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ASSESSMENT OF HOUSING AFFORDABILITY PROBLEM AMONG YOUNG HOUSEHOLDS IN EKURHULENI MUNICIPALITY AND JOHANNESBURG, SOUTH AFRICA



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Johannesburg, 21 October 2019

DECLARATION

I, Kudzai Mawoyo, declare that this research report is my own, unaided work, except where otherwise acknowledged. It is submitted for the degree of Master of Science in Building at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other university.

…….

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October 21, 2019

ABSTRACT

This study examines the issue of Housing Affordability problems faced by the young households in Johannesburg, South Africa. Johannesburg is the heart of various business activities in South Africa, it is characterized by increasing external & internal migration, increasing house prices, inadequate income and an increase in the cost of living. Furthermore, growing unemployment rate in South Africa is one of the key influencing factors to note which makes it a struggle for the YHs to own a house in the housing market. Previous research of similar nature has been conducted before, it was based mainly on housing affordability problems among YHs in the city of Kuala, Malaysia and findings reveal that the main problem faced by the YHs was a limited supply of affordable housing units (Zyed et.al, 2016). South African housing market has been experiencing an increase in limited supply of affordable housing units for the households because contractors want to maximize profits and they prefer medium to high end housing which is costly for the majority of households in South Africa (Rust 2006). Reconstruction and Development Programme housing is present and active in South Africa and it does offer help by providing land and housing to the people of South Africa. However, there is limited government policy interaction in the policy implementation for affordable housing. The study aims to identify HA problems faced by YHs in Ekurhuleni municipalities and the city of Johannesburg, South Africa, which attributed to affordability, housing choice, housing income, housing policy and house prices. This paper adopts a case study approach and design which is then followed by the explanation on data collection and sampling technique, data validity and data analysis.

This paper concludes that there is a gap in affordable housing for YHs in the Johannesburg housing market. Empirical evidence reveals that lack of sufficient income in securing a housing loan is also one of the challenges faced by YHs as well as their financial commitments. The supply of affordable housing for YHs is limited and further decreases their opportunity to purchase a house. Affordability problems faced by YHs in Ekurhuleni municipality and the Coj needs critical study that will aid in establishing in right perspective the ability of the YHs in the acquisition of housing units within their income limit.

DEDICATION

In memory of my beloved grandfather, your legacy continues and your spirit shall live forever.

Philip Kaguri Rusike

(1934 – 2018)

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LIST OF ABBREVIATIONS

YH Young Households

HA Housing Affordability

COJ City of Johannesburg

Chapter 1: Introduction

Background to the Study

Housing has several functions for humankind (the society and amongst individuals) and not only does housing provides shelter for the users. Housing serves as a consumption, a good investment, provides a social space for the households and a platform where social interaction as well as relations with the society are continuously reproduced. According to Brown (2016), article 25 of the Universal Declaration of Human Rights (UDHR) states that "everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family" (Brown, 2016). Article 25 adds that the standard of living must include housing as well as food, clothing, medical care, necessary social services and the right to security in case of unemployment, sickness, disability, widowhood, old age or other conditions beyond any individual's control. Apart from these vital functions, the housing aspect has a specific feature which makes it a subject of government policy (Brown, 2016)

In support of (Brown, 2016), the state is responsible for making sure that its citizens exercise the right to housing irrespective of their income, age and other household's related attributes (Aksoy 2017). The main aim of the housing policy is to ensure that every household gets their benefit to enjoy the right to own adequate housing as noted by (Zyed et.al, 2016).Housing Affordability (HA) is of major concern when households experience difficulties in the acquisition of housing and it is a very broad topic which does not have a uniform definition; instead it entails the use of indexes to measure affordability of households.

In recent years the affordability problem has become important in large number of housing markets in South Africa especially in the City of Johannesburg (CoJ), the heart of business, where cost of living is considered to be high as compared to other cities in South Africa (Zile, Viruly, Tomlison, Hobden and Erasmus, 2008. (Lin & Lind (2011) share the same views as the Shanghai, Chinese market (context) and in addition states that people have cut their expenditure on basic commodities such as food, traffic, clothing, electricity irrespective of whether they buy or rent. This relates to the South African housing market which is the area of study. Housing affordability is currently a prominent concern in the United States due to an increase in housing costs more than incomes of households over the past years (Jewkes, 2008). Moreover, this applies to the South African economy which is a growing market experiencing a similar scenario to that of the United States.

These parameters used to measure affordability range from household disposable incomes, housing prices and the choice of housing just to mention a few (Jewkes,2008). However, the issue of HA has been a crucial topic of interest for both researchers and policy makers in different countries across the globe and it is not a new crucial topic because households are continuously experiencing difficulties in acquisition of housing (Aksoy 2017). The imbalance between increasing housing prices and household's disposable incomes; more especially for low income earners makes it increasingly unaffordable for them and they end up suffering the most (Aksoy,2017). Furthermore, YHs who have graduated and secure employment, are considered to be first time home buyers in most cases and are subjected to more problems in housing affordability; i.e. choice of housing, household disposable income and the housing price identified as key elements Zyed et.al (2016).

A research study in the field of HA problems faced by YH was conducted by Zyed et.al (2016) and it was based on a case study method in Kuala Lumpur Malaysia which was chosen as the area of focus. According to Zyed et.al (2016); problems faced by most YHs is the limited supply of affordable housing in the market since youngest households based on the results of the measurements. The measurements hold that YHs do not earn enough to afford housing. Furthermore, most of the YHs are first time home buyers and they will be competing with other income groups in the market for home ownership. The main focus of the study involves a discussion on the housing affordability problems experienced by the YHs in Ekurhuleni municipality and CoJ, South Africa.

Problem Statement

The issue of HA describes the relationship between housing and its users i.e. measure of a person's ability to afford to live in a given house unit (Cai, 2017). A reliable and efficient way of measuring affordability is very important for individuals who can utilize this measure to make informed decisions about where they would want to live and local policy-makers too for a number of reasons such as the basis for allocating government funds for housing programs, Cai (2017). In the context of the study of HA problems faced by YH, a vast majority of YHs across the globe are considered to be first -time home buyers who earn relatively low income and savings. There have been worries that the YHs may not be able to afford homes due to increasing housing prices and cost of living (Zyed et .al, 2016).

According to the report by Centre for Affordable Housing Finance In Africa, in johannesburg average household's income can afford a home worth R280 000 yet the average sale price is about R825 000, with fewer properties below R500 000. The income -housing gap created by the municipal reveals that it takes 3 times the average household income to afford an average house. Inadequate income to purchase house relates to the issue of increasing house prices which makes it unaffordable for the YHs and the limited housing choice/supply of affordable housing in the housing market which is most likely to affect low income earners (Zyed et. al, 2016).

South Africa as a country is still an emerging market which entails that there is more business opportunities for investors who usually aim at maximising their profits (Zile, Viruly, Tomlison, Hobden and Erasmus, 2008).This still remains true in the South African housing market; however there is limited construction capacity together with insufficient economic opportunity in the low income housing sector. This has resulted in placing the state/municipality on a strain to intervene and perform their role in the development process. The supply of affordable housing into the housing market is very crucial especially in closing the gap of inadequate supply of affordable housing in the housing market for the YHs since they have low incomes and are at newest entrants to the market competing with other income groups in the open market for home-ownership.

According to Trust and Rust (2006), there has been a shift from the affordable market to the lower rung of the middle income market by the developers who are facing demoralization with many pointing out the insistence on meeting higher norms and standards together with subsidy levels which was making projects enviable as increased also state/political influence. The recent trends in Johannesburg reveals high rate of urbanisation more especially the YHs who are seeking for greener pastures, some who have just completed their studies. Getting ready to enter the working space (Rust, 2006). In addition, the property prices are increasing by a greater margin of income received by YH (low income-earners). There is a strong link of the HA influencing factors; the housing choice, household income and housing prices. The major problem is that YHs are likely to face more HA problems when compared to the older households (Zyed et.al 2016). In addition, this serves the rationale to explore on these HA problems and the main aspect being the limited supply of affordable housing in the housing market of the YHs of Ekurhuleni municipality & the CoJ.

Research Questions

The research questions designed are given as follows:

- What are the key elements affecting HA amongst the YHs in the City of Johannesburg, South Africa?
- What are the criteria in measuring household affordability for YHs in the CoJ South Africa?
- How is the HA problem influencing the housing choice and behaviours of households?
- What changes in HA can be identified?

Research Scope

The scope of the research is on HA problems experienced by YHs within housing policy and schemes, housing choice, housing price levels, household income, the assessment of inadequacy of income to purchase/rent a house and supply of affordable housing in the housing market of YHs in the Coj South Africa.

Research Aim

The aim of this research is to identify HA problems faced by YHs (both educated and non-educated) in the city of Johannesburg, South Africa. The need to establish the influencing factors causing the HA problems faced by YH in the Coj, South Africa and to make recommendations on improving the HA problems faced by the YHs.

Research objectives

The main objective of the research is to identify, classify and evaluate the critical issues contributing to the HA problems faced by YHs in Ekurhuleni and the City of Johannesburg, South Africa.

Conceptual Framework

There are four main theoretical frameworks that have been used as tools for analysis in this research (Figure 1). These are namely; housing price, housing choice, household income and state policy intervention in order to find the extent to which they contribute in the areas of concerns around HA issues faced by the YHs in Johannesburg, South Africa.

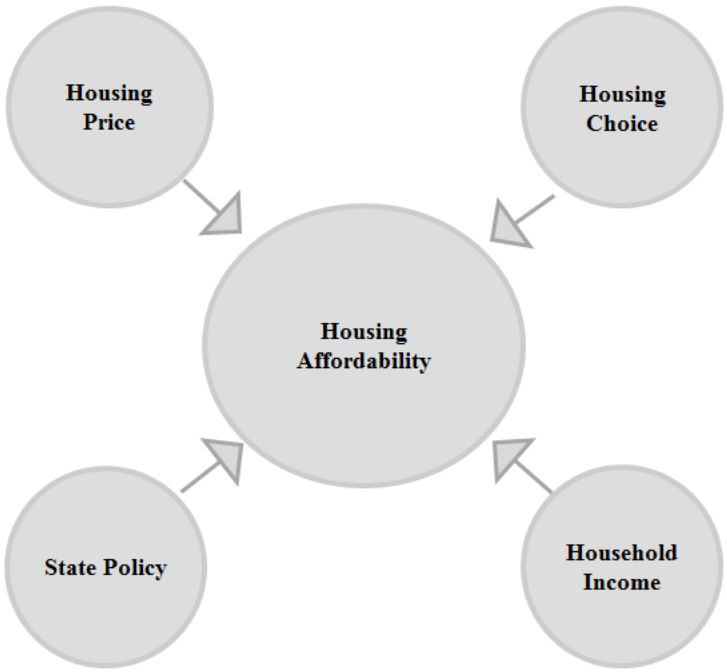


Figure 1.1: Housing affordability conceptual framework.

This section summaries the contributing factors influencing the HA problems faced by YHs in Johannesburg South Africa. South Africa is an emerging economy that has a great potential in terms of investments and opportunities in the property and construction sector.

The major concern of any ordinary household respective of their age is the relationship between the choice of housing and the housing price levels (Zyed et al 2016). In general households more especially the YH can afford to purchase a house irrespective of location and then again these YH cannot afford a house of their own choice without taking into account other inter-related factors such as housing income and housing price levels. The major focus will be more on YH who aspire to become home-owners. Previous research discuss the impact of the problems of HA faced by the YHs within the scope of housing choice, price levels, household income and state intervention .Furthermore, there is a good number of research studies that highlight the HA problems in the international perspectives. The next section discusses the parameters of HA problems faced by the YHs.

Hypothesis

- YHs cannot purchase a house of their own choice
- Housing prices are a great contributing factor in socio-economic issue leaving the YH with more competition in the housing market.
- Housing policies can better the state of YH in the housing market.

