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**Factors Influencing Uptake of Low Cost Housing in Kenya: A Case of Nairobi City
County Employees**

BEREKET GOITOM ASGODOM

MBA/90961/16

**A Dissertation Submitted In Partial Fulfillment of the Requirements for the Award
of a Degree of Master of Business Administration**

STRATHMORE BUSINESS SCHOOL

STRATHMORE UNIVERSITY,

NAIROBI, KENYA



2019

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other university. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the thesis itself.

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Bereket Goitom Asgodom
MBA/90961/16

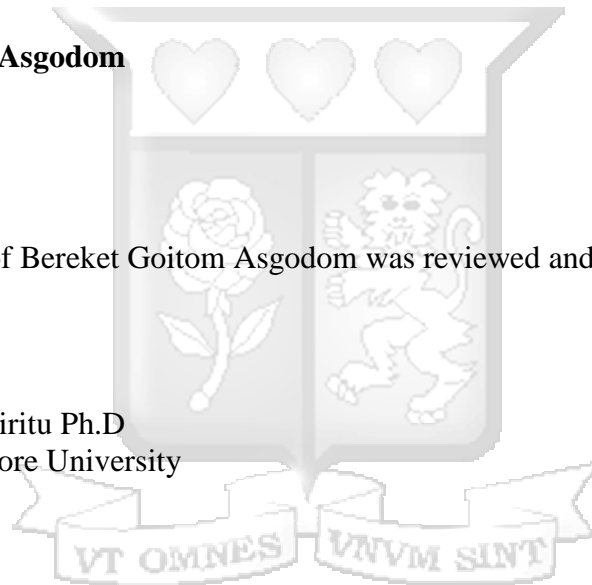
Approval

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DEDICATION

I dedicate this research dissertation to my wife Mrs. Tinsae Asefaw and our children Hiyabel, Samuel and Daniel.



ACKNOWLEDGEMENT

I acknowledge the Almighty God for giving me the knowledge and soberness towards writing and finalizing on this research study.

My other appreciation to my Supervisor for the direction and advise accorded in writing of this research work.

I finally acknowledge my family, friends, relatives, school colleagues and whoever else in one way or the other offered support towards its completion.



ABSTRACT

The purpose of this study was to assess the factors influencing uptake of low cost housing in Nairobi City County government employees. This study was guided by the following specific objectives: to establish the influence of varying price levels on uptake of low cost housing in Kenya, to determine the extent to which disposable income influences uptake of low cost housing in Kenya and to determine the influence of loan repayment period on uptake of low cost housing in Kenya. This study was guided by two theories namely: Housing Adjustment Theory and the Economic Theory of Housing Tenure Choice. This study used descriptive survey research design approach. The target population comprised of all the civil servants working for the City County of Nairobi headquarters. Specifically, the study targeted the 531 top, middle and lower level staff respectively responsible for the day to day operations in the departments. For the case of this study the researcher used quota sampling technique to select 20% of the top, middle and lower level staff respectively working in the city county of Nairobi departments. The sample size was 106 possible respondents. This study used a questionnaire as the only data collection tool for primary data. Data collected in this study was analyzed via quantitative methods and assembled to form the final findings and interpretations. The SPSS program (Version 22.0) was used as the main statistical tool of calculating the expected parameters. Inferential statistics like correlation, ANOVA and regression were applied to establish the association between the dependent and the independent variables. The study concluded that there is a moderate agreement that; overall an increase in the pricing of homes reduces home affordability and vice versa. Most staff were worried of the price the government has set, they also agreed that the price levels relate well with set market prices by other organizations like real estate firms and that they were satisfied of the government policy on low cost housing and affordability. The study concluded that selected land prices in Nairobi County as per the government criteria were reasonable, whereas other land prices were extremely high. Associated land prices where the houses are built on is very costly, land prices are not harmonized in the whole of Nairobi County and that there is a poor system of land records and pricing is always not efficient. The study concluded that most staff moderately believed that the uptake of low cost housing is directly related to income levels for individuals, most civil servants/employees of Nairobi City County can afford to purchase bigger better quality houses compared to low income earners who have to struggle to obtain at least decent housing. The study concluded that the loan repayment period set by the government affect uptake of low cost housing and affordability to a very great extent and there is an optimal repayment period which would not always put unnecessary pressure on respondent's income.

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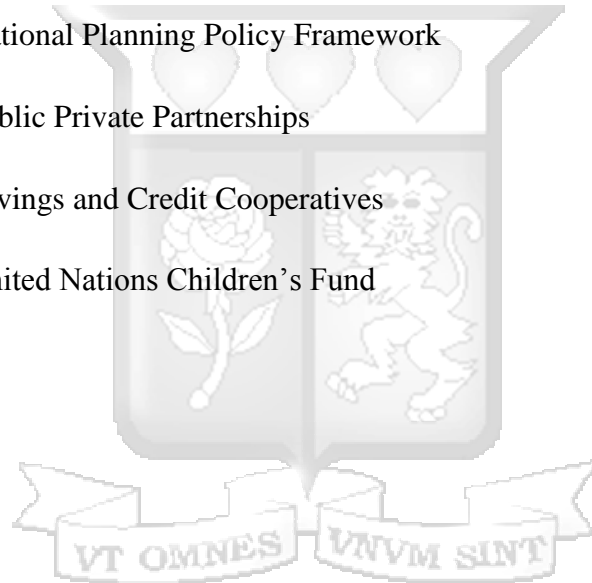
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LIST OF ABBREVIATIONS AND ACRONYMS

AFDB:	African Development Bank
CBK:	Central Bank of Kenya
GDP:	Gross Domestic Product
HDF:	Housing Development Fund
NGOs:	Non-Governmental Organizations
NHC:	National Housing Corporation
NPPF	National Planning Policy Framework
PPPs:	Public Private Partnerships
SACCOs:	Savings and Credit Cooperatives
UNICEF:	United Nations Children's Fund



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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Every man has three crucial needs where housing is one of the paramount needs. The economy of every country needs to ensure that housing is provided for every human being as housing stimulates it greatly (Erguden, 2011). The income that most individuals get is used in housing and therefore a country ought to ensure that its proportional as one of the durable assets in Kenya is housing. When urban civilization began, individuals, families, groups and governments have raised great concerns on the issue on housing. Problems on acquisition of land, individual's having low income, building materials having high costs, statutory regulations, lack of locally available material and expensive building materials are the major causes of housing problems in Kenya. The government not being able to deal with these issues has been made the housing issue to be among the major issues affecting citizens. Lack of shelter is also a major issue facing the world today (Golland, 2013).

The major reason why most people do not afford appropriate housing is due to lack of enough funds to help them take care of basic needs and provide good shelter for themselves and their families (Milligan et al 2004). It therefore means that affordable housing is being able to obtain housing and being able to pay for it appropriately without having to struggle financially (Milligan et al 2004, pi). These specifications may be met by most of the housing forms that are either initiated publicly or privately (Milligan et al 2007, p27). The public, social and low cost terms are used in describing affordable housing in the recent years (Gabriel et al 2005, p6). Without severe consequences and being able to afford housing is what is used to define housing affordability (Noppen, 2014). Housing affordability is subjective implying that what is affordable to one person may not be affordable to another. Various metrics/aspects have been used to measure home affordability key among them being the prices of homes, individuals' disposable income, mortgage loan interest rates, housing price index amongst others. Demand of housing by prospective homeowners and supply of housing by real estate developers and

other institutions plays a critical role in determining the actual pricing of homes (Trimbath & Montoya, 2002). In this study, access to affordable/low cost housing was defined as the capacity to own a dwelling place at the prevailing market price that is easily affordable.

When the market needs of an individual are not met without eligible provision of housing, rented socially (Stone, 2012), renting that is affordable and housing that is intermediate is how affordable low cost housing is defined by the National Planning Policy Framework (NPPF, 2012). The incomes of individuals and the prices of houses locally are what Stone (2012) uses to determine edibility. The provision of housing should be provided in a way that the generations that are growing will also be able to afford housing which will therefore help the future to be bright in terms of providing affordable housing. All the communities in terms of where they are located, size, type, tenure and range of housing needs to be identified by NPPF to able to provide affordable housing effectively. The stress of mortgage should not be part of the owner of the house when it comes to affordable housing (Select Committee, 2008). The occupation of a house is not the same as owing the same house or another which Yi (2004) tries to differentiate. Accessibility has been the term used in Australia. Being able to gain access to a home, being able to own the house's accessibility and having the capability to afford the house are the cases of home buyers (Richards, 2008).

Globally, provision of affordable housing is a key goal for many agencies and organizations in the USA. A study by Odell (2014) on US real estate firms reported low cost housing affordability the greatest problem. There has been sharp rises in cost burden involving housing where individuals have to pay more than have of their income for housing. There was cost burdening in most of the households by 2010 burdened (Joint Center for Housing Studies of Harvard University, 2012). Most of the mortgagees had not been well paid by about 11 million home owners by mid-2011 (Madigan, 2012). There were severe or moderate issue involving housing of about 5.7 million housing units in 2009 (US Department of Housing and Urban Development and US Census Bureau 2009). The term affordable housing states that an individual should not pay more than

30% of his income on housing (O'Dell et al. 2004). The payment of food, clothing, transportation, childcare, and medical care are considered more important than housing as most individuals consider them first than housing where housing has to be provided after one is able to provide the basic needs first (US Department of Housing and Urban Development, 2012). Any income group can apply for the 30%. This is used especially for those that are not able to afford housing for their families. These families are termed as very low income as they use more than half of their salary on housing, low income use quarter of their income and moderate use at least 30% of their income on housing.

Most countries in the African continent have high population growths and high rates of urbanization. UNICEF asserts that as at the year 2012, 24.4% of the Kenyan population was urbanized. Further, it predicts that these urban populations will grow at a rate of over 4% between the years 2012-2030 (UNICEF, 2014). One area that is highly affected by these population demographics is housing (World Bank, 2014). Housing in Kenya like in most developing countries especially in urban areas has been stretched beyond the yield point. Subsequently, this has led to negative outcomes and overflows that are characterized by decreased productivity, congestion, ill health, low rates of wealth, negative social and economic progress amongst other vulnerabilities (UNICEF, 2014). The year 2004 was when the establishment of the Civil Servants Housing Scheme Fund (CSHSF) took place. The National Housing Policy for Kenya 2004 was used in the fund's establishment (Sessional Paper No. 3). The acquiring of housing was facilitated to the employers to help their employees according to the policy. The places where employees work is where the employers should try to ensure that they find housing facilities at the Employer Assisted Housing heart, where there many advantages when this is done (CBK, 2010).

How much a specific plot of land is worth not including any other expenses is called land value/prices. A real estate is taxed by the landowner including its value and any other structures that are in the estate (O'Dell et al. 2004). The major reason why most people do not afford appropriate housing is due to lack of enough funds to help them take care of basic needs and provide good shelter for themselves and their families. The house is

provided to the owner after they pay the percentage of the agreed amount where the rest is paid as per the agreements of the two parties.

