

# The Itsoseng settlement housing intervention in Johannesburg



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**Thesis presented in partial fulfilment for the degree of Master of Management (in the field of Public Sector Monitoring and Evaluation) to the Faculty of Commerce, Law, and Management, University of the Witwatersrand**

**March 2018**

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## DECLARATION

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I declare that this thesis/dissertation titled “*The Itsoseng settlement housing intervention in Johannesburg*” is my own, unaided work. I have acknowledged and referenced all sources that I have used and quoted. I hereby submit it in partial fulfilment of the requirements of the degree of Master of Management (Public sector monitoring and evaluation) in the University of the Witwatersrand, Johannesburg. I have not submitted this report before for any other degree or examination to any other institution.

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Johannesburg, March 2018

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## ABSTRACT

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The purpose of this research was to assess beneficiaries' perceptions regarding improvements in their safety and residential quality of life following a housing intervention programme in Itsoseng Informal Settlement. Initially, this study interrogated literature to comprehend assessments carried out in various housing interventions. Maslow Hierarchy of Needs, Quality of Life Theory and Max-Neef Human Needs Theory of Development were the theoretical frameworks used to understand how beneficiaries perceived the upgrading programme. Improvement in their residential quality of life is realised through the possibilities that are available to satisfy their crucial needs. For this reason, this research focused on assessing the beneficiaries' perceptions on their safety and residential quality of life following the upgrade programme.

Univariate analysis, bivariate analysis, paired sample t-test statistics and one-way analysis of variance (ANOVA) was utilised to analyse the perceptions of beneficiaries following a housing upgrade. The findings showed a good level of agreement between beneficiaries regarding their safety and residential quality of life, and there were no significant difference in the perceptions of male and female beneficiaries. Open-ended questions gave insight on the need to further improve beneficiaries' satisfaction, particularly regarding services such as electricity, clinics, schools and safety walls. Pulling all these things together, the study highlighted the need to prioritise the preferences of beneficiaries, complemented by a comprehensive improvement on safety and residential quality of life to ensure user satisfaction.

Insights from the findings further highlighted that holistic improvement in housing conditions, safety, basic services, building a good sense of belonging and tenure security is crucial and goes a long way towards enhancing improvement in the residential quality of life. This study facilitated the recommendations on improvement in the design of the houses in order to satisfy human needs rather than just focusing on the physical aspects of the house. This further allowed this study to emphasise that development is about people not objects, and that it is vital to steer the development process.

Key words: Assessing, perceptions, residential quality of life, upgrading of informal settlement programme, development, theoretical framework

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## 1.1 Background

It is vital that a brief introduction of terms utilised in conceptualising this research be presented as a path to expound the research problem statement (Section 1.2.1), followed by the purpose of this research (Section 1.2.2) as well as the research questions (Section 1.2.3). Sections 1.1.1 and 1.1.3 elucidate the research context, with more precise detail clarified in section 2.1. Section 1.1.2 briefly details the programme tabled for study as well as key terms and concepts, and is complemented by a detailed discussion in Section 2.2. Section 1.4 articulates the delimitations of the study, while Section 1.5 presents a justification for the research. In conclusion, Section 1.6 gives a preface that briefly summarises all the contents of Chapter 1.

### 1.1.1 History of informal settlements in Johannesburg

Huchzermeyer (2009) contended that informal settlements are interchangeably called slums and are described as the unauthorised and unorganised occupation of a piece of land by the urban poor. Milbert (2010), Menshawy, Aly and Salman (2010) and Huchzermeyer (2009) concurred that these settlements are unhealthy and overcrowded, with people living under terrible conditions, in sub-standard and unsafe dwellings, with inadequate water facilities and poor sanitation. Taher and Ibrahim (2014) agreed with Milbert's (2010) assertion that informal settlements are a breeding ground for socio-economic problems such as crime, violence, drug addiction and alcoholism. However, the view of Misselhorn (2008) and Akhmat and Khan (2011) differed from Milbert (2010), Taher and Ibrahim (2014) and Huchzermeyer (2009) and asserted that informal settlements provide migrants with a convenient holding place, granting them access to urban settings at limited financial cost. Patel (2005) affirmed that South Africa was colonised by the Dutch from the mid-17th century to 1814, when the British colonised the Cape. Joyce (2003) agreed with Patel (2005) that socio-economic strategies favoured and benefited the perpetrators of colonialism in enhancing their development and sustainability. Patel (2005) and Huchzermeyer (2009) articulated that apartheid followed colonialism, which saw further segregation of blacks and other non-white races and influenced the passing of policies to suppress non-whites.

