities and amenities among others. This has put pressure on the accommodation providers especially on how well to satisfy the student unique and ever-changing needs. Most students are willing to pay extra money just to have their needs met. The study has shown that accommodation providers need to build houses which are homely, eclectic, sleek and modern. The students want mid-rise apartments

with modern facilities, internet and mobile connectivity that enables them to virtually interact with others. Students also want spacious rooms and value their privacy. These factors must be incorporated by developers in building houses. The students also want to stay closer to campus where they can easily have accessibility to lecture halls in time.

In reality, the core mandate of any institution of higher learning is education and not provision of accommodation. To meet the unique needs of student, innovative business models (Osterwalder & Pigneur, 2009) between these institutions and private accommodation providers need to be developed to ensure exchange of ideas leading to better understanding of as well as the development of quality houses which meet the unique needs of students. Moreover, private accommodation providers need to be in touch with students' needs as the study findings show that more students prefer off-campus residence.

#### **5.4 Recommendation**

The findings in this study and the conclusion made makes an argument for the following policy recommendation:

The Kenyan government needs to facilitate the enactment and implementation of a regulatory framework that focuses on standardization and regular improvement of both campus-based and off-campus student accommodation in Kenya. Further, the GOK to support the establishment of an agency to champion research and information that will not only feed into the improvement of policies, but also make the current and useful information on student accommodation accessible to stakeholders and accommodation providers.

In the efforts to improve the quality of the current student accommodation in the Kenya, all stakeholders in the student accommodation sector must innovatively factor in global best practices, especially from the United Kingdom and work in collaboration with learning institutions universities in the UK who have pioneered the innovative application of student preferences into student residences. This will help local student accommodation providers to provide a range of quality and price options that suits the different categories of students in Kenya today.

Lastly, institutions need to partner with private accommodation providers to come up with housing that meet the unique needs of students.

## **5.5 Suggestion for Further Research**

While conducting the study, a number of pertinent issues on innovations in student accommodation in Kenya that require further research were encountered. Thus, the researcher suggests the following issues for further research:

First, the effect of accommodation satisfaction on the academic performance of students. Secondly, the best partnership models between the institutions and private accommodation providers. Lastly, the new opportunities for new entrants and existing private accommodation providers within the various university and college catchment areas.

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## APPENDICES

### Appendix I: Letter of Introduction



## UNIVERSITY OF NAIROBI COLLEGE OF HUMANITIES & SOCIAL SCIENCES SCHOOL OF BUSINESS

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01 November 2019

**National Commission for Science Technology and Innovation  
P. O. Box 30623, 00100.  
Nairobi, KENYA.**

Dear Sir/Madam,


**INTRODUCTORY LETTER FOR RESEARCH  
WILFRED OMONDI OPIYO - REGISTRATION NO. D66/71307/2014**

This is to confirm that the above named is a bona fide student in the Master of Science in Entrepreneurship and Innovations Management (MSc. Entrepreneurship and Innovations Management ) option degree program in this University. He is conducting research on ***"Innovations in Student Accommodation in Kenya."***

The purpose of this letter is to kindly request you to assist and facilitate the student with necessary data which forms an integral part of the Project. The information and data required is needed for academic purposes only and will be treated in **Strict-Confidence**.

Your assistance will be highly appreciated.

Thank you.

  
**Jane Muturi**  
For: MSc. Entrepreneurship and Innovations Management Co-ordinator  
WN/jkm

## Appendix I1: Questionnaire<sup>1</sup>

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# QUESTIONNAIRE

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Good morning/afternoon/evening, my name is \_\_\_\_\_. Today we are conducting research in your institution regarding your accommodation needs. May I begin?

### RESPONDENT DETAILS

Respondent's Name			
University/College		Campus	

### QUALITY CHECKS

Interviewer Name			
Date			

### MAIN QUESTIONNAIRE

#### SECTION 1: STUDENT DEMOGRAPHICS

**DM1** Record gender. DO NOT ASK.

GENDER	CODE
Male	1
Female	2

**DM2** Which religion do you belong to?

RELIGION	CODE
Christian	1
Muslim	2
African Traditional	3
None	4
Other (specify)	

**DM3.** Please tell me the age you achieved on your last birthday? Write age of respondent here

\_\_\_\_\_

\_\_\_\_\_

<sup>1</sup> This Questionnaire was adapted from ABC

Please also code where the respondent age falls in the following age brackets.