The employees who did not have housing were provided for by the government through the payment of housing allowance to the employees who did have physical housing from the government. Most of the employees were left without houses as only 12% advantaged from the house while market private housing was left for the other 88%. Those who had physical houses differentiated from those that were given allowances as those with physical houses were more advantaged. The civil servants were provided for a housing policy by the government recently. The policy was involved in encouraging the servants to won their houses rather than rely on the allowances offered and thus offer them direct housing. The housing scheme fund was then established by the government which was offered to the civil servants. This scheme aimed at ensuring that loans were provided to the civil servants so that they can afford to purchase houses, construction housing units which would be sold to the civil servants and making sure that there are enough funds to implement the above. There have been 3,000 civil servants who have accessed housing since the scheme was facilitated.

The scheme has been able to provide housing through provision of loans and physical housing to the civil servants. The Home and Loan of KCB and Housing Finance partnered with the scheme to ensure that all civil servants access housing countrywide. Loans have continued to be provided to the civil servants for them to construct affordable houses or but residential houses (Government of Kenya, 2008). The people of Nairobi are entitled to be provided for services by the Nairobi City County Government. The constitution's fourth Schedule includes all these functions of a devolved government. The government and the beneficiaries are part of the team that is involved in providing affordable housing to the civil servants. Qualification of high income, high interest rates and repayment periods that are short are the challenges that these civil servants face in accessing affordable housing. Land allocation, level of pricing, interest rates charged and the period of repayment are the factors considered by most studies. The real estate firms in Kenya are mostly faced by the above challenges. The price levels, amount to be

deducted to repay the loan and the loan repayment period and how they affected access to affordable housing was considered in the study by the Nairobi City County Government employees.

1.2 Statement of the Problem

The houses available are not affordable to most of the people which make housing a major issue especially in most of the developing countries. Kenya's population has also not been able to be provided for affordable housing by the government of Kenya. Most of the officers that the government has decided to provide housing to have not accessed it effectively since there have been a number of challenges in the process. Nairobi has therefore been taken over by private developers who have undertaken the role of providing housing to the residents of Nairobi (Hassanali, 2009). The lost cost venture does not have many players involved and less players are also interested in the scheme. The places where employees work is where the employers should try to ensure that they find housing facilities at the Employer Assisted Housing heart, where there many advantages when this is done (Hassanali, 2009).

Much of the studies done are from the west nations. Only a few studies have been done locally (Kenya). Acumen Fund Noppen (2013) and Ojijo (2013) did closely related studies on the Factors affecting Real Estate in Kenya in the task of affordable low cost housing provision. Their studies only described the challenges that investors and consumers face in providing low affordable and decent housing but does not offer extensive solutions to these challenges. Obaga (2015) did a study to describe how the Kenyan banks fund property developers face challenges in their fight to provide low cost housing in Kenya. The study failed to mention that only the developers who have collateral acquire this funding. Wahito (2013) did a study which explained how high mortgages deter home ownership in Kenya. The study failed to describe and provide alternative affordable ways of owning a home or renting one. It is therefore evident that there is limited research and little or none has been done on factors influencing uptake of low cost affordable housing especially by civil servants in Kenya through the government

initiative depicting a research gap. The intent of this study was to assess the factors influencing uptake of low cost housing in Kenya in the case of Nairobi City County government employees.

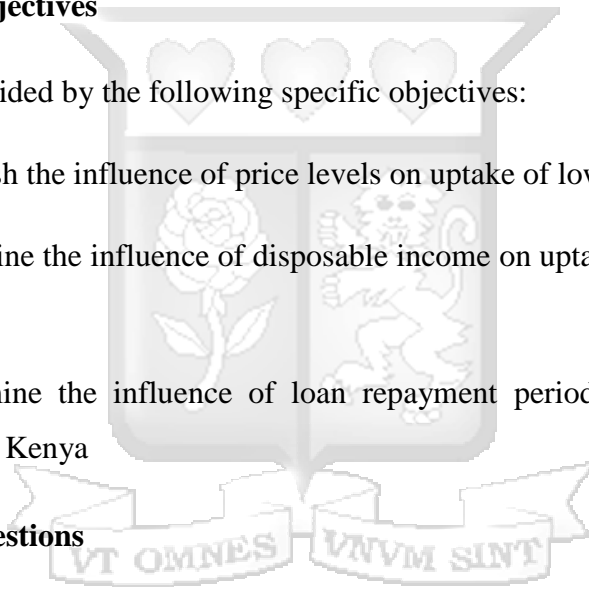
1.3 Objectives of the Study

1.3.1 General objectives

The general objective of this study was to assess the factors influencing uptake of low cost housing by employees in Nairobi City County government.

1.3.2 Specific Objectives

This study was guided by the following specific objectives:

- 
- i. To establish the influence of price levels on uptake of low cost housing in Kenya
 - ii. To determine the influence of disposable income on uptake of low cost housing in Kenya
 - iii. To determine the influence of loan repayment period on uptake of low cost housing in Kenya

1.4 Research Questions

This study was guided by the following research questions:

- i. What is the influence of price levels on uptake of low cost housing in Kenya?
- ii. To determine the influence of disposable income on uptake of low cost housing in Kenya?
- iii. To determine the influence of loan repayment period on uptake of low cost housing in Kenya?

1.5 Significance of the Study

This study will be significant to the following:

This research will help prospective homeowners in the process of determining a choice to own a decent home. In understanding the determinants that affect house affordability, potential homeowners will ensure that they are aware of the challenges that hinder them from accessing affordable housing and solve them to overcome and minimize them.

Additionally, other stakeholders such as banks, the government and micro finance institutions in the housing industry will be advised of how to deliberate and help in making housing affordability in Nairobi County more accessible to their prospective home owners.

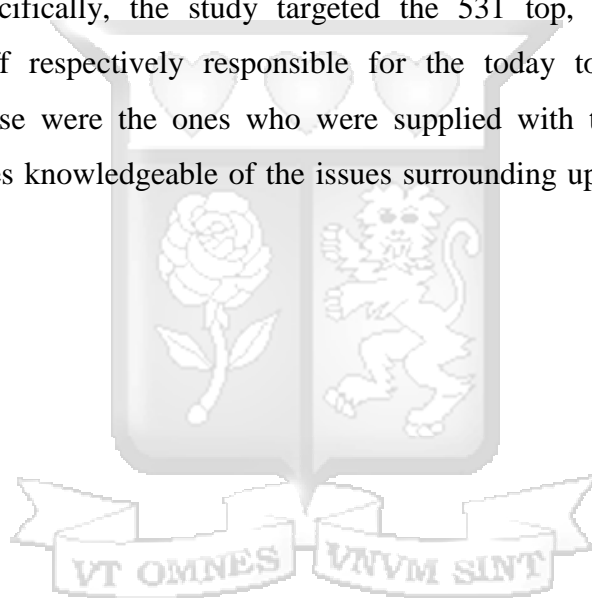
The vision 2030 of Kenya will make use of this study significantly. This is because the government of Kenya has a role in ensuring that its people have affordable access to housing through constructing affordable houses for them and developing low costs housing projects.

This study will be significant to real estate developers associated to the government on the provision of low cost housing in Kenya. In their quest for quick and high returns, the real estate developers have concentrated on the high-end income bracket. However, given the massive numbers of prospective homeowners that fall in the middle income bracket the potential cannot be overstated.

The findings to be obtained from this study will play a significant role to researchers and scholars as they will be added to the existing set of knowledge and information related to the uptake of low cost housing. They will also necessitate further research in the same field as well as in the related research fields especially in the finance sector among others. These findings will set the reference point on the literature related to uptake or provision of low cost housing; locally and globally.

1.6 Scope of the Study

The overall population to be used in this study was the City County of Nairobi. The need to conduct the study in Nairobi is that it's the county that has been highly concentrated with the most sounding ministries and parastatals and the first ever expected to well embrace the low cost housing initiative. Nairobi City County also being the business hub with sixty percent business command in the country. The target population comprised of all the civil servants working for the City County of Nairobi headquarters. This was based on the fact that they form the category of the employees who are part of the larger profile of who are required to embrace low cost affordable housing aspect by the government. Specifically, the study targeted the 531 top, middle and lower level management staff respectively responsible for the today to day operations in the departments. These were the ones who were supplied with the research instruments. These are the ones knowledgeable of the issues surrounding uptake of low cost housing in Kenya.



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presented the literature reviewed in regard to access to low cost housing both locally and internationally. Herein presented are arguments and reports by other authors and academicians. The chapter was divided into theoretical review and empirical review. Besides the chapter presents the conceptual framework, critical review of literature, summary of the reviewed literature as well as research gaps.

2.2 Theoretical Foundation

This study was guided by two theories namely: Housing Adjustment theory and the Economic Theory of Housing Tenure Choice.

2.2.1 Housing Adjustment Theory

Morris and Winter (1996) discovered the theory of housing adjustment which the study is based. The behaviour of housing and how the householders think and behave is what the theory deals with (Morris and Winter, 1996). The householder at most times desires to change the situation in case the house is not as per the society's norms which make them dissatisfied. A household is affected by housing norms and constraints according to the theory's components. Where the householder is faced by challenges and dissatisfaction, then they are forced to change the situation so that they can reduce needs and constraints (Sherman and Combs, 1997). The satisfaction of an individual on their job and how satisfied with their life is what determines the household adjustment theory. The constraints and satisfaction of individuals on residential have been studied through their level of income (Bruin and Cook, 1997).

The visibility of a house, its level of payment, housing scarcity, its level of involvement and proliferation of slums and squatter settlement, lack of enough funds are the major challenges that citizens face in being able to construct their own house as acknowledged by Abdul, (2008), Adeniyi, (2007), Bourne, (2007) and Chatterjee (2008).

All the options available for an urban dweller are exhausted when it comes to accessing affordable housing. Most of the employees have low income and thus are not able to acquire loans so as to be able to build their own homes (Egunjobi, 2007). Most of the low income earners face the challenge of building standard in provision of shelter. This therefore should be addressed through a policy that will consider the poor in how they can access affordable housing without having to strain in affording for other basic needs such as food, water, clothes and health care according to Liman (1989).

The summary of and the applicability of the theory by Adamu's assertion was that housing affordability is a current problem and its especially a no exception to developing countries like Kenya and is virtually a function of the irregularities of urban land administration. This ugly situation had unavoidably matured to a poor tenancy situation. This is undoubtedly a chaining situation as far as urban land acquisition is a concern due to varying land prices and loan repayment challenges related to mortgage acquisition requirements as informed by this study. The attendant problem here is that land acquisition seems to be abundant but it is shared among the high income individuals.

2.2.2 The Economic Theory of Housing Tenure Choice

The disciplines historical development is corresponded through three major approaches which are distinguished broadly by the theory of housing markets. Localism, heterogeneity, durability and housing taxation are addressed through perfectness, friction, the mechanism of market competition which is retained in the first assumption (Smith, 2006). There was experience of maturity when it came to the line of research. The structure of urban understanding has been improved greatly through housing supply and demand determinants and prices for heterogeneous goods measurement.

There are many implications involved when it comes to provision of affordable housing. One looks at externalities of neighbors, efficiency in the housing market where the agents are expected to be forward and rational on the purchasing and selling of the house (Thalmann, 2006).