Patel (2005) confirmed that the discovery of minerals in Johannesburg created a large mining hub, which acted as the engine for industrialisation and urbanisation. Ziblim (2013) further affirmed that the city is the country's economic hub and host to

the largest local and international corporations. The pressure on housing and the birthing of informal settlements in Johannesburg links to the influx of migrants, both from within South Africa and other African countries, in search of greener pastures. Furthermore, anticipation of better access to socio- economic opportunities acts as a strong pull factor to the establishment of informal settlements in Johannesburg. It is unfortunate that several jobseekers fail to secure jobs as anticipated, resulting in their inability to afford accommodation and hence reside in informal settlements.

### **1.1.2 A description of the informal settlements housing interventions in Johannesburg**

Aigbavboa and Twhala (2010) argued that considering the changing realities and various uncertainties faced by informal settlement dwellers, there has been a shift from the concept of just giving houses as a housing solution to ensuring that humans settle in sustainable communities, depicting a social structural change. In order to appreciate the housing intervention under research, it is crucial to understand the symptoms, root causes and effects of the problem of informal settlements that resulted in the intervention. This will enable the researcher to comprehend how the problem evolved and what led to the intervention.

Joyce (2003), Department of Human Settlements (2011), Marais and Ntema (2013) and Rana (2013) concurred that colonialism and the apartheid system are the root causes of the birthing of informal settlements. The system disrupted the peasantry agrarian means of production, which caused a displacement of the non-white race in the search for employment in urban areas. Ziblim (2013) and Hegazy (2016) agreed that many jobseekers who migrate to urban areas face challenges in securing employment, resulting in their inability to afford accommodation and having to reside in urban slums. Huchzermeyer (2009) and Hegazy (2016) confirmed that informal settlements are characterised by symptoms of overcrowding and unhealthy living conditions, a major consequence of which is morbidity and mortality. Furthermore, Ziblim (2013) and Taher and Ibrahim (2014) stated that informal settlements are characterised by symptoms of illegality and informality, which creates a breeding ground for violence and crime. In turn, violence and crime have a detrimental effect on investor confidence, impacting negatively on the economic growth of a community. Szrimai (2005) further posited that limited economic growth results in less resources for improvements in community development, such as schools and health facilities. Desai and Potter (2014) and Szrimai (2005) both agreed that little investment in schools and health facilities

results in uneducated, unhealthy, idle and less empowered communities. This has a negative impact on future community development.

Ziblim (2013) posited that the informal settlements intervention Act in South Africa was put in place in terms of section 3(4) (g) of the Housing Act of 1997 to focus on the upgrading of informal settlements. Department of Human Settlements (2011) further iterated that the upgrading of informal settlements programme, launched in 2004 by Department of Human Settlements, has a thrust to deliver affordable and relevant housing to the poor. This programme places emphasis on ensuring that humans settle in sustainable communities, depicting a social structural change. Muzondi (2014) iterated that this programme talks to the holistic, integrated and appropriate engagement of settlement upgrading, with the aim of improving the lives of people in informal settlements. Muzondi (2014) and Ziblim (2013) agreed in stipulating that the upgrading of informal settlements come in form of grants allocated to municipalities. Municipalities actively respond to the demands of upgrading informal settlements through the facilitated grants. Ziblim (2013) and Department of Human Settlements (2011) agreed that the upgrading programme focuses on key policy objectives to ensure tenure security, health, safety and community empowerment.