AGE	CODE	INSTRUCTION
Below 16 years	1	TERMINATE
17 - 20 years	2	
21 - 24 years	3	
25 - 29 years	4	
Above 30 years	5	

**DM4** What is your year of study?

YEAR OF STUDY	CODE
First Year	1
Second Year	2
Third Year	3
Fourth Year	4
Postgraduate	5
Other (Specify)	

## SECTION 2: ACCOMMODATION

**Q1.** Where do you currently live? READ OUT, ASK & RECORD SPECIFIC LOCATION

CURRENT LOCATION	CODE	INSTRUCTION
On- Campus: _____	1	GO TO Q2
Off- Campus: _____	2	SKIP TO Q4

**Q2.** Do you prefer to live on-campus or off-campus? READ OUT

LOCATION OPTIONS	CODE	INSTRUCTION
YES, On-Campus	1	GO TO Q4
NO, Off-Campus	2	GO TO Q3

**Q3.** All things being equal, are you willing to pay more to live off-campus? READ OUT

PAY MORE OFF CAMPUS	CODE
YES	1
NO	2

**Q4.** Which of the following best describe your current accommodation? READ OUT

CURRENT TYPE OF HOUSE	CODE
Live-at-home	1
Parent-owned residence	2

Studio Apartment - Furnished	3
Studio Apartment - Unfurnished	4
Shared Multiple Roomed Housed	5
Single Room - Unfurnished	6

**Q5.** Please tell me, from the following rent categories, where does your total gross monthly rent fall?

Please include water, security, garbage collection, wi-fi (where offered) etc.

MONTHLY RENT (Kshs.)	CODE
Up to 4,000	1
4,001 - 8,000	2
8,001 - 10,000	3
10,001 - 15,000	4
15,001 - 20,000	5
20,001 - 25,000	6
25,001 - 30,000	7
Above 30,000	8

**Q6.** What does your current rent include?

RENT INCLUSIVE OF	CODE
Backup Generator	1
Cleaning of Common Areas	2
D-STV in Common Room	3
Garbage Collection	4
Parking	5
Security	6
Water	7
Wi-Fi	8
Other Things (Please Specify)	

**Q7.** Did you rent it furnished or unfurnished?

IF FURNISHED	CODE	INSTRUCTIONS
Furnished	1	GO TO Q8
Unfurnished	2	SKIP TO Q9

**Q8.** If living in a furnished house i.e. coded 1 in Q3 above ask: Please tell me, which items are provided in your furnished house?

FURNISHING	CODE
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Bed	1
Bedside table	2
Mattress	3
Study chair	4
Study table	5
TV Unit	6
Kitchenette	7
Cooker (Gas/Electrical)	8
Microwave	9
Refrigerator	10
Other items (please specify)	

**Q9.** Please tell me, why did you move to your current accommodation? Multicode

<b>REASONS FOR SELECTING CURRENT ACCOMMODATION</b>	<b>CODE</b>
Ample Parking	1
Availability of Lift	2
Availability Of Wi-Fi	3
Clean Common Areas	4
Rental Cost	5
Easy Access – Near Major Roads, Good Roads	6
Good Neighborhood	7
Good Security	8
Near College	9
Near Family/Friends/College Mates	10
Near Public Transport	11
Near Shopping Centers	12
Presence of Backup Generator	13
Presence of Borehole Water	14
Quality of House (Finish, Fittings)	15
Recommended by Others	16
Someone Else Decided E.G. Parent/Guardian/College	17
Spacious House	18
Provision of Meals	19
Other Reasons (Please Specify)	

**Q10.** Please tell me, which amenities are available in your accommodation. MULTICODE

<b>CURRENT AMENITIES</b>	<b>CODE</b>
Backup Generator	1
Borehole Water	2
Convenience Shops E.G. M-PESA Shop, ATM, Salon/Barber, Minimart	3
Pay TV (DSTV, ZUKU, Star Times)	4

Garbage Collection	5
Lifts	6
Parking	7
Security Access Cards	8
Wi-Fi	9
Social Spaces i.e. Recreational Lounge(s)	10
Gym	11
Swimming Pool	12
Others (Please Specify)	

**Q11.** How many roommates do you currently share your room with?

<b>CURRENT ROOMMATES</b>	<b>CODE</b>
Live Alone	1
1 Roommate	2
2 Roommates	3
3 Roommates	4
4 Roommates	5
5 or more Roommates	6

**Q12.** What is your ideal number of roommates?

<b>IDEAL NUMBER OF ROOMMATES</b>	<b>CODE</b>
None (0)	1
One (1)	2
Two (2)	3
Three (3)	4
Four (4)	5
Five (5) or more	6

**Q13.** When considering where to live, what is the farthest distance from house to your college?

<b>PROXIMITY TO COLLEGE</b>	<b>CODE</b>
Under 3 km	1
3-5 km	2
6-10 km	3
11-15 km	4
Above 15 km	5