Mobility cost and contractual incompleteness that lead to imperfect competition and frictions are emphasized in the second approach. Housing has various particularities where their coordination must be ensured which a major question is asked. There has been major success in the theory as it has emphasized the need to deal with imperfection on the factors that lead to accessing affordable housing. Agent's roles, rental contracts purpose, rates of vacancy, strategies of optimal pricing and behaviours are the factors that most of the literature discusses. The housing market is dynamic and thus this theory brings out the aspect of coordination which is required in implementing of policies that will assist in provision of affordable housing (Otiso, 2002).

Competition is another factor that is of importance when it comes to accessing affordable housing. The major reason why most people do not afford appropriate housing is due to lack of enough funds to help them take care of basic needs and provide good shelter for themselves and their families. It therefore means that affordable housing is being able to obtain housing and being able to pay for it appropriately without having to struggle financially. These specifications may be met by most of the housing forms that are either initiated publicly or privately. The public, social and low cost terms are used in describing affordable housing in the recent years. Without severe consequences and being able to afford housing is what is used to define housing affordability. Housing affordability is subjective implying that what is affordable to one person may not be affordable to another. Various metrics/aspects have been used to measure home affordability key among them being the prices of homes, individuals' disposable income, mortgage loan interest rates, housing price index amongst others (Ichangai, 2008).

The population in Kenya is facing problems when it comes to being provided for affordable housing which has been reviewed by the theory. There are work units and schemes such as HPF which have been of great benefits to the individuals through policies provided. Land prices, disposable income and the period given for repayment of loans have been considered by the government so that individuals can be able to access affordable housing which has been of great help.

2.3 Empirical Review

This section presents the empirical literature in tandem with the variables of the study which were; price levels, disposable income, loan repayment period and their relationship with uptake of low cost/affordable housing.

2.3.1 Price Levels and Uptake of Low Cost Housing

Land represents a major problem in home ownership in urban areas. According to research, unavailability of fairly priced and well located serviced land with proper documentation is a major inhibitor to rapid growth of a country (Arvanitis, 2013). There are various reasons that include the government as a major holder of vast pieces of land, control of large tracts of land by private entities, poor environmental conditions, and the absence of the essential infrastructure including water and sewer systems are a major challenge to the developers (Ngugi & Njori, 2013; Njathi, 2011). High land prices, poor systems of land records and a slow registration process discourage potential homeowners from mortgage and financing due to lack of timely verification of the prospective developmental properties and in ability to service the huge amounts demanded. In addition, bureaucratic red tapes in the ministry of lands and other related government stakeholders are also a key hindrance among the Nairobi County potential homeowners (Ngugi & Njori, 2013).

When the prices of homes grow faster than individual income less people will be able to afford homes due to the pricing limitation. Several factors determine the pricing of homes key among them being the cost of financing for developers and prospective homeowners. High financing and other costs means that the overall cost of building a dwelling house increases and developers have to charge higher amounts for these homes. Other factors influencing the pricing of homes include but are not limited to land costs, facilitation costs, transportation costs, inflation rates and building material costs. Overall an increase in the pricing of homes reduces home affordability and vice versa (Lerner, 2013).

So as one can be able to purchase a house they have to have money to pay for it which is called the housing price despite the fact there are other factors that lead to determining the price of a house. The U.S. Census Bureau indicated that a family earning median income is called a typical family. NAR calculates the median-priced single-family home of the typical homes. The Federal Housing Finance Board determines the rate of interest to be charged on the loans given on purchasing of houses. The Housing Affordability Index is calculated using the home's 20 percent down payment by NAR. The house's mortgage should not be more than 25% of the income of the owner of the house. A typical home loan can be afforded by families that earn median income rates. Most of the families that earn low income are not able to afford purchasing for a typical house. A typical house can also be afforded by a family that earns on a value larger than 100 which is called the high rate (Lerner, 2013).

2.3.2 Disposable Income and Uptake of Low Cost Housing

When a family pays all other important needs in the house and is able to spare some amount for other expenses is called disposable income or disposable personal income (DPI). The state of the economy is thus measured through the disposable personal income as it is used to monitor the economic indicators. Household financial resources are measured through disposable income. The savings and spending rates of households are gauged through DPI by the economists (Norris & Winston, 2012).

Uptake of low cost housing is directly related to income levels for individuals and combined households who desire to own a home. Higher income levels mean that individuals or households can afford to purchase bigger and better quality houses compared to low income earners who have to struggle to obtain at least decent housing. However, the household expenditure patterns and an individual's perspective to home ownership also determine whether an individual will own a house or not and how fast home ownership will take place. Disposable income is thus a key determinant on home

affordability and determines the type and size of home that can be bought or built (Ngugi & Njori, 2013; Lerner, 2013).

2.3.3 Loan Repayment and Uptake of Low Cost Housing

Loan Repayment Period is determinant of uptake of low cost housing in major cities in the world. The borrowers of loans are determined on whether they will be able to pay the loans as required through the time given to repay, interest rates and the amount they are supposed to pay in every month (Ngugi & Njori, 2013). The housing industry in Europe grew after the government was able to adjust interest rates, period of payment and the amount paid in a month to assist the borrowers to purchase their own houses (Norris & Winston, 2012). Housing projects can only be successful with the purchaser being provided for terms that they are able to adhere to where funds are the main factor to be considered.

According to Derban and Iqbal (2015) the loan repayment is determined through; the income that the borrower has which most likely determines his/her capability to repay the loan. The second one is the nature of the institution that the borrower is given the loan and third is the economic, political and business environment in which the borrowers operation takes place and how external factors affect them.

Housing affordability is subjective implying that what is affordable to one person may not be affordable to another. Various metrics/aspects have been used to measure home affordability key among them being the prices of homes, individuals' disposable income, mortgage loan interest rates, housing price index amongst others. Demand of housing by prospective homeowners and supply of housing by real estate developers and other institutions plays a critical role in determining the actual pricing of homes. In this study, access to affordable/low cost housing was defined as the capacity to own a dwelling place at the prevailing market price that is easily affordable (Godquin, 2014).

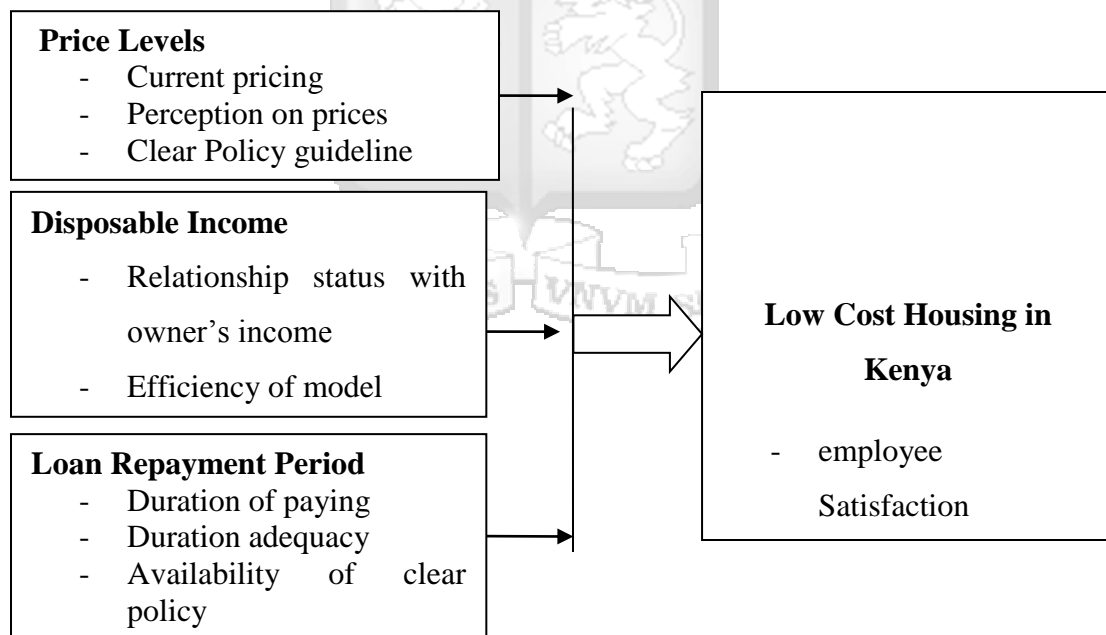
2.5 Summary and Research Gaps

In summary, there are divergent views concerning the factors that affect the uptake of low cost housing in different countries. Loan Repayment Period is the most studied factor as a determinant of uptake of low cost housing in major cities in the world (Norris & Winston, 2012).

The borrowers of loans are determined on whether they will be able to pay the loans as required through the time given to repay, interest rates and the amount they are supposed to pay in every month in Kenya (Ngugi & Njori, 2013). There is a research gap as low cost housing in Kenya has not been researched deeply in Kenya.

2.6 Analytical Framework

An Analytical framework refers to an analytical tool that has a number of variations and contexts. It is used in making conceptual distinctions and organized ideas in a study.



Independent Variables

Dependent Variable

Figure 2.1: Analytical Framework

Source: Author (2019)

2.7 Operationalization of the Variables

Table 2.1: Operationalization of the Key Study Variables

Variable	Conceptual definition	Operational Indicators	Measure scale
Factors (Independent Variables)	Price levels	<ul style="list-style-type: none"> - Current pricing - Perception on prices - Clear Policy guideline 	e.g 5-point rating scale 1=strongly disagree 2 = disagree 3 = moderately agree 4 = strongly agree 5=strongly disagree
	Disposable income	<ul style="list-style-type: none"> - Relationship status with owner's income - Efficiency of model - Clear guideline 	e.g 5-point rating scale 1=strongly disagree 2 = disagree 3 = moderately agree 4 = strongly agree 5=strongly disagree
	Loan repayment	<ul style="list-style-type: none"> - Duration of paying - Duration adequacy - Availability of clear policy guiding on payment - Interest rate 	e.g 5-point rating scale 1=strongly disagree 2 = disagree 3 = moderately agree 4 = strongly agree 5=strongly disagree
Uptake of Low Cost Housing (dependent Variable)		<ul style="list-style-type: none"> - Employee Satisfaction 	e.g 5-point rating scale 1=Very satisfied 2=Satisfied 3=Moderate satisfied 4=Not satisfied

Source: Author (2019)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was used for the study. The main sections in the chapter were; the research design, location of the study, target population, the sample size and sampling procedures used in the study. Pilot testing of the research instruments, data collection procedures and data analysis techniques was also outlined in the study ethical considerations observed in the study were also outlined.

3.2 Research Design

Descriptive survey was adopted for this study. This design is most appropriate given the exploratory and descriptive nature of this study (Kothari, 2008). As explained by Hatcher (2013) it helps in collecting data concerning behaviour, attitude, values and characteristics. Thus, the research design aimed at obtaining the most recent, relevant and in-depth information about factors Influencing Uptake of Low Cost Housing in Kenya.