Delineation

South Africa is made up of 9 provinces out of which Johannesburg was chosen as the case study because of high urbanisation, high business activity, and migration since most people from outside the country come to Johannesburg in search of better life changing opportunities. The study is conducted in Ekurhuleni municipality and the Coj since Johannesburg as a city is the heart of business activity in South Africa (Zile, Viruly, Tomlison, Hobden and Erasmus, 2008. Ekurhuleni and the Coj municipalities are close to the university where the research was carried out which is advantageous in terms of costs involved in the research.

Research Philosophy

The research focus covers factors underlining the socio-economic problems faced by YHs in the housing market of Ekurhukeni municipality and CoJ, South Africa. Neuman (2006) explains meanings of methodologies in three categories in the context of the social research method. Furthermore, the main three meanings to methodology in social research methods are Positivist Social Science, Interpretative Social Science (ISS) and Critical Science (CSS) (Neuman, 2006). . CSS approach is best suitable for this research since it has been adopted by community action groups, political organisations and social movement, it is important to emphasise that this study aims at analysing the HA problems faced by the YHs. For this reason, the study adopts a case study approach which in this case is Johannesburg, South Africa.

Assumptions

YHs are perceived to be first time home-owners and low income earners. Individuals are assumed to have a free will, desire to own a house of their own choice which is further determined by their financial capability.

Chapter 2:Literature review

2.1. Preview

The purpose of a literature review is to develop a good understanding, insight into the previous research and the trends that have emerged in the HA among YH's sector. This paper will be able to identify gaps in the existing body of literature that future research may be able to address. The literature review will commence by introducing the general overview of HA and the measures of housing affordability. The next area of focus is the understanding of HA among YHs and the HA problems they experience when purchasing homes. And then move on to discuss the key influencing factors in housing affordability; housing choice, household income and house price. The last part of the literature review will discuss on the housing policy in South Africa and the HA problems faced by the YHs in the South African context.

2.2. Housing Affordability

Overview of Global Affordability

The issue of HA has risen to the top of national housing agendas especially in the most emerging markets across the globe. Housing is termed as housing that is built specifically for residential purposes in order to provide basic privacy and security for the people to live in.

The idea of HA, can be explained in numerous way and the precise definition is at best ambiguous (Linneman and Megbolugbe, 1992). HA is mainly influenced by the levels and distributions of home prices, household's income as well as the financial structure. In addition, researchers have developed mathematical expressions /models in attempt to details the relationship between these variables According to (Linneman and Megbolugbe, 1992). However, these definitions all reveal that the concept of HA has two elements; the people and what they want to buy (Cai, 2017).

The two elements also represent the demand – supply side of the problem and it is a high priority that affordability of any given item be correlated with the buying power of its potential end users. The prices in the real estate market have become more unstable due to economic performance in many countries across the globe more especially after the World War 2 (Lin and Lind, 2011). In this regard, there has been a wide gap between the high-income and low-income earners, which makes it unaffordable for the low-income earners to own a comfortable house of their choice (Lin and Lind, 2011). Housing not only serves as an investment only but also for social protection.; which is provided by the state to the customers who are mostly low income earners or has lower competition in the social market.

Furthermore, HA recognizes the needs of households whose incomes are not adequate enough for them to access appropriate housing in the market (Milligan et al 2004). It is important to ensure a reliable, efficient measure of HA which is very crucial because it is utilized in various scenarios as follows (Cai, 2017):

- Assisting the state agencies and NGOs to develop reliable estimates and thus utilize public funds effectively.
- For allocating the state funds for housing programmes.
- Households can utilize the measures in making housing choice decisions.

The complexity evolving around the definition of HA reveals that there is no one measure for assessing the nature and degree of HA problems. Milligan, Phibbs, Fagan and Gurran (2004) noted that practical definitions explaining HA are usually specific to the policy and program context in which they are used and they typically have common features such as the notion of what comprises of affordability and the specific targeted group. The term HA in this paper targets the YHs residing in Johannesburg South Africa and this will be discussed further in the next section.

Housing affordability among young households

Housing affordability problem is most common in middle- class and affluent young adults with ever-growing expectations of owning a house. YHs are facing problems in the housing market because they are considered as new entrants in the employment sector and first time buyers which becomes risk for many funding entities (Zyed et.al. 2016). Furthermore, the perceived affordable housing in the market is open to all income groups which reveal that YHs are faced with competition from all other income groups in the market for home-ownership. According to Wilcox, 2003; 2006; 2008), the age of YHs is considered as first time buyers and their age ranges from 20-39 years old. In contrast to HA being a problem faced by the YHs, Ortalo-Magne and Rady (1999) observed co-movements of housing prices, owner occupancy rates and explained the increasing rate in home-ownership among YHs because of the deregulation of the mortgage market which entails easement of accessibility to mortgage credit for the YHs. Zyed et.al (2016) stated that the increase in terms of owner occupancy rate among households is not only because of less interest rates but also savings rate. Financial stability in families has an effect in assist YHs in home ownership.

Green and Hendershott, (1996) Boehm and Schlottmann (1999) noted that on average, the parents who own homes are wealthier than those who rent and they also capable of providing financial aid and this emphasis on help from parents who are home-owners captures an effect towards the HA problems faced by households. Andrew, Haurin and Munasib (2006) argued that some of the YHs primarily choose to remain at their parent's homes than renting and owning a house, so they build up their savings in preparation of purchasing the house of their own choice.

2.3. Nature and Extent of the Problem

Typical YHs are considered to be first -time buyers who have relatively low income and savings (Fisher and Gervais, 2007). Furthermore, increasing housing price booms have been known for centuries, since the late 1990s and it is evident in first world and some emerging markets such as Australia, Canada, China, France, India, Ireland, Italy, Korea, Russia, Spain, the United Kingdom and the United States of America, to mention a few (Shiller, 1988). Hence, one of the common problems identified by previous researchers is the issue of down payment which is one of the constraints for both the younger and middle income earners, so they end up postponing home-ownership.

Zyed et al (2016) stated that one of the key contributing elements to the HA among households is the limited supply of affordable housing in the market. In addition, this is the attributed to key problems of house price, household's income and the housing choice in the market faced by the YHs. Embong, (2013) noted that the supply of these affordable housing is yet to be fulfilled in the market, yet the affordable housing is on open to all income groups which suggest that households will end up competing with other income groups in the open market for home ownership. There is a gap for state intervention across the globe in the market to introduce effective ways that will combat the HA problems face by YHs (Zyed et.al 2016). One of the ways is the National Housing Partnership are organisations that dedicate resources in making investment that betters and allow accessibility to home-ownership by low- middle income earners. With state intervention comes with the implementation of policy options which are perceived to be a solving instrument and improving the affordability problems not only for the YHs but for all age groups that are financially disadvantaged households (Aksoy 2017). The next section discussed the HA problems among YHs residing in Johannesburg South Africa.

2.4. Housing affordability problems among young households in South Africa

Over the years past the apartheid era, urban migration growth has been a trend, a reflection of freedom of movement, the need for better opportunities and has resulted in an increasing number of informal settlements more especially around big towns and cities. According to the Africa Check by 2011, the census revealed that the number on shacks and informal housing arrangements had increased to about 1.9 million. Furthermore, this then reveals approximately 13 % of households in the country which was reported as a decrease since 1996 due to government intervention programmes that assist with low -cost housing (Wilkinson, 2005). Access to housing across all age groups remains a huge crisis in South Africa especially the black community, some still live in informal settlements most of whom cannot afford adequate housing (Sikota, 2015).

According to the demographic analysis of demand in South Africa by Gardener (2004), the country's population is divided into eight sub groups based on differences in income. Approximately 79% of the population is eligible for housing assistance in terms of the R3500 per month income limit of the national housing subsidy scheme and 90% of the country's population earns less than R7500 monthly income (Rust and Trust, 2006).

In order to fulfil the aim of this paper, more focus is put on the targeted YHs residing in Johannesburg who are currently facing employment problems as well as distribution of income that is insufficient enough for them to afford housing. In the South African context, the term HA among YHs refers to as a specific type of housing that comprises of the following attributes:

- Target group (restricted to moderate and /or low income earners aged between 18 – 35)
- Considered as new entrants to the market financed through a mix of public subsidies, planning benefits, private equity and/or debt financed
- First time home buyers
- Initiated and owned by non-government not for profit providers

In order for the South African market to understand its housing market opportunities and assist both the cities and the private sectors, the South African Cities Network (SACN) partnered with the Centre for Affordable Housing Finance (CAHF) to develop profiles for each of the 9 member cities.

On average properties in Johannesburg are highly priced with the fewest properties under R500 000, but less affordable for the greater portion of the people in Johannesburg. According to the housing gap created by the municipality, average household's income can afford a home worth R280 000 yet the average sale price is about R825 000. This entails that it takes 3 times the average household income to afford an average house and the gap is considered to be higher in other nine provinces. However, there is a generalisation in terms of the components of HA problems in YHs and government intervention which comprise of supply of housing, household's capability of purchasing a home in terms of buying/renting (Milligan, 2004).Furthermore, this is closely related to the HA problems among YHs which are influenced by house prices, household income and housing preference. The state intersession is important more especially in the housing consumption as the HA issues among households encompassing decreasing purchasing power capability in the housing market (Zyed et.al 2016).

One of the major factors not be overlooked in the South African context apart from income difficulties, economic fluctuation is the racial indifferences and the legacy of the apartheid system where housing was supplied and used as an instrument to pave way for social segregation among the black community and mixed race (Burgoyne 2008). This is evident in Western Cape , other parts in Johannesburg such as Soweto; where by the black community was subdued to class separation making great resistance to low-income housing projects by the neighbouring communities , as new housing projects are perceived as dysfunctional ghettos Department of Local Government and Housing, 2005).This is further discussed in the next section that deals with the South African housing policy and implementation that reversed the older policies that suppressed the black community to better the young generation of today.

2.5. Housing Policy in South Africa

Housing policy is regarded as a crucial instrument in addressing the phenomenon of informal settlements because the assumption is that informal settlements materialise as a result of a lack of housing (Marx, 2003). The state policies ensure that the government to devise housing strategies and integrated development plans to meet the goals of integrated, healthier, safer and more vibrant urban areas (Marx, 2003).

In South Africa October 1994, a national housing accord was formed and this developed the basis of the common vision that shaped the core of the South Africa; housing policy in modern day times (National Department of Housing, 2003). Furthermore, the white Paper on housing policy followed the National Housing Accord in December 1994. The White Paper comprised of three strategic thrust; nation housing subsidy scheme to eligible households (South African citizens), Stabilise the housing environment (encouraging greater lending in the market by the existing banks which took up a larger portion of the country's financial lending sector and mobilisation of the housing finance. In 2004, a new policy: Breaking New Ground (BNG) was formed in order to refocus policy attention on the development of sustainable human settlement rather than just delivery of subsidised housing units (Rust and Trust, 2006), to promote the achievement of non-racial, integrated society through development of sustainable housing settlements and quality housing" (Department of Local Government and Housing, 2005).

BNG introduced a more defined role of municipality, placed increased emphasis on the role of state in determining location, the nature of housing as part of a plan to connect the demand and supply of the housing market. BNG approach enables the municipalities to assume overall responsibility in terms of setting their housing programmes in the case of jurisdiction, through a greater devolution of responsibility and resources to them. Furthermore, cities of Johannesburg, Ekurhuleni and eThekweni have already taken the initiative to redraft their housing strategies in the line with the budgetary allocations and inherent constitutionality's defined at national level and which are yet to be defined.

In terms of policy implementation, South Africa has begun to look much more like other parts of the world; the likenesses with Latin America. According to Gilbert (2000), the bureaucracy is certainly regarded as one of the most efficient and in the Chilean region; the subsidy programme would not have been a success without this efficiency. The Chilean region has competent officials who were involved in the implementation process. Unfortunately, in the initial stages, South Africa lacked a well-established and efficient bureaucracy which would have made the process fairer and represented and also considering low education levels in typical of the average South African. This was clear that an efficient government intervention was not something that South Africa was likely to benefit from for a number of years (Gilbert, 2000). The main aim of housing policy is to ensure that every household enjoy their right to own a home (Zyed et.al 2016).