**Q14.** Without considering the rental cost, which among the following would be your ideal apartment?

<b>IDEAL APARTMENT</b>	<b>CODE</b>
Off-campus, Cluster Bedrooms (sharing kitchen, dining & lounge), Multiple Roommates	1
Off-campus, One Bedroom Units, Single Occupancy	2



On-campus, Apartments Style Units with multiple Roommates	3
Off-campus, Studio Style Units, Single Occupancy	4
On-campus, Dorm Style Units, Single Occupancy	5
On-campus, One Bedroom Units, 2 Sharing	6
On-campus, Dorm Style Units, 2 Sharing	7
Others (Please Specify)	

**Q15.** When you are in your room, what are you likely to be doing?

ACTIVITIES WHEN IN THE ROOM	CODE
Gaming	1
Studying	2
Sleeping	3
Eating	4
Hanging Out	5
Partying	6
Other (Please Specify)	

**Q16.** Where do you study most?

STUDY LOCATION	CODE
In the room, on the desk	1
In the room, on the bed or sofa	2
On Campus, in the Library	3
In the Study Room, in my apartment block	4
In the Café, Common Room, Garden or Terrace within the residence	5
Off Campus, with friends	6
Other (Please Specify)	

**Q17.** On a scale of 0 – 10 where 0 means “not important at all” and 10 means “extremely important”

Please tell me, how important is room size in your decision on where to stay?

Not Important										Extremely Important
0	1	2	3	4	5	6	7	8	9	10

**Q18.** Please tell me, what type of building are you likely to live in?

TYPE OF BUILDING	CODE
Highrise Apartment Tower	1
Mid-rise Apartment Complex	2
Townhouse Apartments	3
Micro-apartments suitable for one resident	4
Family House	5

**Q19.** In terms of visual appeal, what would be your favourite design?

<b>ARCHITECTURAL DESIGN STYLE</b>	<b>CODE</b>
Funky & Eclectic	1
Sleek, Clean & Modern	2
Traditional & 'Homey'	3
No Preference	4

**Q20.** What would you say are your top three (3) most important design features in your ideal apartment?

<b>DESIGN FEATURE</b>	<b>CODE</b>
Large Room/Living Room	1
Open Floor Plan	2
Spacious Kitchen	3
Study Space	4
Wall-to-Wall Carpet in the Room	5
Wooden Flooring the Room	6
Large Windows with pleasant view natural surrounding	7
Modern/High-end Appliances in the Room	8
Large Wardrobe/Storage Space	9
Extra Shelving in the Room	10
Pin Board in the Room	11
Beautiful Exterior Facade	12
Beautiful Landscaping & Surrounding	13
Good Looking Common Spaces with Stylish Furniture	14

**Q21.** What would be the top three (3) most important amenities for your ideal apartment?

<b>IDEAL AMENITIES</b>	<b>CODE</b>
Keyless Access /High-tech Security System for Room & Building	1
Ability to paint the room in your favourite colour	2
Big Fridge	3
Washer-Dryer Facilities in the Building	4
Green Features – recycling, door-to-door trash pick-up, etc.	5
Each Roommate with own bathroom	6
Cable Internet/Wi-Fi Included	7

**Q22.** From the following list, what are the communal spaces you would most likely use?

<b>USE OF COMMUNAL SPACES</b>	<b>CODE</b>
Study Room	1
Game Room	2
Fitness Center/Gym	3
Quiet Lounge/Reading Area	4

Coffee Shop	5
Comp-Lab/Cyber Café	6
Movie Theater/Cinema Room	7
Clubhouse	8
Swimming Pool	9
Parking	10

**Q23.** Can you tell me the number of activities within your residential community you have attended in the last 12 months?

<b>NO. OF COMMUNAL ACTIVITIES ATTENDED</b>	<b>CODE</b>
None (0)	1
One (1)	2
Two (2)	3
Three (3)	4
Four (4)	5
Five (5) or More	6

**Q24.** How important is cell-phone reception in your selection of an apartment to stay?

<b>Not Important</b>										<b>Extremely Important</b>
0	1	2	3	4	5	6	7	8	9	10

**Q25.** How satisfied are you with the internet bandwidth/Wi-Fi reception at your apartment?

<b>Not Satisfied</b>										<b>Extremely Satisfied</b>
0	1	2	3	4	5	6	7	8	9	10

**Q26.** What role did your parent/guardian play in selecting your college accommodation?

<b>No Influence at All</b>										<b>Greatly Influenced</b>
0	1	2	3	4	5	6	7	8	9	10

**THANK RESPONDENT AND CLOSE INTERVIEW**