3.3 Population and Sampling

3.3.1 Population

A specific population that is related to the study that has people with the same interest as the study that a researcher wishes to investigate is termed as a population (Mugenda and Mugenda, 2003). The population of this study was the City County government of Nairobi. The target population comprised of all the civil servants working for the City County of Nairobi headquarters. Specifically, the study targeted the 531 (top, middle and lower level staff) respectively responsible for the today to day operations in the departments. This is based on the fact that they form the category of the profile of employees (top, middle and lower cadre) intended to benefit from the low cost houses in Kenya. These are the ones to be supplied with the research instruments. These were the

ones knowledgeable of the issues surrounding uptake of low cost housing in Kenya. The distribution was as follows:

Table 3.2: Target Population

Category	Target population
Top	23
Middle level	87
Lower level staff	421
Total	531

Source: (HRM Department statistics, County Government of Nairobi)

3.3.2 Sample Size and Sampling Procedures

A sample is a set of respondents obtained from a targeted population with an aim of establishing the features of the population Siegel (2013). It refers to a section of the population chosen in order to have a clear representation of the whole population. Sampling is a procedure or technique applied while selecting a sample of the population that is to participate in the research study (Ogula, 2008). This study used simple random sampling technique to select 50% of the respondents in each of the categories as stated in the target population section (Cooper and Schindler (2014). For the case of this study the researcher used quota sampling technique to select an equal 20% of the top, middle and lower level management staff respectively working in the city county of Nairobi departments. The sample size was 106 possible respondents as shown in the distribution below;

Table 3.3: Sample size

Category	Target population	Sample size
Top	23	5
Middle level	87	17
Lower level staff	421	84
Total	531	106

3.4 Data Collection Methods

A questionnaire was used as the tool for data collection. As noted by Kombo & Delno, (2011) a questionnaire is a preferred research tool since it allows a research to collect a lot

of data within a limited time frame; it also gives the participants to provide true and anonymous data. A questionnaire was designed to be used by the employees chosen who belonged to the county government. It was made up of close ended questions. The questions asked which sought comprising of the top, middle and lower level staff were clear and written in such a way that they could be understood easily. The questionnaire comprised of various sections. Section A contained questions on demographic information of the respondents, section B contained questions based on each of the factors influencing uptake of low cost housing where respondents were to indicate their opinion on statements associated to a 5 point Likert scale. Finally, section C contained a question on satisfaction levels of employees. The questionnaire was self-administered through pick and drop approach, this was important for collection of primary data.

3.5 Data Analysis

The Statistical Package for Social Sciences (SPSS version 22) was used to analyze the data. Data entry was facilitated through coding of items in the questionnaire and referencing all the received questionnaires. Tables and graphs were used to present the presented information through frequency, and then obtaining of descriptive statistics and frequencies was done after checking of errors was done so as to clean the data for entry.

Employment of both descriptive and inferential statistics was done. The data was further analyzed through inferential statistics where basic ad impetus features were provided on the variable for data collection (Sekaran and Bougie, 2011). Undertaking of different variables to ensure that indices were aggregated was also done. Findings were presented by standard deviation, means frequency tables, histogram pie chart, graphs and percentages.

This study employed a multiple linear regression analysis using price levels, disposable income and loan repayment period as the independent variables and Uptake of low cost housing in Kenya as the dependent variable respectively.

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$, where,

Y= Uptake of low cost housing in Nairobi County, Kenya

β_0 = Intercept

X_1 = Price Levels

X_2 = Disposable Income

X_3 = Loan Repayment Period

β_1 , β_2 and β_3 are the coefficients of the regression

ε = the error Term

3.6 Research Quality

Before the actual data was collected, a pilot test was done. This is a small test done that is similar to the large test to ensure that the questionnaire is reliable to the study and that it is accurate for the purpose of the study. In case the main study would face challenges or lead to failure, pilot test helps in identifying the risks and handling the challenge before the actual study.

3.6.1 Validity of the Instruments

The results that the study offers are measured on how accurate and meaningful they are through validity as defined by Mugenda and Mugenda (1999). The study's phenomena are thus represented by the actual data's analysis which is obtained from the degree of validity. To ensure validity of the instruments, the researcher discussed the questionnaire with the supervisors who are specialists in the area of study while framing the questionnaires. To ascertain for content validity, the researcher used a check list to ensure that all items in the questionnaire are based on the study objectives. At the same time, supervisors and lecturers in social sciences department views guided the researcher to develop valid instruments with regard to the face validity pertaining to the attractiveness and appeal to the eyes of the tools.

3.6.2 Reliability of the Instruments

After repeated trials the research instrument yields consent results which are measured through reliability according to Donald (2006). The same group of respondents was given the same scale and two different times to measure the level of reliability. This is after a time lapse of one or more weeks. A pilot study was conducted where 10% of the participants of the sample size were reached to participate in the study. These randomly selected from the city county of Nairobi and requested to participate in the study. This was repeated to the same respondents after one week. Correlation Co-efficient (r) were calculated and produced for each of the items. Kerlinger (1983) recommends that a coefficient of 0.7 and above is acceptable. Consecutively, the reliability coefficient of above 0.7 was obtained for all the items within the Likert scale as shown below;

In this research, Cronbach's Alpha values of above 0.7 in this study denoted good internal consistencies. The Tables 3.4 below present's summary of the reliability tests as was computed.

Table 4.5: Reliability Statistics

Reliability Statistics	Cronbach's Alpha	N of Items
Price levels	0.866	7
Disposable incomes	0.889	3
Loan repayment	0.881	4

3.7 Ethical Considerations

The researcher made use of all research ethics that aid in achieving the set study objectives. The researcher first and foremost sought consent from the university as well as a letter of introduction for the participants, Ethical Approval letter from Strathmore University Business School and the permit from the National Commission for Science, Technology and Innovation (NACOSTI).

In addition to that, the researcher gave assurance of the privacy and confidentiality of the study. The participants were not required to indicate their names on the question papers for purposes of anonymity. This motivated the respondents towards giving valid information. For the case of this study, privacy of the participants considered as a fundamental right. Individuals had a privacy interests in relation to their bodies, personal information, expressed thoughts and opinions. Finally the research assistants who were involved in the course of this study were educated on the requirements of the study, as well as, how they were to approach the participants in an effort to securing their time. They also had the task of assuring the participants on the importance of the study which was purely academic and then protect all information gathered.



CHAPTER FOUR: DATA ANALYSIS, INTERPRETATION AND PRESENTATION

4.1 Introduction

This chapter contains the data analysis, interpretation and presentation of results on the study intentions. The general objective of this study was to assess the factors influencing uptake of low cost housing in Nairobi City County employees. to establish the influence of price levels on uptake of low cost housing in Kenya, to determine the influence of disposable income on uptake of low cost housing in Kenya, to determine the influence of varying land prices on uptake of low cost housing in Kenya and; to determine the influence of loan repayment period on uptake of low cost housing in Kenya. Data was computed using the Statistical Package for Social Sciences (SPSS Ver. 22.0).

4.2 Response Rate

The researcher sought to establish the response rate of the study. The results are displayed in the Table 4.4 below;

Table 4.6: Response Rate

Status	Frequency	Percentage (%)
Responded	89	83
Not responded	18	17
Total	107	100

Source: Survey Data (2019)

The researcher distributed a total of 107 questionnaires. Out of these, a total of 89 respondents filled in and returned the questionnaires whereas 18 questionnaires were never returned or were returned in a faulty mode. This gave the study a response rate of 83% which is adequate according to revised edition of Mugenda and Mugenda (2010) who advocates that a response rate of 75% or above is adequate for a given research.

4.3 Demographic Information of the Respondents

In the section below, the general information of the respondents with regard to gender, age, level of education and so on was presented.

4.3.1 Gender

The researcher wanted to know the gender of the respondents. According to the findings, 63% of the respondents were male while 37% were female respectively. This was a clear indication that the researcher tried as much as possible to reach out to both gender to avoid gender bias in the research as well receive divergent views related to the raised research questions. This was presented in the Figure 4.2 below;

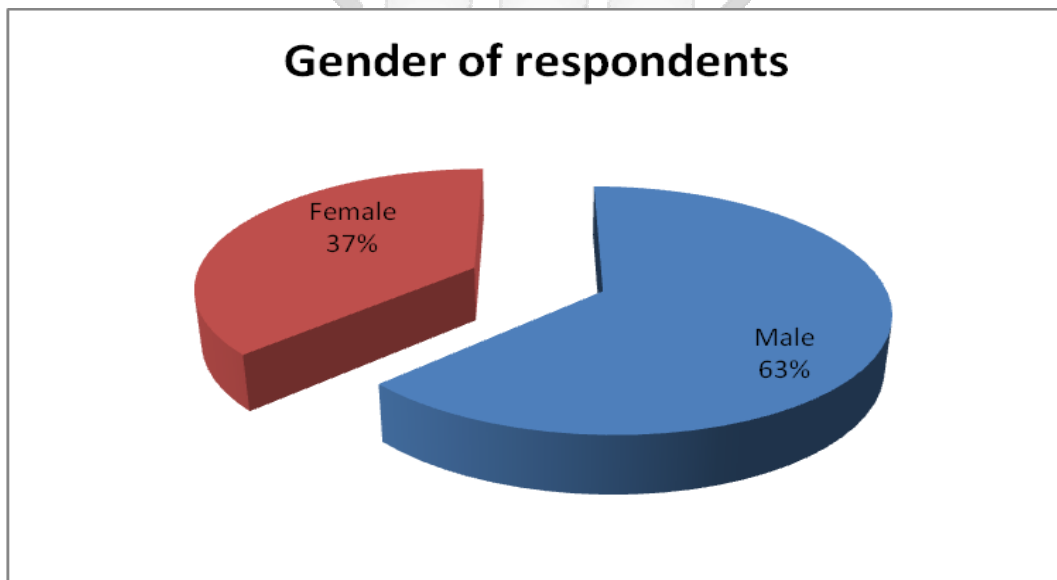


Figure 4.2: Gender of the respondents

4.3.2 Level of Education of the Respondents

The researcher was interested in finding out the respondents' level of education. According to the findings displayed in figure below, 47% said they had diploma certificates, 43% indicated that they had university level degrees whereas a few, 10% of the respondents indicated that they had secondary level education, respectively. This implied that most of the citizens reached were adequately educated to understand and

express their level of satisfaction relative to the raised research questions. The same information is presented in the Figure 4.3 below;