Since YH fall under the low income earners, they face other contributing problems to HA such as access to home loans from various banks because they are regarded as new entrants into the market, racial indifferences. However, the introduction of BNG in mobilising housing finance, led to the establishment of two institutions; the National Housing Finance Corporation and the Rural Housing Loan Fund. Furthermore, this would encourage increased lending for housing purposes to low income earners through the provision of wholesale finance and market development support to specialist housing lenders, micro financiers, social housing institutions and primary market lenders.

According to recent research by Pearson and Greeff (2006) this picture still holds true today, especially in the terms of the extension of bank credit cards down market. Furthermore, state intervention allows for great practice in policy implementation and subsidy programmes to cope with the HA problems (Zyed et.al 2016). In sum, research findings reveal that one of the main problems experienced by YHs is the limited supply of affordable housing in the market. This attributed to crucial problems of house price, household's income and housing preference which is discussed in the next section.

2.6. Housing Choice

Housing choice explains the action taken by households in deciding their choice of house and this include tenure, type of house, location, neighbourhood (Zyed et.al 2016). The rationale that is HA index should take into account factors such as location because the aim of HA policies is not only dedicated to providing shelter but also to supply units that are accessible to jobs, education and other related amenities. (Cai, 2017). Problems evolving around HA in housing choice are viewed in the perspective of purchasing due to the notation that every citizen is entitled a right to housing and it is the state's duty to ensure households enjoy this right. In sum, housing policies are there to better barriers and constraints faced by the households in the housing market. According to Zyed et al (2007), YHs are likely to live with other such as family and a large group of friends if their housing choice is not met. Tenure choice plays a huge role in understanding the trend among the YHs in the housing market; be able to identify the growing trend (buy/rent).

Another view of housing choice in financial perspective that that most YHs are do not have sufficient income to purchase a house of their desire. In Johannesburg housing market is considered to have the highest property values and a few property values just under R500 000 whereas average income for a household is R290 000 per annum.

This entails that it takes three times the average income to afford the average housing. In the South African housing market, low-income earning households are often faced with high transaction costs and are limited in the choice of providers of basic banking services (Falkena, Davel, Hawkins, Llewellyn, Luus, Masilela, Parr G, Pienaar and Shaw et.al 2004). Theoretically, one of most efficient way to solve the HA problems among the YHs is increasing supply at the bottom rung of housing stock and ensuring these housing units are made available as well as affordable to most low-income earning households (Cai, 2017). In contrast to this, the municipal recordings reveal that most properties are way over the average income earners category. According to the Centre for Affordable Housing Finance, municipalities can use this information to better align housing policy in order to address real affordability at the local level and to encourage development that successfully meets the needs of local households.

2.7. Housing Price

Price is regarded as an important instrument and most reliable index of housing market (Stutz and Kartman, 1982). Rapid urbanisation, growing population, economic growth like the South African market and the liberalization of housing market and inadequate supply of affordable housing are influencing factors towards the rising housing price level (Mak, Choy and Ho, 2007). Furthermore, supply and demand for housing explanations are not mutually exclusive and does not have any significance in price changes more especially if housing demand is stable or declining (Matlack and Vigdor, 2008). In contrast, Mak et al (2007) research reveals that demand and supply are closely related and while there is an increase in housing demand, the supply lags behind housing demand.

In the South African market, there has a decline in terms of sub R200 000 housing category from 70% of delivery in 2000 to comprising less than 40% of delivery in 2005. Furthermore, housing prices are continuously increasing while inflation has rising since 2000 (Rust & Trust 2006). According to the Banking Association , it reported that South Africa's housing backlog is continuously expanding and there was a shortage in supply of affordable housing in the sub R200 000 price with the greatest log experienced in Gauteng (191 000 houses lacking for the demand created by FSC target housing loans). With the growing economy in South Africa, it is highly unlikely for someone in to improve their income by a margin that will enable them to get funding institutions in order to purchase a home. This entails that even households accessing or trying to access affordable housing with Financial Sector Charter loans are unlikely to ever succeed and better their housing situation further.

According to the National Housing Strategy "BNG", noted that a number of private firms opted to move out of the low-cost housing sector. Research conducted by the CMDA in July 2020 revealed that developers were highly demoralized with many developer pointing out that that the insistence on meeting higher norms and standards together with static subsidy levels was making projects unviable as the issue of increased political intervention which exacerbated the problem. In the context of this paper, YHs are considered to be more vulnerable and be the victim of increasing house prices where the benefits are mostly enjoyed by those who already home owners, older generation with more and strong buying power in the housing market (Zyed et.al 2016). Since younger households are considered to be at the lower tail of the income distribution, it questions if there is a possibility of reducing the HA problems faced by the younger households. Due to political instability and ever growing economy that is unpredictable, has led to other developers opting to leave the low cost housing affordable to low income-earners; younger households will continue to face such difficulties. The idea of inadequate income to afford housing may present an issue for young leaseholds in terms of housing prices (Stutz and Kartman, 1982).

2.8. Household Income

As discussed in previous sections, HA issues faced by the YHs are presented by inadequate cash flow. In general, HA is explained in terms of a relationship between housing cost and household income (Henman and Jones, 2012). The housing price levels are for ever increasing such that the gap is very wide resulting in a crisis experienced by household's especially younger households, is when the basic expenses are perceived to be too high in relation to household income (Zyed et al 2016). Furthermore, this is revelled in the South African market where by many local housing markets are not affordable to the average local incomes. Matlack and Vigdor (2008) noted that increases at the high end of distribution can raise house price levels paid by the low income -earning households (YHs). The increase in income inequality gap leads to a growth in residual income of households, decreases and crowding occurs. YHs are mostly affected by this parameter because there are relatively young in the working environment and earn a smaller amount of income before acquiring more experience and as result this limits the YH's asset accumulation and their reliance on the private sector (Rappaport, 2008). In sum the issue of HA faced the YHs in the housing market is an inter-related problem between, housing choice, housing price levels and household income.

2.9. Literature review findings

This section discussed fundamentals of HA, influencing factors that contribute the most to HA problems among YHs and the role of government intervention. It is important to recognize the focus is mostly on the inter-relation between housing choice, housing price and household income experienced by YHs and the perception to achieve home ownership in an emerging market that is Johannesburg, South Africa. YHs are considered to be in the low – income earners category which makes them the victim to the issue of "affordability" in the housing market. In the South African market there is a limited supply of affordable housing which is likely to affect the YHs (Zyed et.al 2016) and this evident in the shift of a number of private firms opting to move out of the low-cost housing sector as stated by the National Housing Strategy.

One of the contributing factors to the notation that developers are opting to move out low-cost affordable housing is due to the expectations to meet higher norms and standards together with static subsidy levels making projects unviable since the issue of increased political intervention became a problem. The problem of inadequate income to purchase a home translates to house price levels that are not affordable for the households and limits their housing choice (Zyed et al, 2016). The gap between the average housing price and the average income by low-income earners is so huge that it takes three times the average income to afford the average housing in Johannesburg, South Africa. Literature findings reveal that choices is also a critical factor since YHs choice houses that fall outside their income bracket. On the other hand contractors are do not have incentives to venture into low cost housing since its perceived as profitless. Hence , there is a limited supply of affordable houses in the housing market of the CoJ , South Africa and this leaves the YHs limited in terms of asset accumulation.

Chapter 3: Research Methodology

3.1. Preview

The previous chapter explains the literature review of HA problems among the YHs. The scope of the research on HA problems faced by YHs is within housing policy and schemes, housing choice, housing price levels and household income and the study requires empirical evidence. The study was based on the analysis of measurable data thorough face to face questionnaire survey which was analysed with the IBM SPSS software.

3.2. Research Design

Research design is essentially focuses on developing a research question and objectives into a research project and it considers research strategies, the choice and time horizons. A research design gives a detailed outline of how an investigation is to be carried out. According to Kumar (2011), a research design is a procedural plan that is adopted by a researcher to answer questions. Willis (2015) indicated that the research design should be an all-inclusive strategy to explore and throw light on how the study is to be conducted. Mustafa (2010) expatiates that research design is a plan of action, a conceptual structure, a blueprint and a strategy of investigation so as to obtain answers to the research questions of a study. This includes how data were collected, what instruments were used, how the instruments were used and the method for analysing the data collected.

The research design should contain the following elements: clear statement of the problem, procedure and techniques to be used for data collection, the population to be studied and the methods to be adopted in the processing and analysis of the data. Research design is used to justify decisions and choices relating to the research procedure (Sekaran, 2003). This section provides the outline of the study's research design. The study will use the survey research method. The choice of research design is influenced by the methodology as well as the assumptions guiding the research process. The instruments used in collecting data were also determined by the research design. The research design is as well guided by the research questions and aims. The justifications for a research design should follow five aspects: research purpose, theoretical framework, research questions, research methods and sampling strategy.

The choice of research methods for the study was influenced by the research aim, questions and objectives. The study was conducted in two metropolitan areas (Johannesburg and Ekurhuleni) in South Africa and will used questionnaires to answer the research objectives. The study used questionnaires which were distributed to selected sample within Johannesburg and Ekurhuleni municipalities. The questionnaires were used to collect data regarding HA problems among YHs. The data was collected over a period of 6 weeks.

3.3. Population and Sampling

A population in a survey research as defined by Davies (2007) and Groves et al. (2009) is the group of subjects from which the researcher wants to make inferences by using sample statistics. A study population refers to the entire group of items in which the researcher has an interest (Neuman, 2006). The targeted population in this study is mainly YHs who work in different trade industries and residing in the city of Ekurhuleni and CoJ and between the ages of 21 to 35 years.

3.4. Sampling method

Sampling is the process of selecting some elements from a population for analysis (Mustafa, 2010). The main objective of sampling in quantitative studies is to create a sample which is representative and presents features or characteristics of the population from which they were drawn (Neuman, 2006). The sample that is collected is usually small but representative of the larger population. The results of the sample are therefore used to make an estimation of the entire population. According to Mustafa (2010), the sample size should be small enough to avoid unnecessary expenses and large enough to avoid intolerable sampling errors. Selecting samples is less expensive, less time-consuming, less cumber- some and more practical to analyze. Sampling techniques are of two types, namely non-probability sampling and probability sampling (Berenson, Levine & Krehbiel, 2009). In non-probability sampling, the samples are selected without any knowledge of the probabilities of their selection while in probability sampling, the subject are selected based on known probabilities. In this research, the probability sampling approach would be used because it allows unbiased inferences about the population to be made. A combination of stratified and simple random sampling was used in this study. The target population was divided into strata and a simple random sampling technique would be applied in each stratum. Simple random sampling allows the sample to be chosen by a simple random selection where every subject of the population has an equal chance of being selected.

Stratified random sampling occurs in population that consist of different or heterogeneous groups. The respondents were randomly selected based on their knowledge regarding HA problems among YHs and all YHs in the two metropolitans with knowledge on HA had equal chances of selection to be part of the sample. The respondents were mainly individuals who fit into the YH category , from different trade industries and mainly those who hold tertiary qualifications even though about 10% from the randomly selected individuals do not hold any tertiary school but have managed to fit the category because of being first time buyers. Because Gauteng is such a huge province, Johannesburg and Ekurhuleni municipalities were randomly selected and also because of their closes to the institution which also helped in cutting down the costs in this research project.

3.5. Sample Size

A sample is a smaller collection of units from a population used to determine truths about that population (Sharma, 2016). A sample size is the number of observations to be included in a statistical sample. The sample size is an important feature of any empirical study in which the goal is to make inferences about a population, as is the case with the current study. Tests of statistical significance are designed to account for sample size, thus the larger the sample, the easier it is for results to reach significance. The sample size used in the study was determined based on the expense of data collection, and the need to have sufficient statistical power to validate the findings. Neuman (2006) suggests that the question of how large a sample should be depends on the kind of data analysis the researcher plans to use, how accurate the sample has to be for the researcher's purposes and the population characteristics. The sample size used in this research was based on the population of YHs in Johannesburg. A sample of 120 respondents were targeted in each municipality.

3.6. Development of the Research Instrument

The research made use of a questionnaire which was adapted from Zyed et.al (2016), the questions around affordability to purchase a house, house price in the housing market, household income, housing choice in housing market and housing policy and schemes were measured on a five point Likert scale ranging from strongly disagree to strongly agree.