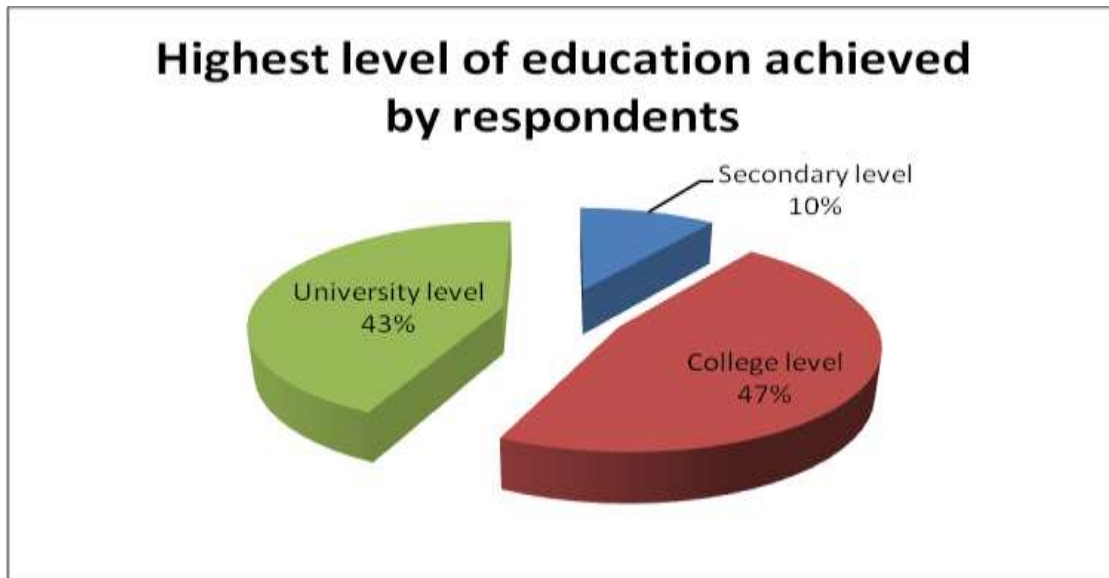


Figure 4.3: Education level of Respondents

4.3.3 Age bracket of respondents

According to the findings, most of the participants as shown by 51% were aged between 31-40 years, 21% said 21-30 years, 20% said 41-50 years whereas only 7% who said that they were aged above 50 years respectively. It implied that most of the staff sampled and took part in the study were middle aged. This was shown in the Figure 4.4 below;

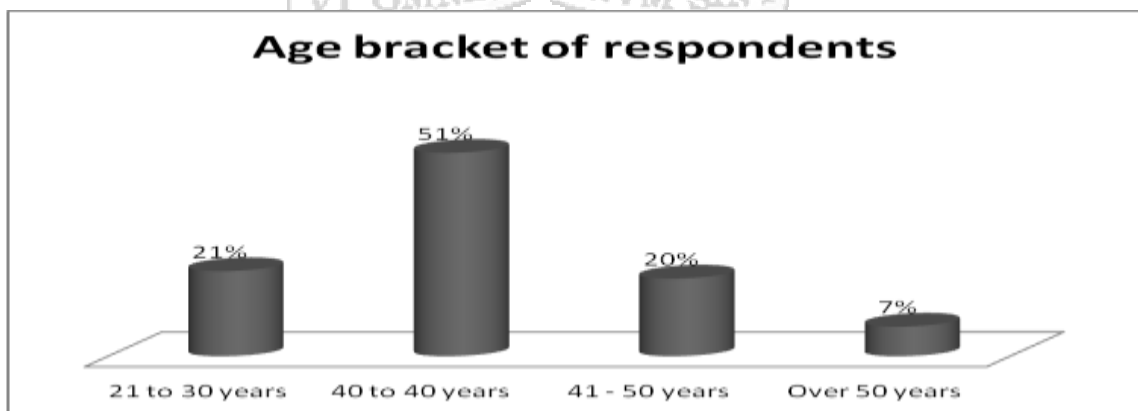


Figure 4.4: Age Bracket of Respondents

4.3.4 Duration respondent have been working at Nairobi City County

The researcher wanted to deduce the duration respondents had worked for their organization. According to the findings, the researcher established that 43% of the respondents had worked in the organization for a period of 2-3 years, 32% said 3-4 years, 16% said 1-2 years whereas 9% said that they had worked in the organization for a period of 5 years or above. This implied that most of the staff in the targeted aviation firms had worked for the organizations for an ample period giving them experience towards the issues affecting the performance. The results on duration are as shown in the Figure 4.5 below;

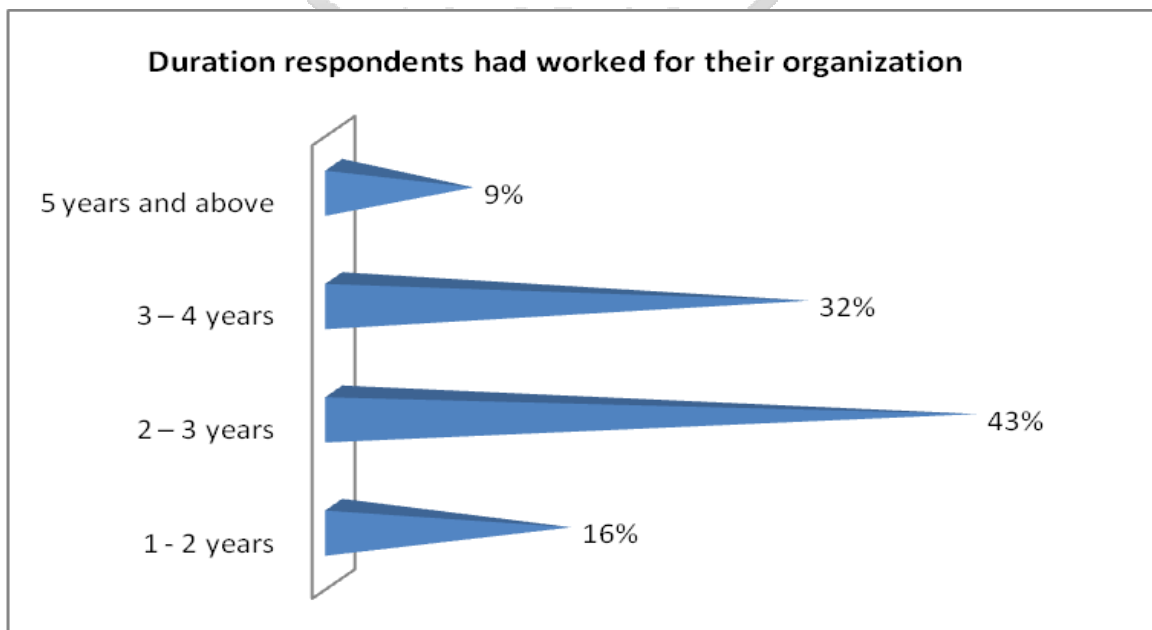


Figure 4.5: Duration Respondents had worked for their Organization

4.4 Price Levels and Uptake of Low Cost Housing

4.4.1 Level of satisfaction with the Price Levels set and Uptake of Low Cost Housing

The study sought to establish the level of satisfaction with the Price Levels set and Uptake of Low Cost Housing. According to the results displayed in the Figure 4.5 below, 57% of the participants showed that they were undecided on their level of satisfaction with the Price Levels set and Uptake of Low Cost Housing; 21% were very satisfied, 11% were dissatisfied, 8% were satisfied whereas 2% said that they were very dissatisfied. The results are as shown in the Figure 4.6 below;

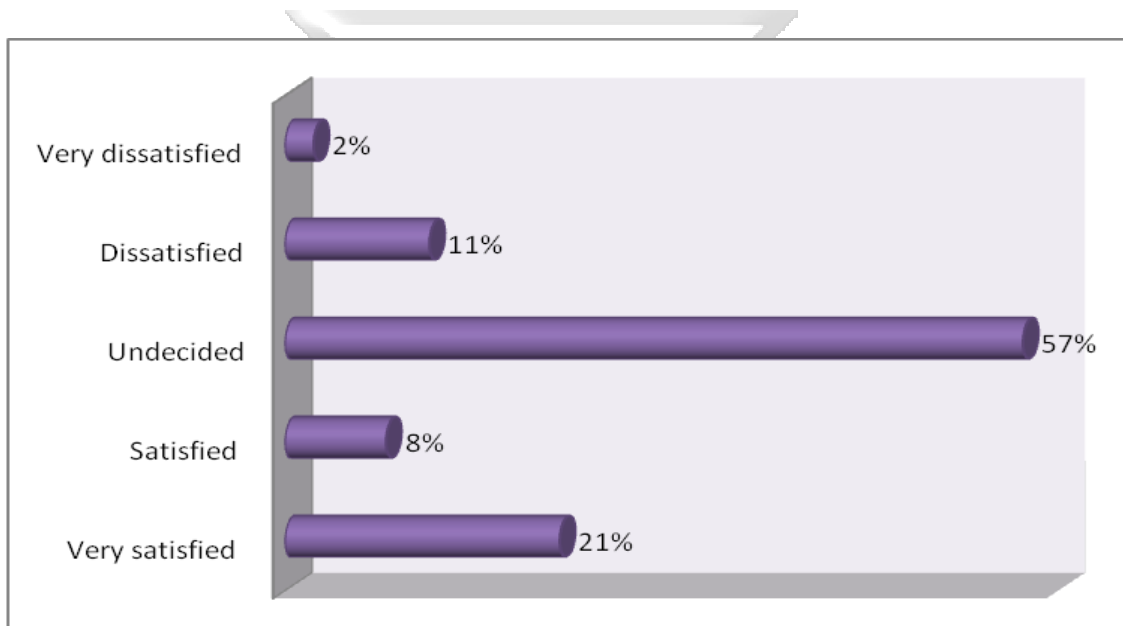


Figure 4.6: Respondents level of satisfaction with the Price Levels set and Uptake of Low Cost Housing

The researcher sought to establish the respondents' level of agreement on statements that regard the influence of Price Levels on Uptake of Low Cost Housing. The results are as shown in the Table 4.5 below;

Table 4.7: Respondents level of agreement on statements that regard the influence of Price Levels on Uptake of Low Cost Housing

Statements	Strongly agree (%)	Agree (%)	Moderately agree (%)	Disagree (%)	Strongly disagree	Mean scores
The price levels relate well with set market prices by other organizations like real estate firms	12	18	70	0	0	3.42
Am happy of the government policy on low cost housing and affordability	4	24	66	6	0	3.26
There is a good relationship between employer and employee collaborations	1	15	84	0	0	3.17
Overall an increase in the pricing of homes reduces home affordability and vice versa	7	14	76	3	0	3.13
Am worried of the price the government has set	1	11	88	0	0	3.13
There is a good relationship between employer and mortgage institutions collaborations	3	15	79	3	0	3.11

Source: Survey Data (2019)

According to the results displayed above, majority of the respondents moderately agreed that; the price levels relate well with set market prices by other organizations like real estate firms as shown by a mean score of 3.42, employees are satisfied of the government policy on low cost housing and affordability as shown by a mean score of 3.26, there is a good relationship between employer and employee collaborations as shown by a mean score of 3.17, an increase in the pricing of homes reduces home affordability and vice versa as shown by a mean score of 3.13, employees are worried of the price the government has set as shown by a mean score of 3.13 and that; there is a good relationship between employer and mortgage institutions collaborations as shown by a mean score of 3.11 respectively.