3.7. Data collection Protocol

Lapan and Quartaroli (2009) indicated that any data collection method must fit the purpose, respond to the needs of the study and suit the frame allocated to the study. There are a couple of ways of collecting data. These include interviews, questionnaires and observation (Lowe, Thorpe and Easter by – Smith, 2004). The study made use of questionnaire for data collection. A questionnaire is a method used to gather information related to the opinions of a large group of people (Pinsonneault and Kraemer, 1993). According to (Thwala et al 2017), a standardized questionnaire exposes each respondent to the same set of questions. A well-structured questionnaire was used to collect data. This study applied a formal standardised questionnaire to collect data in order to answer the objectives of the study of which the questionnaire consisted of five sections.

The first section was designed to collect biographical and demographical information relating to gender, age group, ethnic group and educational qualifications of respondents. The second section of the questionnaire was designed to collect data on the employment background of the participants. The third section of the questionnaire was designed to gather information about the household income of the participants. Section four sought information on the current residence of the participants. The fifth section comprised of five subsections designed to collect data relating to affordability to purchase a house, house price in the housing market, household incomes, housing choice in housing market and housing policy and scheme.

The questions that constituted the questionnaire were constructed in such a way that they were direct, short, simple, comprehensible, avoided ambiguity, not vague, not leading, not double-barrelled nor presumptuous. This was meant to avoid bias resulting from questionnaire design. Instructions on the questionnaire were kept simple and the use of technical or specialised words was avoided. The respondents were asked to rate each of the items on a five-point Likert scale regarding the extent to which they agreed or disagreed with factors as outlined in the questionnaire. The data collection process took one month, from January to February 2019, and it took approximately 5-7 minutes to complete each questionnaire.

3.8. Pilot Study

A pilot study was conducted in order to test and confirm the questions in the survey. According to Naoum (2012), good research starts with pilot study before actual study is carried out in order to trace any discrepancies in the questionnaire.

The pilot study was conducted through quantitative survey and data collection method was based on face-to-face interview. The main purpose of the pilot study was to ensure that the respondents understand the questions in the survey and to avoid misinterpretations. Besides, there are few matters that have to be assured in the pilot study as mentioned by Naoum (2012) namely; time period to answer questionnaire, clarity of questions and instructions, sensitive questions that respondents are reluctant to answer; ensuring the questionnaire has covered all important topic; layout is cleared, attractive and, consideration of comments and suggestions by respondents. The questionnaire was first printed out on a hard copy, given out to 20 randomly selected respondents from Ekurhuleni and CoJ, who work in different trades in order for them to complete the questionnaire. The respondents understood the questions well and made additional suggestions. One of the most important suggestions was to create a soft copy version of the questionnaires whereby the respondents can fill in via desktops or mobile, this saved time and was perceived as not a tedious exercise by the respondents.

3.9. Reliability

Reliability and validity of measurement are important in an empirical research. As suggested by Neuman (2006), a number of research strategies are used in this study by standardising the research procedures and conducting a pilot study. Trochim and Donelly (2007) defined validity as rationality, legitimacy and approximation of truth, while Sekaran (2003) term validity as truthfulness. Reliability and validity are important concepts in research as they are meant to enhance the accuracy of the assessment and evaluation of a research work (Tavakol and Dennick, 2011). Reliability refers to the consistency, stability and repeatability of results. The result of a researcher is considered reliable if consistent results have been obtained in identical situations but under different circumstances (Twycross & Shields, 2004).

Reliability is concerned with the consistency with which the measurement instrument measures what it intends to measure. Respondents, situational factors, the measurer and the instrument are sources that compromise reliability(Cooper and Schindler, 2008). Questionnaires were adopted from past literature. Attempts were made to ensure that questionnaires were administered during times agreed on with respondents, sensitive issues were avoided as much as possible and respondents were assured of confidentiality in their input, any condition that put a strain on the data collection were avoided. Problems usually arise due to poor questionnaire design or respondents lack of understanding of questions.

The Cronbach's alpha, measures consistency of the respondent's answers was be used and high level of reliability was ensured through the use of structured, standardized questions, clear and straight forward questions that are free of ambiguities.. However, these problems are eliminated through pilot study where every ambiguity in the questions were cleared making the responses a true reflection of the views of the respondents. A cover letter and an ethics letter further assured respondents that their information are confidential and will not be used for any other purpose.

3.10. Validity

Validity is defined as the extent to which any measuring instrument measures what it is intended to measure (Thatcher, 2010). In addition, Saunders et al.2009) stated that validity is concerned with weather if the findings are really a true reflection of what they appear to be about. The completed questionnaires from the respondents reveal that one of the most cited problem faced by the YHs in acquisition of homes is that there is a shortage supply of affordable housing in the housing market for the YHs .

3.10.1. External Validity

External validity is about the ability of the research to be generalized across the whole population (Litwin, 1995). This is usually increased by having a large sample size. External validity includes questions such as, is there enough data and whether the data are right. The research draws samples from all two metropolitans so that it is sufficiently representative of the population and to reduce the variances within the population. This enables the result to be applied across all the metropolitan area with confidence.

3.10.2. Internal Validity

This is about the extent to which the data collected could be used to draw valid conclusions. The internal consistency measure such as Cronbach's alpha, which measures consistency of the respondents answers which were used. The Cronbach alpha values for the different factors affecting HA are shown in the table below. Apart from affordability which has a low Cronbach alpha, the rest of the factors have a high Cronbach alpha. The correlation between HA and housing price and household income are statistically significant. The correlation coefficient between affordability and housing price is 0.5 and highly statistically significant, and the correlation coefficient between affordability and household income is 0.4 and also statistically significant. There was no statistically significant correlation between affordability and housing choice

Table 3.1: Reliability of factors affecting housing affordability

Construct	Cronbach alpha
Affordability	0.4
House price	0.7
Household income	0.6
Housing choice	0.6
Housing policy	0.6

3.11. Data Analysis

The responses from the questionnaire were coded, data cleaning was performed and the selection of the appropriate data analysis technique was done. The data was captured in an excel sheet and exported to R Software. In choosing the appropriate statistical analysis, the research questions together with the data collected were considered. Data analysis and interpretation was done using both descriptive and inferential statistics. The descriptive statistics was done to describe the distribution of the data using mean, minimum, maximum and standard deviation for the continuous variable while frequencies and graphs were used to report categorical variables. Inferential statistics were used to make judgments based on the sample collected from the population. Therefore the questionnaire was sent out to a sample of randomly selected YHs respondents who aged between the 21 – 35 years old around the population of Ekurhuleni municipality and CoJ in South Africa. According to Saunders (2009), the inferential statistics is used to save up time and costs, it makes generalization about larger population of subjects.

Chapter 4: Results and Analysis

4.1. Preview

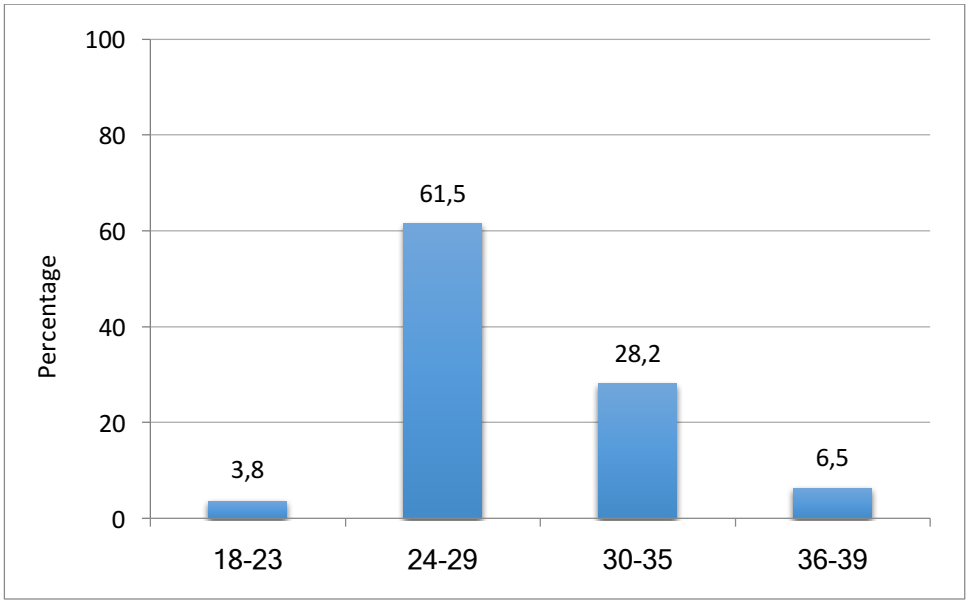
This chapter presents the quantitative findings and the analysis by the methodology set out in the methodology chapter. The results of the quantitative study were analysed and presented in this chapter.

Table 4.1: Demographic analysis of the respondents

	Description	Frequency	Percentage
Gender	Female	32	41
	Male	46	59
Ethnicity	Black	59	75.6
	Coloured	3	3.8
	Indian	10	12.8
	Others	1	1.3
	White	5	6.5

A total of 78 respondents were involved in this study. The respondents were identified based on their age group and location of work place in Ekurhuleni and Johannesburg metropolitan area. The age category of the respondents is 18 to 23 years old, 24 to 29 years old, 30 to 35 years old and 35 to 39 years old. From the data available from Figure 4.1 below, majority (61.5%) of the respondents were in 24 to 29 year group. There are 22 respondents in 30 to 35 year category, 5 (6.4%) were in the 35 to 39 year old category while 3 (3.8) were in the 18 to 23 year old category. There were 46 (59%) of the total number of respondents who were males while 32 (41%) were females. Most of the respondents in the study were males. There were 3 (3.8%) Coloured, 5 (6.5%) Whites and 10(12.8%) Indians in the study and most of the respondents were Blacks (75.6%).

Figure 4.1: Distribution of age group.



4.2. Demographic Analysis

From the total number of respondents, 16 (20.8%) were married while 60 (77.9%) were single. Therefore, most of the respondents in the study were single and this helps in order to know the demographic range of the respondents. Most of the respondents aged between the ranges of 24 years to 29 years were single and most of the respondents aged between the ranges of 24years to 29 were married. Among the total number of respondents who participated in the study, there were 41 (52.6%) of the respondents who had honours degree, 17 (21.8%) had bachelor's degree and 16 (20.5%) had Master's degree. 1 respondent had doctoral degree and 3 had other types of educational qualifications. From the survey, 34 (41.2%) of the respondents were homeowners while 43(55.8%) were not home owners and majority of the respondents in the study were not home owners.

Table 4.2: Demographic analysis of respondents

	Description	Frequency	Percentage
Marital status	Married	16	20.8
	Single	60	77.9
	Widow/widower	1	1.3
Education	Bachelor degree	17	21.8
	Honours	41	52.6
	Masters	16	20.5
	Other	3	3.8
	PhD	1	1.3
Home owner	No	43	58.8
	Yes	34	41.2

The results presented in Table 4.2 suggests that among the professionals who responded to the survey, 59(76.6%) of them work in the private sector, 12 (15.6%) work in the public sector while 4 (5.2%) were self-employed. There were 2 (2.6%) respondents who had a different occupation and the location of work for the respondents was captured as well. From the available data, 60(76.9%) work in Johannesburg while 7 (9.0%) work in Ekurhuleni municipality. It is revealed from the study that most of the respondents work in Johannesburg municipality. Also, majority (52%) of the respondents live in Johannesburg municipality. The findings were cross-tabulated between location of work and location of residence and it shows that majority of the respondents working in Johannesburg municipality live in same municipality. However, the majority of the respondents working in Ekurhuleni municipality live in Johannesburg municipality. The gross monthly salary of the respondents was also collected.

There were 25 (33.3%) of the respondents who received between R20001 and R30000, followed by 16(21.3%) who receive between R30001 and R40000. From the data available, 4 (5.4%) of the total number of respondents received below R10000, 12 (16%) received between R10001 to R20000, 10 (13.3%) received between R40001 and R50000 while 8 (10.7%) had more than R50001.

Table 4.3: Professional, Location and Income analysis of respondents

	Description	Frequency	Percentage
Occupation	Private sector	59	76.6
	Public sector	12	15.6
	Self employed	4	5.2
	other	2	2.6
Workplace location	Ekurhuleni	7	9.0
	Johannesburg	60	76.9
Gross monthly salary	Below R10000	4	5.4
	R10001-R20000	12	16.0
	R20001-R30000	25	33.3
	R30001-R40000	16	21.3
	R40001-R50000	10	13.3
	Above R50001	8	10.7
Years of work experience	Less than 1 year	2	2.6
	1-5 years	48	62.3
	6-10 years	21	27.3
	11-15 years	5	6.5

	16-20 years	1	1.3

From the data gathered, it is evident that majority of the respondents were in the R20001 and R30000 monthly salary bracket. From the available data, most of respondents aged 24 to 29 receive between R20001 to R30000 as their monthly salary. The respondents were asked about the number of years they have worked in their different professions. Based on the results obtained, it suggests that 1(1.3%) of the total number of respondents had 16 to 20 years of working experience, 2 (2.6%) have less than 1-year experience, 5 (6.5%) have 11 to 15 years of working experience, 21(27.3%) had 6 to 10 years' work experience while majority (62.3%) have 1 to 5 years of working experience. From the statistics gathered, a higher percentage of those who participated in the study worked for a higher number of years in their fields.

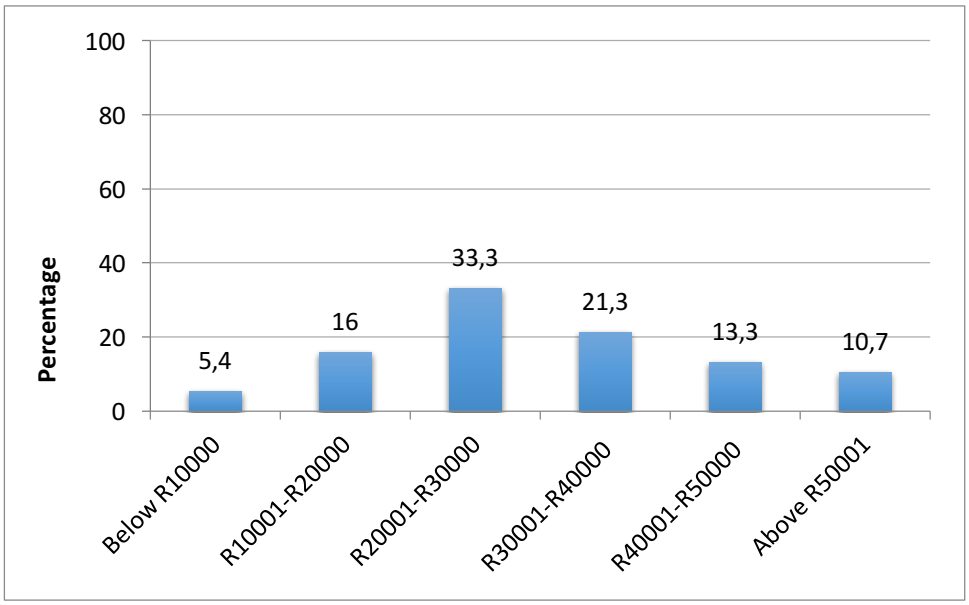


Figure 4.2: Distribution of gross monthly salary

From the available data, there were 14 (21.2%) of the total number of respondents who stay in the Ekurhuleni municipality while 52(78.8%) of them live in the Johannesburg municipality. Majority of the respondents in the study live in the Johannesburg municipality. A total of 31(41.3%) rent apartments, 30(40.0%) own their homes, 14(18.7%) live with their family. Most respondents aged 24 to 29 in the study rent their own apartments, followed by owning their own apartments with few living with their family. Out of the two municipalities, majority of the respondents are currently renting in Ekurhuleni municipality while majority

own their own apartments in Johannesburg. In both Johannesburg and Ekurhuleni, majority of the respondents aged 24 to 29 were currently renting. Most of the respondents aged 30 to 35 in Ekurhuleni were currently renting while most of the respondents aged 30 to 35 in Johannesburg owned their places of abode.

Table 4.4: Demographic analysis of respondents

	Description	Frequency	Percentage
House location	Ekurhuleni	14	21.2
	Johannesburg	52	78.8
Current residence	Family	14	18.7
	Own	30	40.0
	Rent	31	41.3
Years at current residence	Less than 1 year	21	27.6
	1-5 years	39	51.3
	6-10 years	7	9.3
	More than 10 years	9	11.8
Total rental per month	Below R3000	2	5.5
	R3001-R5000	8	22.2
	R5001-R7000	14	38.9
	R7001-R9000	6	16.7
	More than R9001	6	16.7
Financial assistance	No	29	85.3

to rent	Yes	5	14.7

There were 21(27.6%) of the total number of respondents who lived at their current residence for less than 1 year, 7 (9.3%) lived between 6 to 10 years and 9 (11.8%) lived for more than 10 years. Most of the respondents have stayed between 1 to 5 years at their current residence. The rentals which were paid every month by participants who are renting was also analysed. From the study, majority of the respondents pay a rental between R5001 and R7000.

There were 14(38.9%) of the total number of respondents who paid rental between R5001 and R7000, 6 (16.7%) paid between R7001 and R9000 as rental, another 6(16.7%) paid a rental more than R9001, 8(22.2%) paid between R3001 and R5000 and 2 (5.5%) paid below R3000 as rental. By age group, respondents aged 24 to 29 paid rental between R5001 to R7000 followed by R3001 to R5000. Most of the respondents aged 35 to 39 paid rental between R5001 to R7000. Majority of the respondents aged 24 to 29 years who were renting paid between R5001 to R7000. For respondents aged between 35 to 39 years, the rental paid was between R5001 and R7000. None of the respondents in the 18 to 23 years category were currently renting. For the respondents who were currently renting, 29(85.3%) did not receive any financial assistance in order to pay their rental while 5 (14.7%) receive financial assistance while paying their rental.

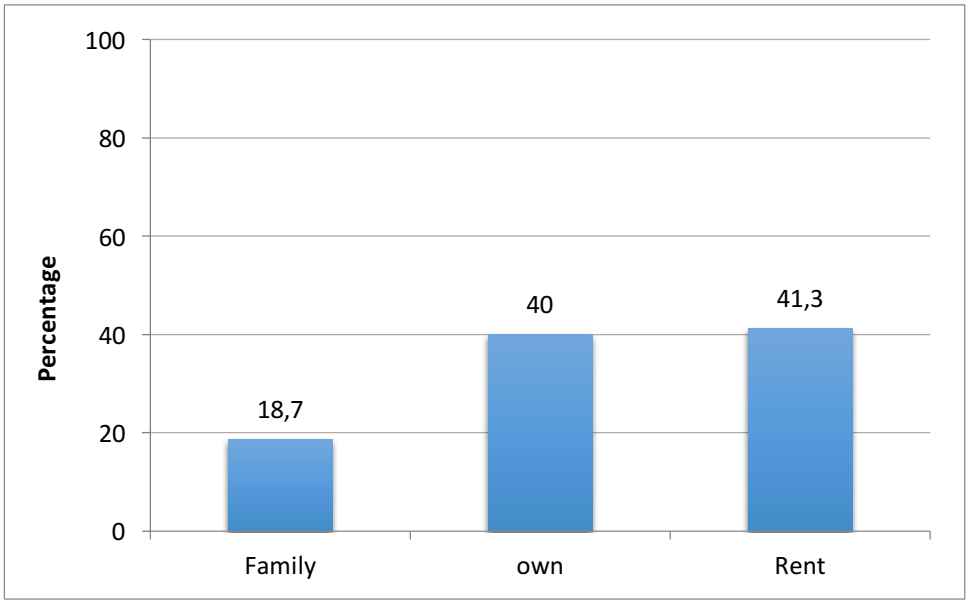


Figure 4.3: Distribution of current residence by respondents.

The table 4.6 below shows the prices of the houses in which some of the respondents stayed and were analysed. From the available data, 4 (8.2%) of the respondents bought their house

less than R400000, 7 (14.3%) bought their house between R400001 and R500000, 4(8.2%) bought between R500001 and R600000, 5 (10.2%) bought between R600001 and R700000, 5(10.2%) between R700001 and R800000 and 24(48.9%) bought their houses for more than R800001. For the respondents who own the house, 14 (31.1%) bought the house with the assistance of financial institution and family, 22(48.9%) bought the house with support from financial institutions and no support from family, 3(6.7%) of them bought with cash while 6(13.3%) bought their house using other means.

Table 4.5: Demographic analysis of respondents.

	Description	Frequency	Percentage
Price of house	Less than R400000	4	8.2
	R400001-R500000	7	14.3
	R500001-R600000	4	8.2
	R600001-R700000	5	10.2
	R700001-R800000	5	10.2
	Above R800001	24	48.9
How did you own house	Financial institution with family support	14	31.1
	Financial institution without family support	22	48.9
	Others	6	13.3
	cash	3	6.7

Table 4.6 below shows the data from the spouse of those married which was collected. From the available data, 25(69.4%) of the spouses were working while 11(30.6%) were not working. There were 14(50.0%) of the spouse who have bachelor degree, 6(21.4%) have master's degree, 1(3.6%) have PhD while 7(25%) had other type of educational qualification.

A total of 16(57.1%) of the number of spouses work in the private sector, 5(17.9%) work in the public sector, 3(10.7%) were self-employed and 4 (14.3%) had other forms of occupation. There were 2(8.3%) of spouses whose monthly gross salary were below R10000, 9 (37.5%) earned between R10001 and R20000, 2 (8.3%) earned between R20001 and R30000, 6(25%) earned between R30001 and R40000 while 5(20.9%) earned between R40001 and R50000.

Table 4.6: Demographic analysis of respondents.

	Description	Frequency	Percentage
Spouse working	No	11	30.6
	Yes	25	69.4
Spouse qualification	Bachelor	14	50.0
	Masters	6	21.4
	PhD	1	3.6
	Other	7	25
Spouse occupation	Private sector	16	57.1
	Public sector	5	17.9
	Self employed	3	10.7
	other	4	14.3
Spouse gross monthly salary	Below R10000	2	8.3
	R10001-R20000	9	37.5
	R20001-R30000	2	8.3
	R30001-R40000	6	25
	R40001-R50000	5	20.9

4.3. Perception on housing affordability problems

From the data available, more than 70% of the respondents were in agreement that houses were not affordable if the housing cost excessively displace other non-housing expenditure. Also, more than 60% of the respondents believe that inadequate income, housing preferences, households with more working experience will have better housing choice and limited affordable housing choice were key elements which affect affordability of houses among YHs. From the study, it is established that the criteria for measuring household affordability for YHs depend on a number of factors.

It states that houses were not affordable if one pays more than 30% of income to purchase a house, rentals not affordable if one pays more than 25% to rent, when one has insufficient income to secure a housing loan and also due to financial commitments.