4.4.2 Varying Land Prices

The study sought to establish the rating on land prices in Nairobi County. The results are as shown in the Table 4.6 below;

Table 4.8: Respondents rating on Land Prices in Nairobi County

Extent	Frequency	Percentage
Extremely High	7	8
High	23	26
Reasonable	44	49
Affordable	15	17
Total	89	100

Source: Survey Data (2019)

According to the findings, 49% of the respondents said that selected land prices in Nairobi County are reasonable, 26% said prices were high, 17% affordable, whereas 8% said that the land prices were extremely high. The same information is presented in the Figure 4.7 below;

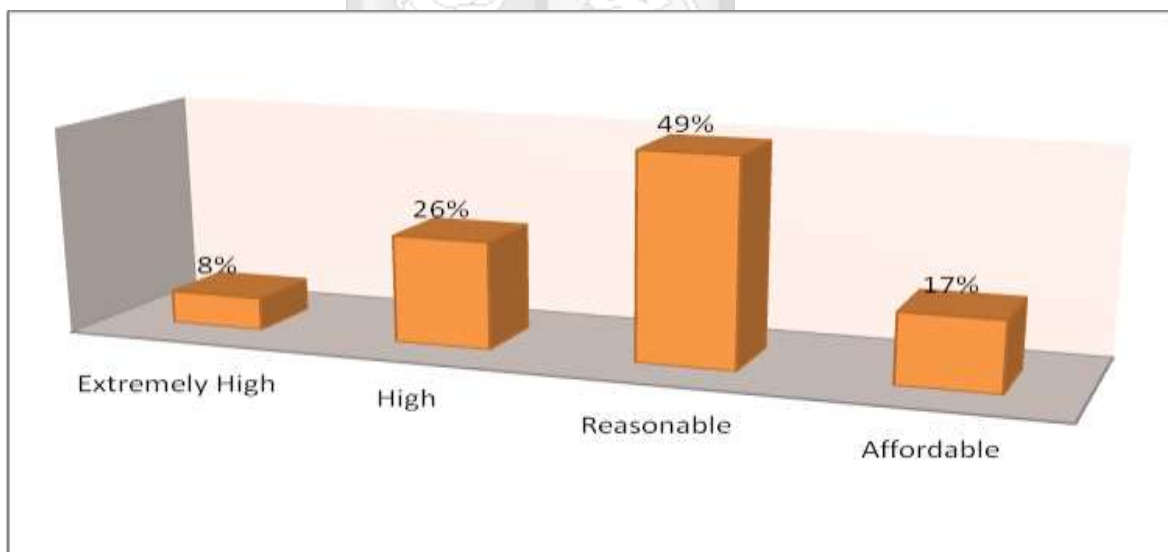


Figure 4.7: Respondents rating on Land Prices in Nairobi County

The Table 4.6 below sought to establish the respondents' level of agreement on statements that regard the influence of varying land prices on uptake of low cost housing in Nairobi County.

Table 4.9: Level of agreement on statements that regard the influence of varying land prices on uptake of low cost housing in Nairobi County

Statements	Strongly agree (%)	Agree (%)	Moderately agree (%)	Disagree (%)	Strongly disagree (%)	Mean scores
Land prices are not harmonized in the whole of Nairobi county	0	12	70	18	0	4.06
There is a poor systems of land records and pricing is always not efficient	2	2	90	6	2	4.02
Associated land prices where the houses are built on is very costly	2	10	82	2	2	2.00

Source: Survey Data (2019)

According to the results, majority of the respondents were in agreement that; Land prices are not harmonized in the whole of Nairobi County as shown by a mean score of 4.06, there is a poor systems of land records and pricing is always not efficient as shown by a mean score of 4.02 and that associated land prices where the houses are built on is very costly as shown by a mean score of 2.00 respectively.

4.5 Disposable Income and Uptake of Low Cost Housing

4.5.1 Level of satisfaction satisfied on the amount of disposable Income set relative to uptake of Low Cost Housing in Kenya

The study sought to establish the level of satisfaction with the amount of disposable Income set relative to uptake of Low Cost Housing in Kenya. According to the results displayed in the Figure 4.8 below, 38% of the participants showed that they were undecided on their level of satisfaction with the disposable income set and Uptake of Low Cost Housing; 25% were very satisfied, 24% were satisfied, 9% were dissatisfied, whereas 4% said that they were very dissatisfied.

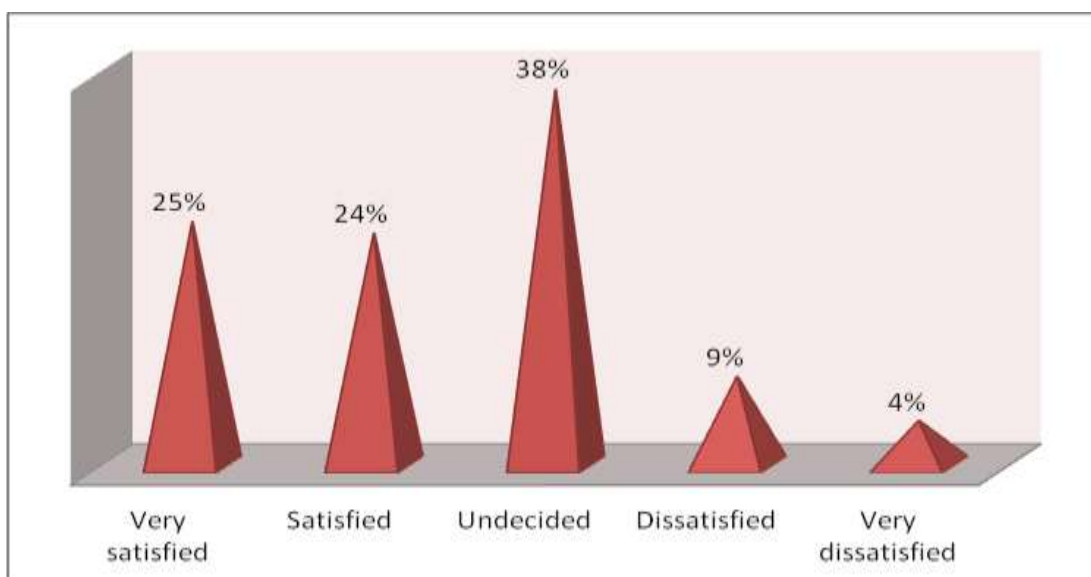


Figure 4.8: Respondents' level of satisfaction on the amount of disposable Income set relative to uptake of Low Cost Housing in Kenya

The Table 4.4 below depicts findings on Respondents' level of agreement on the statements that regard the influence of disposable Income set on uptake of Low Cost Housing in Kenya.

Table 4.10: Respondents' level of agreement on the statements that regard the influence of disposable Income set on uptake of Low Cost Housing in Kenya

Statements	Strongly agree (%)	Agree (%)	Moderately agree (%)	Disagree (%)	Strongly disagree	Mean scores
My income levels do not in any way relate to the disposable income set by the financial institutions associated with the low cost housing construction by the government	10	23	66	1	0	3.42
Most civil servants/employees of Nairobi city county can afford to purchase bigger better quality houses compared to low income earners who have to struggle to obtain at least decent housing	10	16	74	0	0	3.36
Uptake of low cost housing is directly related to income levels for individuals	2	6	88	2	2	3.04

Source: Survey Data (2019)

The results indicated that majority of the respondents moderately agreed that; employees income levels do not in any way relate to the disposable income set by the financial institutions associated with the low cost housing construction by the government as shown by a mean score of 3.42, most civil servants/employees of Nairobi city county can afford to purchase bigger better quality houses compared to low income earners who have to struggle to obtain at least decent housing as shown by a mean score of 3.36 and that uptake of low cost housing is directly related to income levels for individuals as shown by a mean score of 3.04 respectively.

4.6 Loan repayment period & uptake of Low Cost Housing

The researcher sought to find out from the respondents' the extent to which loan repayment period affect uptake of low cost housing and affordability.

Table 4.11: Extent to which loan repayment period affect uptake of low cost housing and affordability

Extent	Frequency	Percentage
Very great extent	37	42
Great extent	28	31
Moderate extent	16	18
Little extent	7	8
No extent at all	1	1
Total	89	100

Source: Survey Data (2019)

According to the findings, 42% of the respondents said that loan repayment period affects uptake of low cost housing and affordability to a very great extent, 31% said great extent, 18% said moderate extent, 8% said little extent whereas 1% said to no extent at all respectively. The same information is displayed in the Figure 4.9 below;

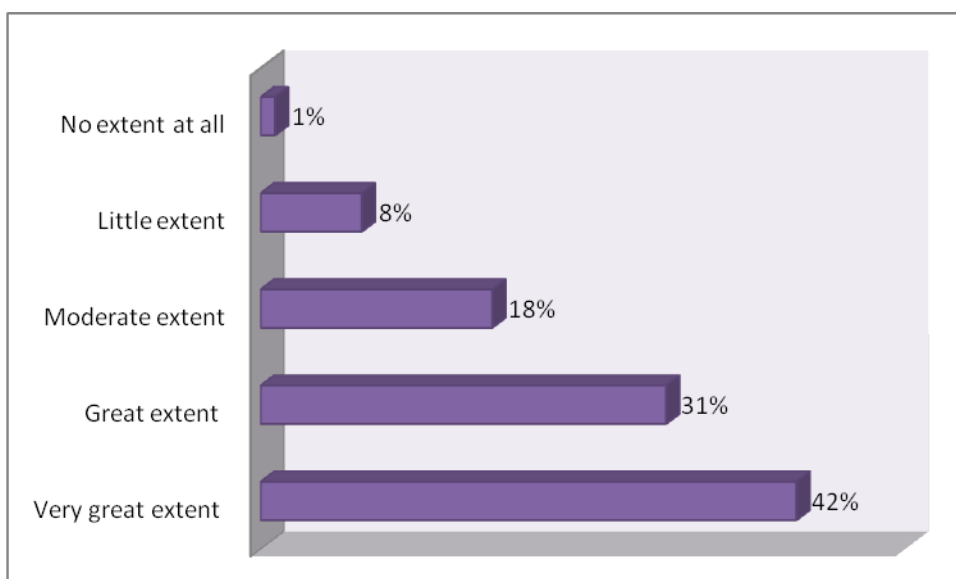


Figure 4.9: Extent to which loan repayment period affect uptake of low cost housing and affordability

The study sought to establish the respondent's opinion on optimal repayment period that would not put unnecessary pressure on respondent's income.

Table 4.12: Optimal repayment period that would not put unnecessary pressure on respondent's income

Duration	Frequency	Percentage
Beyond 20 Years	32	36
5-10 Years	12	13
10-15 Years	19	21
15-20 Years	22	25
Less than 5 Years	4	4
Total	89	100

Source: Survey Data (2019)

According to the findings, 36% knew that the repayment period of beyond 20 years as an optimal repayment period that would not put unnecessary pressure on respondent's income, 21% said 10-15 years, 25% said 15-20 years, 13% said 5-10 years whereas 4% said less than 5 years respectively. The same information is displayed in the Figure 4.10 below;

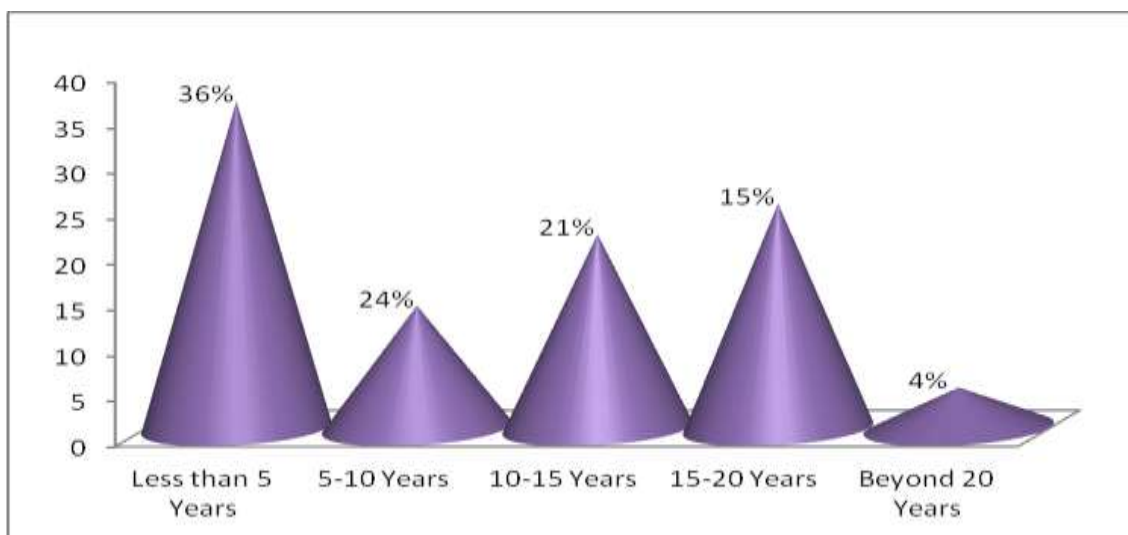


Figure 4.10: Optimal repayment period that would not put unnecessary pressure on respondent's income

The study sought to establish the respondents' level of agreement on statements that regard the influence of loan repayment period on uptake of low cost housing and affordability.