Table 4.7: Respondents perception on housing affordability.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Houses are not affordable if the housing costs excessively displace your other non-housing expenditures	3 (3.8)	6(7.7)	8 (10.3)	42(53.8)	19(24.4)
Inadequate Income is a major concern for aspiring home-buyers	1(1.3)	3(3.8)	3(3.8)	22(28.2)	49(62.8)
Housing preferences influence housing affordability	1 (1.3)	4(5.1)	12(15.4)	29(37.2)	32(41.0)
The perception that YHs with more working experience will have better housing choice in the housing market that they can afford.	8(10.3)	11(14.1)	15(19.2)	33(42.3)	11(14.1)
There are limited affordable housing choice in housing market	2(2.6)	13(16.7)	20(25.6)	18(23.1)	25(32.1)
The current house price in the housing market are expensive for you to purchase		10(12.8)	14(17.9)	31(39.7)	23(29.5)
You believe overvaluation is attributable to the rising house price	1(1.3)	16(20.5)	13(16.7)	30(38.5)	18(23.1)

The house prices in the current housing market are unpredictable.	2(2.6)	26(33.3)	16(20.5)	22(28.2)	12(15.4)
Increase of foreign investors in the housing market decreases the house price in the housing market	10(12.8)	29(37.2)	26(33.3)	10(12.8)	3(3.8)
Houses are not affordable if you pay more than 30% of your income to purchase (mortgage) a house	4(5.1)	10(12.8)	10(12.8)	33(42.3)	21(26.9)
Rentals are not affordable if you pay more than 25% of your income to rent a house	1(1.3)	12(15.4)	16(20.5)	34(43.6)	15(19.2)
You have difficulties in purchasing a house because your income is insufficient to secure a housing loan (deposit, mortgage, transfer fees, tax)	5(6.4)	12(15.4)	9(11.5)	30(38.5)	22(28.2)
Houses are not affordable because of your financial commitments	1(1.3)	10(12.8)	16(20.5)	29(37.2)	22(28.2)
Your tenure choice if you cannot afford to purchase a house is to rent	1(1.3)	5(6.4)	9(11.5)	50(64.1)	13(16.7)
You will opt to purchase low cost houses if you can afford it & eligible for it	3(3.8)	20(25.6)	25(32.1)	24(30.8)	6(7.7)
You would like to purchase & live in urban areas if you can afford it		1(1.3)	6(7.7)	45(57.7)	26(33.3)
You do not want to bear transportation costs & purchase a house outside of urban areas.		7(9.0)	11(14.1)	27(34.6)	33(42.3)
You are fully aware of National Housing Policy	10(12.8)	24(30.8)	20(25.6)	18(23.1)	6(7.7)
You agree that similar strategy to assists low income households should be applied to YHs	2(2.6)	5(6.4)	12(15.4)	37(47.4)	22(28.2)
You agree that financial literacy		3(3.8)	5(6.4)	47(60.3)	23(29.5)

programmes should be incorporated in housing policy & schemes					
You agree that YHs should be more involved in designing & creating affordable housing in housing policy & schemes		5(6.4)	5(6.4)	48(61.5)	20(25.6)
You agree that there should be a policy on controlling a segment of housing market by the state especially for affordable housing	2(2.6)	1(1.3)	9(11.5)	36(46.2)	30(38.5)

4.4. Research Objectives

4.4.2. What are the criteria in measuring housing affordability for young households in the City of Johannesburg, South Africa?	This section seeks to investigate the factors affecting HA amongst YHs in the two municipalities; Johannesburg and Ekurhuleni. Respondents were asked to ranked questions relating to factors affecting housing affordability. On the issue of houses not being affordable if the housing costs excessively displace your non-housing expenditures, 3 (3.8%) of those who participated strongly disagreed, 6 97.7%) disagreed, 8 (10.3%) are neutral, 42 (53.8%) are in agreement while 19(24.4%) strongly agree. Inadequate income is one of the reasons stipulated as a major concern for aspiring home buyers. From the results obtained, 1(1.3%) strongly disagree, 3 (3.8%) disagree, 3 (3.8%) were neutral, 22(28.2%) agree while 49(62.8%) strongly agree. It is therefore evident from the empirical studies that inadequate income is a major concern for respondent who aspire to buy homes. More than 90% of the total number of respondents in the study indicated that inadequate income is a major concern whenever YHs decide to buy a house. On the issue of housing preferences influencing housing affordability, 1(1.3%) strongly disagree, 4(5.1%) disagree, 12 (15.4%) were neutral, 29(37.2%) agree while 32(41%) strongly agree. Generally, more

	than 50% of the respondents believe that limited affordable housing choice in the housing market is a major issue regarding affordability among YHs. More than 40% of the respondents believe that YHs with more working experience will have better housing choice in the housing market.

4.4.2. What are the criteria in measuring housing affordability for young households in the City of Johannesburg, South Africa?	This sections deals with the criteria for measuring household affordability for YHs. From the results, 4(5.1%) strongly disagree, 10(12.8%) disagree, 10(12.8%) were neutral, 33(42.3%) agree while 21(26.9%) strongly agree that houses are not affordable if one pays more than 30% of income to purchase (mortgage)a house. Regarding rentals, 1(1.3%) strongly disagree, 12(15.4%) disagree, 16(20.5%) were neutral, 34(43.6) agree while 15(19.2%) strongly agree that rentals are not affordable if one pays more than 25% of income to rent a house. Sometimes, it is difficult to purchase a house because income is not sufficient to secure a housing loan. From the results, 5(6.4%) strongly disagree, 12(15.4%) disagree, 9 (11.5%) were neutral, 30 (38.5%) agree while 22 (28.2%) strongly agree that it is indeed difficult to purchase a house because of challenges in securing a housing loan with insufficient income. Some of the respondents believe that financial commitments can hinder housing affordability. From the data available, 1(1.3%) strongly disagree, 10 (12.8%) disagree, 16 (20.5%) were neutral, 29(37.2%) agree while 22(28.2%) strongly agree that houses are not affordable due to financial commitments. From the results, more than 65% of the total respondents are in agreement that houses are not affordable due to financial commitments.
4.4.3. How is the house affordability issue	The choice of a house is heavily dependent

influencing the housing choice and behaviours of households?	on the affordability. This section seeks to explore how HA influences the choice of house owned. From the data available, 1(1.3%) strongly disagree, 5 (6.4%) disagree, 9 (11.5%) were neutral, 50(64.1%) agree while 13(16.7%) strongly agree that renting a house is the choice when one cannot afford to purchase a house. More than 80% of the respondents in the study agree that renting is the choice when purchasing a house is not feasible. In certain instances, there are low cost houses which are available for sale. Those who are not able to buy expensive houses due to financial constraints could opt for low cost houses provided they are able to pay. From the study, 3(3.8%) strongly disagree, 20(25.6%) disagree, 25(32.1%) were neutral, 24(30.8%) agree while 6(7.7%) strongly agree that they will opt for low cost houses if they are able to afford it and eligible for it. From the results, quite a number (29.4%) believe that low cost houses are not an option even if they can afford and are eligible for it. It is likely that these respondents may decide to rent for some time while saving for a house of their choice rather than opting for a low cost house. From the results, 1(1.3%) disagree, 6(7.7%) remained neutral, 45(57.7%) agree and 26(33.3%) strongly agree that they will purchase and live in urban areas if they can

	afford it. It is clearly evident that majority of the respondents agree that their preference is urban areas if only they can afford it. Costs of transportation are increasing on regular basis and have become a factor in housing choice and affordability. Results from the study indicate that 7(9.0%) of the total respondents disagree, 11(14.1%) are neutral, 27(34.6%) agree and 33(42.3%) strongly agree that they do not want to bear transportation cost and purchase a house outside of urban areas. Most of the respondents prefer to live in the urban areas in order to reduce their cost of transportation to work and other places of interest.

4.4.4. What changes in housing affordability can be identified?	This section sorted the opinions of the respondents on changes in HA that are identified. From the results of the study, 10(12.8%) strongly disagree, 24((30.8%) disagree, 20 (25.6%) were neutral, 18(23.1%) agree while 6(7.7%) strongly agree that they were fully aware of National housing policy. It is revealed from the study that majority of the respondents disagree that they were aware of National housing policy. There were 2(2.6%) who strongly disagree, 5(6.4%) disagree, 12 (15.4%) neutral, 37(47.4%) agree and 22(28.2%) strongly agree that strategies to assist low income households be applied to YHs. About 3(3.8%) disagree, 5 (6.4%) were neutral, 47(60.3%) agree and 23(29.5%) strongly agree that financial literacy programmes should be incorporated in housing policy and schemes. From the results, it is established that more than 80% of the respondents believe that financial literacy programmes need to be part of housing policy and schemes. There were 5(6.4%) of the total respondents who disagree, 5(6.4%) remained neutral, 48(61.5%) agree and 20(25.6%) strongly agree that YHs should be more involved in designing and creating affordable housing policy and schemes. The state needs to play an active role in the housing market so as to make houses

	affordable for YHs. From the study, 2(2.6%) strongly agree, 1(1.3%) disagree, 9(11.5%) were neutral, 36(46.2%) agree and 30(38.5%) strongly agree that there should be a policy on controlling a segment of housing market by the state especially for affordable housing.

4.5. Descriptive and Inferential Statistics

This section analyses the perceptions of YHs on HA problems. The perceptions of the respondents are analysed based on gender, house location age group, marital status, ethnic background, occupation. The aim of this analysis is to determine the HA problems as perceived by YHs and to examine the relationship of the HA problems. The perceptions of HA problems are considered as problems in terms of HA, house price, household income, housing choice and housing policy.

Descriptive statistics of housing affordability factors.

The average affordability perception for females and males is 4.1 and 3.7, respectively. There was a statistically significant difference in affordability perception between males and females. Females had a higher affordability perception rating than males. Also, there was a statistically significant difference in house price perception between males and females. The average housing price rating for females was 3.5 while it was 3.2 for males. There was no statistically significant difference in household income, housing choice and housing policy perception between males and females.

Table 4.8: Descriptive statistics of housing affordability factors.

	Minimum	Median	Mean	Maximum	Std Dev
Affordability	1.8	4.0	3.9	5	0.6
House price	1.8	3.4	3.3	5	0.8
Household income	2.0	3.8	3.7	5	0.7
Housing choice	2.5	3.8	3.8	5	0.6
Housing policy	2.0	3.8	3.8	5	0.6

Discussion

There was no statistically significant difference in affordability, housing price, household income, housing choice and housing policy for participants in the Johannesburg and Ekurhuleni municipalities and also between respondents who own a house and those who do not own a house. There was a statistically significant difference in affordability perception between married and single respondents.

However, there was no statistically significant difference in housing price, household income, housing choice and housing policy between married and single respondents. There is no statistically significant difference in perceptions about affordability between respondents who own, rent and stay with family. Similarly, there are no statistically significant differences in perceptions regarding housing price, household income, housing choice and housing policy among the respondents who are renting, owning an apartment and those who live with their family. There is no statistically significant difference in perceptions about affordability, housing choice and housing policy among the different age groups. However, there is a statistically significant difference in housing price and household income between the different age groups. The results reveal that there is a significant difference in perception about housing price between respondents who are aged 24 to 29 and those aged 18 to 23, and also significant difference between respondents aged 18 to 23 and those aged 30 to 35.

The average perception for housing price for respondents aged 18 to 23, 24 to 29, 30 to 35, 36 to 39 are 4.5, 3.3, 3.1 and 3.7, respectively. There is a statistically significant difference in household income between the respondents between 30 to 35 years and those between 36 to 39 years. There was no statistically significant difference in perception regarding affordability, housing price, housing choice and housing policy among the different ethnic groups. However, there is a statistically significant difference in household income perception among the ethnic groups. The results reveal that there is a significant difference between White and Indians and also between White and Blacks. The average household income perception for Blacks, Coloured, Indians and Whites are 3.8, 2.9, 4.0 and 2.9, respectively. There was no statistically significant difference in perceptions about affordability, housing price and housing policy among the respondents with different educational background.

There was a statistically significant difference in perception on household income and housing choice among the respondents with different educational background. The result reveals that there was significant difference in household income between respondents with Masters and bachelor degree. The average household income perception for respondents with bachelor, honours, masters and PhD are 4.1, 3.7, 3.3 and 4.0, respectively. There is also a significant difference in housing choice perception between respondents with honours and bachelor degree. The average housing choice perception for respondents with bachelor, honours, masters and PhD are 4.1, 3.7, 3.9, and 4.8, respectively. There is no statistically significant difference in perceptions regarding affordability, housing price, household income, housing choice and housing policy for the different occupations

Chapter 5: Conclusion & Recommendation

5.1. Conclusion

The purpose of this chapter is to summarise the results and analysis of the study and to discuss the findings in relation to the research objectives. The focus of this chapter is to examine HA problems among YHs so as to address the policy implications. The HA problems among YHs are influenced by house price, household income and housing choice in the housing market The key findings of this study suggest that there is a gap in affordable housing for YHs in the housing market. The findings also showed that the supply of affordable housing for YHs is limited and further decrease their opportunity to purchase a house.

Furthermore, the justification of majority of the YH to live and work in the same municipality is due to the fact that they still live in their family houses. There is a positive relationship between HA and housing price and household income. The analysis and discussions of findings indicated that HA is affected by housing price and household income. The HA problems being experienced by YHs indicates that there is a need for initiatives by the government to implement and execute policies which are designed to solve housing issues especially for YHs. Affordable housing for YHs has not achieved much to encourage private sector participation which could help solve the issue. There is limited government involvement in policy implementation for affordable housing.

However, there were also views on the absence of financial literacy among YHs which led to the HA problems. In addition, the reluctance of YHs to purchase low cost available affordable houses outside urban areas and their spending behaviour are among the HA problems being encountered. In addition, the perception of HA among YHs have statistically significant differences between gender, ethnic groups, different occupations and marital status. There is a statistically significant difference in housing price between genders, age groups. The findings revealed that YHs between 18 to 23 years experienced more problems in terms of housing price compared to YHs wo are between 24 to 29 and 30 to 35. However, there is significant difference in perceptions on household income between age groups, ethnic groups and different educational levels. Overall, the HA problems among YHs in this study are attributed to affordability, housing price, household income, housing choice and housing policy. However, these four problems are interrelated.

There is a positive relationship between affordability and housing price and household income while affordability is not related to housing choice and housing policy. The positive relationship between house price and household income relatively shows YHs who have affordability problems in terms of house price will have problems in household income as well. Similarly, there is also no relationship between household income and housing choice and a positive relationship between household income and housing policy.

HA issues among YHs can be attributed to affordability, housing price, household income, housing choice and housing policy. The evidence gathered empirically from the study indicates that these problems are inter-related. The study gathered that there is limited housing choice in the housing market which makes the price of the available houses expensive. There is a problem of insufficient funds to purchase a house and that relates to house prices that are not affordable for YHs. There is therefore the role of the government in addressing and closing this gap of providing affordable houses in the market. The intervention from the state will ensure that HA problems are minimized.

Even though the government is responding to the housing needs and providing low cost and affordable houses, the study revealed that majority of the YHs would rather prefer renting than occupying the low cost houses being provided by the government. Their housing choices and the low cost affordable houses provided by the government do not match. Because of limited affordable houses in the market, there is competition for the houses. This makes the houses far more expensive as there is more demand for the limited supply. It therefore puts YHs who earn little at a great disadvantage. Empirical evidence from the study revealed that YHs deem it expensive if they have to pay more than 30% of their income as mortgage in order to secure a house. Lack of sufficient income in securing a housing loan is also one of the challenges faced by YHs as well as their financial commitments.

Most of the respondents indicated that they preferred renting a house whenever they are unable to purchase a house. Some of the respondents are not willing to consider low cost houses as options even when they are qualified and can afford due to their housing choices because these low cost houses are not in urban areas. This could be due to the fact that majority of the YHs prefer to live in urban areas in order to cut cost of transportation. A national housing policy on affordable housing project will be able to address the problem of housing affordability. From the empirical study, most of the YHs are not aware of any national housing policy and that there were no strategies that are being implemented to assist low income households.

Financial literacy should be a component of the housing policy and YHs should be key stakeholders in drafting and designing housing policies.

5.2. Recommendations and limitations

The study showed results of HA problems among YHs in Johannesburg and Ekurhuleni municipalities in South Africa. It is recommended that income that is left over after he household's expenditure be used as a determining factor for housing affordability. This residual income may be a better approach to assess YHs HA as it considers both the household size and location. Geographical location differences in expenditure should also be considered when determining affordability problems. The study did not consider the household size of the respondents and also did not consider the income that is left over after their expenditure. Due to financial and time constraints, the sample for primary data collected for this study was limited to the Johannesburg and Ekurhuleni municipalities and cannot be used to make inferences about the whole country.

Future Research

There is the need to examine the effect of transportation costs on HA and choice. HA education and counselling should be implemented to assist YHs in planning towards acquisition of houses. Therefore, There should be a further research into rental affordability problems among YHs in order to have a better policy framework and a research similar to this could be conducted for the whole of South Africa

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APPENDICES

Appendix A: Participant Information Sheet

University of the Witwatersrand

School of Construction Economics and Management

Participant Information Sheet: Questionnaire Survey

Study Title: The Housing Affordability Problem Among Households In Johannesburg, South Africa

To whom it may concern

My name is Kudzai Mawoyo, a part-time master's candidate in the school of construction economics and management (MSc Building) at the University of the Witwatersrand. As part of my degree programme, I am required to conduct a research project whereby I will be investigating the problems that are often faced by the YHs in different field of work when buying homes

As part of this research study, I would like to invite you to part take in a self-administered questionnaire survey. Your involvement will require you to answer questions pertaining to housing affordability problems faced by YHs at your firm. Answering the questionnaire survey may take between 10-15 minutes long depending on your pace. The questionnaires will be distributed via a unique internet link and the responses will not be used for any other purposes except for the purpose of this research.

Apart from undertaking this interview in order to complete the research successfully, I want to ensure that the experience is beneficial to you as well. The findings of this research study may be shared with you if requested, which may supply you with information regarding the status of housing affordability problems among YHs in Johannesburg, South Africa. Creating awareness and sharing this information should not be of detriment to the individual participants nor to the University which you are representing and, therefore, I do not see any risks that may occur throughout the research study.

Please note that your participation in this study is completely voluntary and refusal to participate or withdrawal at any time will not have any adverse consequences. Therefore, you are allowed to withdraw from partaking in the questionnaire survey any time before you submit your response. Your identity and the firm which you represent will be kept anonymous along with any information deemed confidential. The Firms part taking in this research study will not be directly identifiable as they will be referred to as Firm A, B, C, etc. All research data will be stored and secured under password within my personal collection and also physically at the University of the Witwatersrand.

Below are contact details if you require further information or have queries concerning the study?

Researcher: Kudzai Mawoyo 464415@students.wits.ac.za 061 281 5302

Supervisor: Dr Kola Ijasan kola.Ijasan@wits.ac.za 011 717 7681

Head of School: Prof David Root david.root@wits.ac.za 011 717 7663

Appendix B: Consent Form

University of the Witwatersrand

School of Construction Economics and Management

Consent Form: Questionnaire Survey

I Kudzai Mawoyo, agree to participate in this research study.

Please tick the boxes of statements which you agree with

I confirm that I have read and understood the research purpose.	✓
I understand that my identity and the University which I represent will be kept anonymous along with any information deemed confidential.	✓
I understand that my participation in this study is completely voluntary and refusal to participate or withdrawal at any time will not have any negative consequences.	✓

Signature: _____ Date: _____

Appendix C: Ethics Application Form

School of Construction Economics & Management

University of the Witwatersrand, Johannesburg -PO Box 20, Wits 2050, South Africa • Tel: +27 (0)11 717 7652/77669 · Fax: +27 (0)11 717 9729 Email:CEM@wits.ac.za

SCHOOL OF CONSTRUCTION ECONOMICS AND MANAGEMENT RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER CEM/19/01/KM**
PROJECT TITLE	The Housing Affordability Problem Among Young Households In Johannesburg, South Africa
INVESTIGATORS	Kudzai Mawoyo (464415)
SCHOOL/DEPARTMENT	**SCHOOL OF CONSTRUCTION ECONOMICS AND MANAGEMENT**
DATE CONSIDERED	31/01/2019
DECISION OF THE COMMITTEE	Approved conditionally with respect to the declaration
EXPIRY DATE	30th January 2020
DATE 31/Jan/2018	**CHAIRPERSON** Dr. Kola Ijasan

cc: Supervisor : Dr. Kola Ijasan

DECLARATION OF INVESTIGATOR (S)

To be completed in duplicate and **ONE COPY** returned to the Secretary Mrs. M. Sithole at the CEM reception desk.

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to completion of a yearly progress report.**

_____ _____/_____/_____

Signature **Date**

Ethics Application Form for School of Construction Economics and Management Ethics Committee

Use this form in applying for clearance of research involving human participants

Instructions

1. Completed applications must be submitted to Mantiseng Sithole at the CEM reception desk
2. Four paper-based (hard) copies of each document must be submitted.
3. All submissions and materials must be typed. Handwritten submissions are NOT acceptable.
4. Incomplete applications will NOT be considered.
5. Applications will NOT be processed if signatures from applicant or supervisor are missing.
6. Photocopying should be done 'back-to-back' to save paper.
7. Glossy and fancy binding is NOT necessary.
8. Necessary supporting documents (e.g. Participant Information Sheet, Consent Form, copies of instruments), must be stapled to the Ethics Application Form.
9. Please ensure the order of the documents being submitted are – Application form, participant information sheet, Consent form, copies of instruments and the research proposal

Complete this checklist to show what documents you have submitted.

Check list

For all research:

✓	Completed Ethics Application Form
✓	Copies of the research proposal
✓	Copies of proposed research instruments (e.g. questionnaires/interview schedules)
✓	Participant Information Sheet (for each different sample group)
✓	Consent Form [Assent Form for under 18s] (for participant's signature) (for each different sample group)

Where applicable (Attach to this form):

	Relevant permission letter (from, e.g. company's HR department, National authorities such as Education Departments, Health Centres, Correctional Services, landowners, University Registrars, School principals, etc.)
	Any other appropriate Consent Forms (e.g. for members of focus groups, etc.)
	Guardian Consent Form (for participants under the age of 18)
	Other (please specify)

Declaration

I recognise that it is my responsibility to conduct my research in an ethical manner according to Guidelines of the University of the Witwatersrand, according to any laws and/or legal frameworks that may apply, and according to the norms and expectations of my discipline.

In preparing this Application for Ethics Clearance form, I have consulted the Guidelines for Human Research Ethics Clearance Application /non-medical (available on this web site http://web.wits.ac.za/Academic/Research/Applications.htm) and have familiarised myself with the ethical guidelines specific to my discipline.

Signature

Name of researcher/applicant Kudzai Mawoyo

1. Researcher's personal data

Surname: Mawoyo						Name: Kudzai					
Title:		Prof		Dr		Mr		Ms		Mrs		Other:
School:		Construction Economics and Management									
Staff / Student number:		464415				Full time		Part time		Staff	

Your telephone(s):	+27 (61) 281 5302
Your Email:	464415@students.wits.ac.za
Name of Supervisor (if applicable):	Dr Kola Ijasan
Supervisor's email address:	kola.Ijasan@wits.ac.za
Supervisor's tel. number(s):	011 717 7681

2. Specifics about the research project
Title of research project
The Housing Affordability Problem Among YHs In Johannesburg, South Africa

Is this research for degree purposes?		Yes		No	
If so, for what degree?		Honours		Masters (research report)	
Other (please specify)					
Has it been approved by the relevant higher degrees committee or other relevant unit?		Yes		No	Submitted & pending

List the names and affiliations of any <u>additional</u> researchers who will be covered by this ethics protocol

Where will the research be carried out?

In Johannesburg, South Africa

What are the aims / objectives of the research? (Please list; be brief)
The aim of this research is to identify housing affordability problems faced by YHs (both educated and non-educated) in the city of Johannesburg, South Africa.

Do you have any financial or material interest associated with your research participants or with the organisations that you will work with during your research?		
☐ Yes	☐ No	☐ Potential conflicts of interest may exist
Please explain how you will manage any existing or potential conflicts of interest, if applicable.		