Table 4.13: Level of agreement on statements that regard the influence of loan repayment period on uptake of low cost housing and affordability

Statements	Strongly agree (%)	Agree	Moderately agree (%)	Disagree (%)	Strongly disagree (%)	Mean scores
The loan repayment period provided by the mortgage firms associated with the government housing projects is inadequate	6	88	2	2	2	2.96
I am pleased that I am able to meet the monthly loan repayment deadlines set by the partner financial institutions	16	74	10	0	0	2.94
Short maturity periods and inflexible monthly payments all discourage the already homeowners from seeking financing alternatives for other projects	23	66	10	1	0	2.89

Source: Survey Data (2019)

According to the results displayed in the table above, majority of the respondents were in agreement that; the loan repayment period provided by the mortgage firms associated with the government housing projects is inadequate as shown by a mean score of 2.96, employees are pleased that they are able to meet the monthly loan repayment deadlines

set by the partner financial institutions as shown by a mean score of 2.94, short maturity periods and inflexible monthly payments all discourage the already homeowners from seeking financing alternatives for other projects as shown by a mean score of 2.89 respectively.

4.7 Inferential Statistics on Factors influencing the Uptake of low cost Housing in Nairobi County

4.7.1 Correlations among the various factors influencing Uptake of low cost Housing in Nairobi County

The Table 4.11 below presents the correlations among the various factors influencing Uptake of low cost Housing in Nairobi County.

Table 4.14: Pearson Coefficient Correlations

		Price Levels	Disposable Income	Loan Repayment Periods
Price levels	Pearson Correlation	1	.831**	.099**
	Sig. (2-tailed)		.012	.000
	N	89	89	89
Disposable Income	Pearson Correlation	.831**	1	.111**
	Sig. (2-tailed)	.012		.000
	N	89	89	89
Loan Repayment Periods	Pearson Correlation	.099**	.111**	1
	Sig. (2-tailed)	.000	.000	
	N	89	89	89

** Significance level at 95% Level of Confidence

The researcher used Pearson's correlation coefficient test at alpha level 0.05 to determine the relationship between each of the independent variables (Pricing Levels, Disposable Income and Loan Repayment Periods). Table 4.11 indicates a significant association among the study's independent variables Pricing Levels, Disposable Income and Loan Repayment Periods ($r=0.750$, $P=0.000$). Correlation analysis done also indicates

statistically positive significant association at the 0.05 level (2-tailed).

4.7.2 Results Based On Model of Estimation

The table below presents the model of estimation on the relationship between the studied variables.

Table 4.15: Model of Estimation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.896 ^a	.803	.801	.008978	.00099	2137.1	2	2	.000

a. Predictors: (Constant), Pricing Levels, Disposable Income and Loan Repayment Periods

b. Dependent Variable: Uptake of low cost Housing in Nairobi County

Adjusted R squared is coefficient of determination that shows the changes in the dependent variable as a result of variations in the independent variables. As can be seen from the above Table 4.12, the adjusted R value was at 0.801, showing a change of 80.1% on dependent variable. This indicates that the model was a good fit in Pricing Levels, Disposable Income and Loan Repayment Periods. In addition, the adjusted multiple coefficient of determination of 0.801 indicates the high joint impact of the explanatory variables. It means that 80.1% of changes in Uptake of low cost Housing in Nairobi County are explained by the changes in Pricing Levels, Disposable Income and Loan Repayment Period whereas 19.9% of changes in Uptake of low cost Housing in Nairobi County are explained by other factors such as location and demographic factors among others.

4.7.3 Results based on ANOVA test

The section Table 4.13 presents the Analysis of Variance (ANOVA).

Table 4.16: Analysis of Variance (ANOVA)

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	196.218	2	17.702	2137.147	.000 ^b
	Residual	1.179	91	.007		
	Total	197.397	93			
a. Dependent Variable: <i>Uptake of low cost housing</i>						
b. Predictors: (Constant), (Pricing Levels, Disposable Income and Loan Repayment Period)						

From the ANOVA analysis results on table 4.14 above, the overall p value was equal to 0.000 which was less than 0.05. The regression analysis results in the ANOVA output table indicates that the overall regression model was significant in predicting the uptake of low cost housing in Nairobi County at 95% (.05) confidence level based on the studied independent variables; pricing levels, disposable income and loan repayment period.

4.7.4 Regression model on factors influencing Uptake of Low cost Housing in Nairobi County

The Table 4.14 below presents the combined regression model on factors influencing Uptake of Low Cost Housing in Nairobi County.

Table 4.17: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.114	.023		114.661	.020
Pricing Levels	.409	.019	1.226	19.883	.022
	.580	.011	3.489	31.314	.016
Disposable Income	.151	.021	4.688	7.746	.010
Loan Repayment Periods					

a. Dependent Variable: <i>Uptake of Low cost Housing in Nairobi County</i>

As shown in the Table 4.14, the regression equation model for the study was of the form; $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon$ where Y = Dependent variable (Uptake of Low cost Housing in Nairobi County), β_0 = Constant (The intercept of the model), β = Coefficient of the X variables (independent variables), X_1 = Pricing Levels, X_2 = Disposable Income, X_3 = Loan Repayment Periods. The figures in the above table were generated through the use of SPSS data analysis and established the following regression equation; $Y = 1.114 + 0.409X_1 + 0.580X_2 + 0.151X_3$. The study found that when independent variables (X_1 = Pricing Levels, X_2 = Disposable Income, X_3 = Loan Repayment Periods) were kept constant at zero, Uptake of Low cost Housing in Nairobi County will be at 1.114. A rise by a unit in Pricing Levels will result to a rise in Uptake of Low cost Housing in Nairobi County by a factor of 0.409, a rise by a unit in disposable Income will result to a rise in Uptake of Low cost Housing in Nairobi County by a factor of .580, while a rise by a unit loan repayment period will lead to increase in Uptake of Low cost Housing in Nairobi County by a factor of 0.151. The Table 4.14 also shows that the X variables (independent variables), X_1 = Pricing Levels, X_2 = Disposable Income, X_3 = Loan Repayment Period with Y = Uptake of Low cost Housing in Nairobi County were all statistically significant at 5% and 95% level of confidence at .022, .016 and .010 respectively.

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the discussion of findings, conclusions and recommendations on the assessment of the civil servants on factors influencing uptake of low cost housing in Nairobi City County government employees. to establish the influence of price levels and varying land prices on uptake of low cost housing in Nairobi County, to determine the influence of disposable income on uptake of low cost housing in Nairobi County and; to determine the influence of loan repayment period on uptake of low cost housing in Nairobi County.

5.2 Discussion of Findings

5.2.1 Price Levels/Variations and Uptake of Low Cost Housing

The study found out that 57% of the participants showed that they were undecided on their level of satisfaction with the Price Levels set and Uptake of Low Cost Housing. The study found out that majority of the respondents moderately agreed that; majority of the respondents moderately agreed that; the price levels relate well with set market prices by other organizations like real estate firms as shown by a mean score of 3.42, employees are satisfied of the government policy on low cost housing and affordability as shown by a mean score of 3.26, there is a good relationship between employer and employee collaborations as shown by a mean score of 3.17, an increase in the pricing of homes reduces home affordability and vice versa as shown by a mean score of 3.13, employees are worried of the price the government has set as shown by a mean score of 3.13 and that; there is a good relationship between employer and mortgage institutions collaborations as shown by a mean score of 3.11 respectively. The study established that only 49% of the respondents said that selected land prices in Nairobi County are reasonable whereas 8% said that the land prices were extremely high. The study found out that majority of the respondents were in agreement that; Land prices are not harmonized in the whole of Nairobi County as shown by a mean score of 4.06, there is a

poor systems of land records and pricing is always not efficient as shown by a mean score of 4.02 and that associated land prices where the houses are built on is very costly as shown by a mean score of 2.00 respectively. The results concur with literature by Ngugi and Njori (2013) that high land prices, poor systems of land records and a slow registration process discourage potential homeowners from mortgage and financing due to lack of timely verification of the prospective developmental properties and inability to service the huge amounts demanded. The literature by Lerner (2013) that explains overall increase in the pricing of homes reduces home affordability and vice versa also concurs with the findings of the research. When the prices of homes grow faster than individual income less people will be able to afford homes due to the pricing limitation. Several factors determine the pricing of homes key among them being the cost of financing for developers and prospective homeowners. High financing and other costs means that the overall cost of building a dwelling house increases and developers have to charge higher amounts for these homes. Other factors influencing the pricing of homes include but are not limited to land costs, facilitation costs, transportation costs, inflation rates and building material costs. Overall an increase in the pricing of homes reduces home affordability and vice versa (Lerner, 2013).

5.2.2 Disposable Income and Uptake of Low Cost Housing

According to the results the study found out that 38% of the participants showed that they were undecided on their level of satisfaction with the disposable income set and Uptake of Low Cost Housing. The results indicated majority of the respondents moderately agreed that; employees income levels do not in any way relate to the disposable income set by the financial institutions associated with the low cost housing construction by the government as shown by a mean score of 3.42, most civil servants/employees of Nairobi city county can afford to purchase bigger better quality houses compared to low income earners who have to struggle to obtain at least decent housing as shown by a mean score of 3.36 and that uptake of low cost housing is directly related to income levels for individuals as shown by a mean score of 3.04 respectively. Disposable personal income is often monitored as one of the many key economic indicators used to gauge the overall

state of the economy. The literature by Norris and Winston (2012) also indicated disposable income as an important measure of household financial resources. Economists use DPI as a starting point to gauge households' rates of savings and spending. The results agree with the literature reviewed by Lerner (2013) whose study reported that uptake of low cost housing is directly related to income levels for individuals and combined households who desire to own a home. Higher income levels mean that individuals or households can afford to purchase bigger and better quality houses compared to low income earners who have to struggle to obtain at least decent housing. However, the household expenditure patterns and an individual's perspective to home ownership also determine whether an individual will own a house or not and how fast home ownership will take place. Disposable income is thus a key determinant on home affordability and determines the type and size of home that can be bought or built.