INFORMATION RELATING TO ETHICAL MATTERS		
Protocols submitted to the Committee must have sufficient information to enable the committee to judge the ethical implications of the proposed research. Please be brief and concise but also as specific and informative as possible		
3. Formal permission		
Has appropriate formal permission been obtained, if required (e.g. employer, government department, land owner, etc.)?		
☐ Yes (attached)	☐ Not required	☐ Pending (must be supplied before permission is granted)
Obtaining permission is necessary when conducting research within the premises of a particular site such as an ethnography of the functioning of a supermarket or a school, or the way staff interact with clients in a clinic, or of how the HIV Unit in the CoJfunctions. Please read the detailed guidelines on the Ethics website http://web.wits.ac.za/Academic/Research/Applications.htm		

4. How will data on human research participants be collected (instruments, methods, procedures)? (Attach instruments as an appendix)	
	In written format (e.g. questionnaires, diagnostic tests, etc.)
	Completion of on-line instruments (e.g. questionnaires)
	Individual interviews (e.g. structured, semi-structured, etc.)
	Group interviews (e.g. seminar/discussion groups, focus groups, etc.)
	Ethnographic observation, participant observation, other informal descriptive, and/ or interactive methods
	Community-based methods or techniques such as drama workshops, community theatre, training workshops, participant rural appraisal (PRA), rapid rural appraisal (RRA), etc.
	Research on/in therapeutic or counselling contexts
	Observation of public performance, and/or public behaviour observation
	Photography, video and/or audio recording (ensure permission is signed for on the Consent Form)
	Other research methods or techniques (specify in this line).
Brief details of instruments to be used (attach instrument or draft to this application)	

5. Who will the research participants be?				
Brief description of human participants, including age range and sample size, <u>for each sample</u>: New graduates/employees 20-25 years from different trades not earning less than R15000, 26-35 employees from different trades/industries earning not less than R15 000				
Does this research expose either the participant or the researcher to any potential risks or harm that they would not otherwise be exposed to?		Yes		No
If 'yes', explain:				

Will research involve vulnerable categories?		Yes		No
If so, state which ones:				
How will any existing vulnerabilities among research participants be addressed?				

NB: The term 'vulnerable categories' includes, among others, children under 18, orphans, prisoners, persons with cognitive or communication disorders, people who are traumatised or currently in traumatic situations.

Where necessary, include details of steps to be taken to facilitate data collection across language barriers (e.g. interpretation or translation).

6. How will informed consent be obtained?					
How will potential participants be identified / selected / recruited? Based on their age, different field of industry, income range					
What will participants be told about the research (including the promises to be made)? The participants will be informed to about the research aim and to share their opinions through answering questionnaires and they will be anonymous					
How will informed consent be obtained?					
☐ Formal (Signed form)	☐ Informal (e.g. verbal)	☐ Other			
Briefly explain your strategy for ensuring informed consent					
Attach Participant Information Sheets and Consent Forms for each sample group, and/or other related materials					

NB: Consent in social science and humanities research involving human participants: Where informal ethnographic or participant observation methods are used, or where signed Consent Forms are not possible, or for research involving group contexts (focus group, Participant Rapid Assessment, Rapid Rural Appraisal, public performance, workshops) state how the quality of informed consent will be assured. It is essential that participants in research be fully informed and agree, on this basis, to participate in the research.

7. Protecting participant identities				
Can anonymity be guaranteed in resulting reports, theses and/or publications?	☐	Yes	☐	No
Can confidentiality be guaranteed?	☐	Yes	☐	No

Explain how this will be done? (What will participants be told in this regard?) The participants will be encouraged to to share their own opinions/view through answering the question and they should not disclose their identity.

NB: While confidentiality may be desirable, it cannot be guaranteed in, for example, focus groups, or ethnographic observation. Similarly, anonymity should be preserved in questionnaires, but cannot be offered in workshop methodologies, focus group research, etc. Participants should have the right to remain anonymous in the final report, and this must be respected in handling of all data relating to them. Participants need to be informed about these issues.

8. Protection of data during and after the research	
How will the data be protected while the research is in progress? (This includes how the identities of participants will be protected). The questionnaire does not a section that requires the participants to put in their names.	
What is to be done with the research data after completion of the project?	
☐ Stored in archives (specify)	☐ Stored in on-line data base (specify)
☐ Stored in password protected computer	☐ Stored in digital form with all identifying feature removed
☐ Destroyed after … years (insert numbers of years)	
Explain how the data will be securely stored during this time	

NB: 'Raw' or unprocessed data, especially where the identity or personal data of research participants is included, must be safeguarded and preserved from unauthorised access. Data may be destroyed after use, but preservation in an archive or personal collection may also be appropriate, desirable or even essential. For instance, data sets that contain historically important information or information that relates to national heritage must be preserved and should be placed in a public archive where possible and appropriate.

All data should be preserved in a way that respects the nature of the original participants' consent. If you are unsure about the procedure of data management and storage, please contact Nina Lewin (ninalewin@gmail.com)

9. Access to the research results / reports
How will the results be reported? In the research methodology
Who will have access? Students or individuals who have access to Wits library and other individuals who have access to online journals
Note: All Wits Masters and PhDs are stored in the main library as well being made available on the www.

SIGNATURES (REQUIRED)

By signing this form the researcher and supervisor (if any) of this project undertake to ensure that any amendments to this project that are required by the Human Research Ethics Committee (Non-medical) are made before the project commences.

Declaration: We, the signatories, declare that all information on this form is correct and that we will strive to maintain the highest ethical standards in this research at all times, according to disciplinary and university expectations, recognising that ethical practice in research is always a continuing process.

	Date	Name	Signature
Applicant	30/11/2018	Kudzai Mawoyo	
Supervisor	30/11/2018	Dr Kola Ijasan	

Appendix D: Research Questionnaire

Research Questionnaire Survey



Questionnaire

The Housing Affordability problem among young households in Johannesburg South Africa.

I am currently pursuing a Masters in Property Studies at Faculty of Built Environment, University of Witwatersrand, South Africa. The main aim of this study is to examine housing affordability problems among YHs in Johannesburg South.

The research questions are as below:

- What are the key elements affecting housing affordability amongst the YHs in the City of Johannesburg, South Africa?
- What is the criteria in measuring household affordability for YHs/households in the CoJSouth Africa?
- What are the characteristics of the affordable/unaffordable housing markets based on the results of the measurements in the City of Johannesburg, South Africa?
- How is the housing affordability issue influencing the housing choice and behaviors of households?
- What changes in housing affordability can be identified?

All the information is strictly for the purpose of this research study only and complete anonymity is respected.

Your kind co-operation is highly appreciated.

Name:

Address:

Phone number:

(Please note this is option) Please tick one √ (unless stated)

1. Which category below includes your age?
   - 18-23
   - 24-29
   - 30-35
2. Gender: Male ☐ ☐ nale
3. Ethnic:

   ☐ Black ☐ White

   ☐ Indian ☐ Coloured

4. What is your marital status?

   ☐ Single ☐ Divorced

   ☐ Married ☐ Widow/Widower

5. What is your highest education level?
   - Bachelor Degree
   - Honours Degree
   - Master's Degree
   - PhD
   - Other (Please specify)
6. Are you a home owner? Y☐ ☐ No

Part B: Your employment background Please tick one √ (unless stated)

7. What is your occupation?

	Self employed
	Private sector employee
	Public sector employee
	Others (please specify)

8. Where is the location of your current work place? (By Municipality)

	Johannesburg
	Ekurhuleni

9. Which of the following best describe your current gross monthly salary?

	Below R 10, 000		R 30,001 – R 35,000
	R 10 001 – R 15 ,000		R 35,001 – R 40,000
	R 15,001 – R 20,000		R 40,001 – R 45,000
	R 20,001 – R 25,000		R 45,001 – R 50,000
	R 25,001 – R 30,000		Above R 50,001

10. How many total years of working experience do you have?

	Less than 1 year
	1-5 years
	6-10 years
	11-15 years

Part C: Your household income

Please tick one √ (unless stated)

If you are married, please answer this section.

If you are single/divorced/widow/widower, please skip this section and proceed to Part D.

11. Is your spouse working? Yes ☐ ☐ No (please proceed to Part D).

12. Spouse highest education level:

	Bachelor Degree		Doctor of Philosophy
	Master's Degree		Other (please specify)

13. Spouse occupation:

	Self employed		Public sector employee
	Private sector employee		Others (please specify)

14. Spouse current gross monthly salary:

	Below R 10,000		R 30,001 – R 35,000
	R 10 001 – R 15 ,000		R 35,001 – R 40,000
	R 15,001 – R 20,000		R 40,001 – R 45,000
	R 20,001 – R 25,000		R 45,001 – R 50,000
	R 25,001 – R 30,000		Above R 50,001

Part D: Your current residence, please tick one (unless stated)

15. Where is your house located? (By municipality)

	Johannesburg		Ekurhuleni

16. What type of house is your current residence?

	Flat/Apartment		Town house
	Single Storey house		Other (please specify)
	Double Storey house		

17. How long have you lived at your current residence?

	Less than 1 year		5 to 10 years
	1 to 5 years		More than 10 years

18. Which of the following best describes your current residence?

	Own		(please answer question 19-21)
	Rent		(please answer question 24-26)
	Family Residence		
	Others (please specify)		

Own

19. What is the price of your house?

	< R 400 000		R 600,001 – R 650,000
	R 400,001 – R 450,000		R 650,001 – R 700,000
	R 450,001 – R 500,000		R 700,001 – R 750,000
	R 500,001 – R 550,000		R 750,001 – R 800,000
	R 550,001 – R 600,000		> R 800,001

20. How did you own the house?

	Financial institution		Others (please specify
	(with financial family support)		

	Financial institution		
	(without financial family support)		
	Paid by cash		

21. What is your monthly mortgage and gross monthly income? (Please state below)

Monthly mortgage R _____

Gross monthly income R _____

Rent

24. How much is the total rental per month?

	Below R 3000		R 7001 – R 9000
	R 3001 – R 5000		More than R 9001
	R 5001 – R 7000		

25. What is the estimated monthly rent and gross monthly income? (Please state below)

Monthly rent R _____

Gross monthly income R _____

26. Did you receive any financial assistance from parents/family to rent your house? (if yes, please state the amount in Rand).

	Yes	R
	No	

Part E: Housing affordability problems among Young Working Households

For each statement below, please indicate the extent of your agreement or disagreement by placing a circle in the appropriate box.

Questions 27 – 33: Related to affordability to purchase a house

27. In my opinion, houses are not affordable if the housing costs excessively displace my other non-housing expenditures

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

28. My problem in purchasing a house is inadequate income

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

29. In my opinion, housing preferences influence housing affordability

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

30. I perceived that homeownership is available at early working age

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

31. I perceived with more working experience I will have better housing choice in the housing market that I can afford

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree

1	2	3	4	5

32. I have a perception that I can afford to purchase a house in the housing market when I get employed

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

33. There are limited affordable housing choice in housing market

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

Questions 34 – 37 Related to house price in the housing market

34. In my opinion, the current house price in the housing market are expensive for me to purchase

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

35. I believe overvaluation is attributable to the rising house price

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

36. In my opinion, the house prices in the current housing market are unpredictable.

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

37. Increase of foreign investors in the housing market decreases the house price in the housing market

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

Questions 38 – 42: <u>Related to household income of YWH</u>

38. Houses are not affordable if I pay more than 30% of my income to purchase (mortgage) a house

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

39. Rentals are not affordable if I pay more than 25% of my income to rent a house

Strongly	Disagree	Undecided	Agree	Strongly

disagree		or neutral		agree
1	2	3	4	5

40. My monthly income is not enough to save for the housing deposit to purchase an affordable house of my choice

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

41. I have difficulties purchasing a house because my income is insufficient to secure a housing loan (deposit, mortgage, transfer fees, tax)

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

42. Houses are not affordable because of my financial commitments

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

Question 43 – 46: <u>Related to housing choice in the housing market</u>

43. My tenure choice if I cannot afford to purchase a house is to rent

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

44. I will opt to purchase low cost houses if I can afford it and is eligible for it

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

45. I would like to purchase and live in urban areas if I can afford it

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

46. I do not want to bear transportation costs and purchase a house outside of urban areas

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

Questions 47 – 51: <u>Related to housing policy and schemes to assist YWH</u>

47. I am fully aware of National Housing Policy

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

48. I agree that similar strategy to assists low income households should be applied to YWH

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

49. I agree that financial literacy programmes should be incorporated in housing policy and schemes

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

50. I agree that YWH should be more involved in designing and creating affordable housing in housing policy and schemes

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

51. I agree that there should be a policy on controlling a segment of housing market by the state especially for affordable housing

Strongly disagree	Disagree	Undecided or neutral	Agree	Strongly agree
1	2	3	4	5

END OF QUESTIONN AIRE THANK YOU FOR YOUR TIME.