5.2.3 Loan Repayment & Uptake of Low cost Housing in Nairobi County

According to the findings, 36% of the respondents said that loan repayment period affect uptake of low cost housing and affordability to a very great extent. According to the findings, 36% knew that the repayment period of beyond 20 years as an optimal repayment period that would not put unnecessary pressure on respondent's income. According to the results displayed in the table above, majority of the respondents were in agreement that; the loan repayment period provided by the mortgage firms associated with the government housing projects is inadequate as shown by a mean score of 2.96, employees are pleased that they are able to meet the monthly loan repayment deadlines set by the partner financial institutions as shown by a mean score of 2.94, short maturity periods and inflexible monthly payments all discourage the already homeowners from seeking financing alternatives for other projects as shown by a mean score of 2.89 respectively. The literature by Godquin (2014) reported loan repayment problem as one of the critical issues that concerns all stakeholders where the high loan default rate is the primary cause of the failure of many consumers to access and fully own low cost houses. The literature by Ngugi and Njori (2013) also supports the findings of this study by stating that the loan Repayment Period is determinant of uptake of low cost housing in

major cities in the world. The duration of repayment, interest rates and flexibility of monthly repayments can also not be overemphasized as they determine whether the borrowers will have the capacity to repay the loan within the stipulated period. The results agree with Derban and Iqbal (2015) that the loan repayment causes of repayment could be grouped into three main areas: the inherent characteristics of borrowers and their businesses that make it unlikely that the loan would be repaid. Second, are the characteristics of lending institution and suitability of the loan product to the employees which make it unlikely that the loan is to be repaid.

5.3 Conclusions

5.3.1 Price Levels/variations and Uptake of Low Cost Housing

On objective one, it was concluded from the study that most staff are undecided on their level of satisfaction with the Price Levels set and Uptake of Low Cost Housing. The study concludes that there is a moderate agreement that; overall an increase in the pricing of homes reduces home affordability and vice versa, most staff were worried of the price the government has set, there is a good relationship between employer and employee collaborations, there is a good relationship between employer and mortgage institutions collaborations, the price levels relate well with set market prices by other organizations like real estate firms and that they were happy of the government policy on low cost housing and affordability. The study concluded that selected land prices in Nairobi County as per the government criteria were reasonable whereas others land prices were extremely high. The study found out that majority of the respondents were in agreement that; associated land prices where the houses are built on is very costly, land prices are not harmonized in the whole of Nairobi county and that there is a poor systems of land records, and pricing is always not efficient.

5.3.2 Disposable Income and Uptake of Low Cost Housing

On objective two, the study concluded that most staff are currently undecided on their level of satisfaction on disposable income and Uptake of Low Cost Housing. According

to the results, the study concludes that most staff moderately believed that the uptake of low cost housing is directly related to income levels for individuals, most civil servants/employees of Nairobi city county can afford to purchase bigger better quality houses compared to low income earners who have to struggle to obtain at least decent housing and that most staff income levels in Nairobi city county do not in any way relate to the disposable income set by the financial institutions associated with the low cost housing construction by the government.

5.3.3 Loan Repayment Period & Uptake of Low Cost Housing in Nairobi County

Finally, on objective three, the study concluded that the loan repayment period set by the government affect uptake of low cost housing and affordability to a very great extent, and that there is an optimal repayment period that would not always put unnecessary pressure on respondent's income. About 36% of the respondents thought that loan repayment period of beyond 20 years would be optimal depicting that employees would like to repay for the loans as fast as possible and forget about it. The study concluded that there is a gap on understanding of mortgages and repayment periods. This may partially explain why there are only 24,085 mortgages in Kenya as per Central Bank of Kenya report (2017). The study concluded that; the loan repayment period provided by the mortgage firms associated with the government housing projects is inadequate, most staff in Nairobi city county were pleased that they were able to meet the monthly loan repayment deadlines set by the partner financial institutions, and that short maturity periods and inflexible monthly payments all discourage the already homeowners from seeking financing alternatives for other projects.

5.4 Recommendations

The study recommends that the government be clear on the prices it has set for the affordable low cost houses in Nairobi City County. In this case, there should be training

on the prices and the pricing decision thereof to the civil servants not only in Nairobi City County but also in relevant government ministries and agencies so as to clear the confusion among staff as well set optimized prices which do not raise questions.

The study recommends that there should be a guideline evident to the staff/civil servants indicating the formulae used to relate the disposable income with accessibility or uptake of low cost houses within Nairobi County and beyond, for this was found to be not clear among them. The disposable income must be harmonized so as not to affect the employees' perception on the uptake of the low cost housing initiative.

The study recommends that the government through the related ministries and agencies as well as the associated realtors and financial institutions cooperate and incorporate the civil servants' views on land prices and loan repayments periods. This will help the stakeholders involved come up with a guideline or policy that will not lead to the effect of failures to payments by the civil servants.

5.5 Limitations of the Study

The results of this study should be interpreted and understood with the confines of the following limitations. First, this study was limited to Nairobi County government employees. In this case, the study is therefore a representation of the scenario of what could be happening in other employees in other government officials for example in parastatals and so on in Kenya.

Secondly, the researcher experienced a challenge whereby there was some reluctance by respondents to reveal information on operational performance which was classified as confidential in their records. In this case, much time was used to stress on the importance of undertaking the research.

Respondents feared as if the research was official. The researcher informed the respondents that the information and other related responses they offer would be treated with utmost confidentiality, this might influence the adequacy of the data collected, therefore the validity of the conclusions derived from the data.

5.6 Recommendations for Further Studies

The study recommends that further study be done to explore more factors that influence or determine the uptake of low cost housing among the civil servants within Nairobi City County as well as in other companies or organizations besides the ones studied here. The researcher recommends that future authors and researchers involve more civil servants especially from the state corporations, parastatals and the 47 county governments to find out if they have the same feelings/perceptions on the studied parameters among other factors influencing the uptake of affordable low cost housing in Kenya.



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APPENDICES

Appendix 1: Introduction Letter

Name.....
P.O Box
NAIROBI

Dear Respondent,

RE: FACTORS INFLUENCING UPTAKE OF LOW COST HOUSING IN KENYA: A CASE OF NAIROBI CITY COUNTY GOVERNMENT EMPLOYEES

I am a Masters student pursuing Masters of business administration in Business Administration at Strathmore University. I am currently writing a thesis on the civil servants on factors influencing uptake of low cost housing in Kenya: a case of Nairobi City County Government Employees. I am visiting your reputable organization with the attached questionnaire seeking to gather information as pertains to the study. You are assured that the information you will provide in the questionnaire is only for academic purpose and that your identity will be treated with confidentiality. I will be grateful for your cooperation and active participation to this academic effort.

Yours faithfully,

.....

Name

Appendix II: Research Questionnaire

Section A: General

1. Indicate your Gender

a) Male ☐

b) Female ☐

2. Indicate Highest level of education

a) Secondary level ☐

b) College level ☐

c) University level ☐

d) Others specify

3. Kindly indicate your age bracket

a) 21 to 30 years ☐

b) 31 to 40 years ☐

c) 41 - 50 years ☐

d) over 50 years ☐

4. Kindly indicate how long you have been working at Nairobi city county

a) 1 - 2 years ☐

b) 2 – 3 years ☐

c) 3 – 4 years ☐

d) 5 years and above ☐

Section B: Perceived Factors Influencing Uptake of Low Cost Housing in Nairobi County

Price Levels and Uptake of Low Cost Housing

5. How satisfied are you with the Price Levels set and related to Uptake of Low Cost Housing?

Very satisfied ☐

Satisfied ☐

Undecided ☐

Dissatisfied ☐

Very dissatisfied ☐

6. Kindly indicate your level of agreement on the following statements that regard the influence of Price Levels on Uptake of Low Cost Housing. Rate where 1= Strongly Agree, 2 Agree, 3 Moderately Agree, 4 Disagree and 5 = Strongly Disagree

Statements	1	2	3	4	5
Overall an increase in the pricing of homes reduces home affordability and vice versa					
Am worried of the price the government has set					
There is a good relationship between employer and employee collaborations					
There is a good relationship between employer and mortgage institutions collaborations					
The price levels relate well with set market prices by other organizations like real estate firms					
Am happy of the government policy on low cost housing and affordability					
Any other					

7. How would you rate land prices in Nairobi County?

Extremely High ☐

High ☐

Reasonable ☐

Affordable ☐

8. Kindly indicate your level of agreement on the following statements that regard the influence of varying land prices on uptake of low cost housing in Nairobi County. Rate where 1= Strongly Agree, 2 Agree, 3 Moderately Agree, 4 Disagree and 5 = Strongly Disagree

Statements	1	2	3	4	5
Associated land prices where the houses are built on is very costly					
Land prices are not harmonized in the whole of Nairobi county					

There is a poor systems of land records and pricing is always not efficient					
Any other					

Disposable Income and Uptake of Low Cost Housing

9. How satisfied are you with the amount of disposable Income set relative to uptake of Low Cost Housing in Nairobi County?

Very satisfied ☐

Satisfied ☐

Undecided ☐

Dissatisfied ☐

Very dissatisfied ☐

10. Kindly indicate your level of agreement on the following statements that regard the influence of disposable Income set on uptake of Low Cost Housing in Nairobi County. Rate where 1= Strongly Agree, 2 Agree, 3 Moderately Agree, 4 Disagree and 5 = Strongly Disagree

Statements	1	2	3	4	5
Uptake of low cost housing is directly related to income levels for individuals					
Most civil servants/employees of Nairobi city county can afford to purchase bigger better quality houses compared to low income earners who have to struggle to obtain at least decent housing					
My income levels do not in any way relate to the disposable income set by the financial institutions associated with the low cost housing construction by the government					

b) Loan repayment period & uptake of low cost housing in Nairobi County

11. To what extent does loan repayment period affect uptake of low cost housing and affordability?

Very great extent ☐

Great extent ☐

Moderate extent ☐

Little extent ☐

No extent at all ☐

12. If you were able to obtain a home loan what would be the optimal repayment period that would not put unnecessary pressure on your income?

Less than 5 Years ☐

5-10 Years ☐

10-15 Years ☐

15-20 Years ☐

Beyond 20 years ☐

13. Kindly indicate your level of agreement on the following statements that regard the influence of loan repayment period on uptake of low cost housing and affordability.

Rate where 1= Strongly Agree, 2 Agree, 3 Moderately Agree, 4 Disagree and 5 = Strongly Disagree

Statements	1	2	3	4	5
The loan repayment period provided by the mortgage firms associated with the government housing projects is inadequate					
I am pleased that I am able to meet the monthly loan repayment deadlines set by the partner financial institutions					
Short maturity periods, and inflexible monthly payments all discourage the already homeowners from seeking financing alternatives for other projects					
Any other					

Section C: Uptake of low cost housing in Nairobi County

As a civil servant, indicate the extent to which you satisfied with the governments' initiative on the provision of low cost housing in Kenya?

Very satisfied ☐

Satisfied ☐

Moderate satisfied ☐

Not satisfied

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Thanks for your participation



Appendix III: Approval Letter, Strathmore Business School



Appendix IV: Data Collection NACOSTI Authorization Letter