### **1.1.3 The Establishment of Itsoseng informal settlement**

Wotela and Letsiri (2015) posited that South Africa is situated around to its west by the Atlantic Ocean and Indian Ocean to its east. On its north, Namibia, Botswana, Zimbabwe, Mozambique and Swaziland towards the east are located, which is concluded by two more oceans on its south. There is a composition of nine provinces within its borders. Gauteng, which is located to the north eastern side of the country, is the province that house the Greater City of Johannesburg. Johannesburg consist of four sub- regions of Eastrand, Westrand, Pretoria and the Southern region. Ziblim (2013) concurred with City of Johannesburg (2017), stating that Johannesburg is the biggest and wealthiest city in South Africa with the potential of offering great opportunities to many people. The city hosts the largest national and international corporations in the country and is attributed to be the country's economic hub, which put the city on the spotlight for migrants within and from neighbouring countries to come and look for greener pastures. Statistics South Africa (2016) estimated that 4.94-million people reside in the City of Johannesburg.

City of Johannesburg (2012) explained that Itsoseng is a Tswana word that inspires proactively improvement in people's circumstances. Itsoseng is a small informal

settlement within region C of the city of Johannesburg. It is located north-west of Johannesburg. The site is situated to the northwest to the existing Cosmo City development, running to the west of Malibongwe Drive (R512), south of R28 and north of K56 road. City of Johannesburg (2009) iterated that Itsoseng informal settlement previously fell outside the urban zone of Cosmo city, having recorded about 2000 informal settlement dwellers by 2008, which kept on growing up to date. However, City of Johannesburg managed to buy and incorporated it into the greater development of Cosmo City with the aim of alleviating the invasion drive of informal settlers.

Statistics South Africa (2008) posited that Region C consist of approximately eight percent of the entire Johannesburg population confirming that Itsoseng Informal Settlement falls under Region C of the Johannesburg Metropolitan Municipality. It also has several open spaces that gives much opportunity for investment, however it is explained in City of Johannesburg (2009) that the vast open space seem to have created a convenient ground for informal settlements invasion to those who migrate to the city looking for job opportunities.

## **1.2 Towards assessing beneficiaries' perceptions on improvement in the residential quality of life following a housing programme in an informal settlement**

### **1.2.1 The research problem statement**

Department of Human Settlements (2011) posited that there is a greater need for more proactive action to form a strong economic base, proper financial discipline and participatory engagements in order to attain desired outcomes in upgrading programmes. Despite all the efforts by the governments worldwide to bring decency in housing the poor and providing a sustainable human settlement through the upgrading of informal settlements, improvement in the lives of beneficiaries is still a concern. Huchzermeyer (2011), Archer (2011) and Naceur (2013) equally posited that South Africa is one of numerous countries – such as Kenya, Brazil, Thailand and Egypt – that are formulating and implementing housing intervention programmes.

Amao and Benjamin (2015) acknowledged that quality of life concerns the overall assessment of humanity's well-being as individuals and a society. Naceur (2013) and Wokekoro (2015) posited that residential quality of life stands out as a function of housing and characteristics of the respective neighbourhood. Naceur (2013) and Wokekoro (2015) concurred that waning housing and deteriorating neighbourhood settings are cause for concern regarding the safety of residents. Notwithstanding various

recorded success stories of upgrades done in informal settlements worldwide, Huchermeyer (2011) argued that many governments still face challenges regarding improvement of the residential quality of life. Department of Human Settlements (2011) confirmed that in some assessments of upgrades done at the Grasslands informal settlement in the Free State, South Africa, residents did receive houses, but due to budget constraints and planning difficulties meant they neither received the appropriate infrastructure and proper sanitation. Archer (2011) posited that in a study done in Bangkok, Thailand, delayed tenure security was a setback for residents, who felt that they did not belong to the upgraded community. In an assessment of an upgrade programme done in Tanzania, Iweka and Adebayo (2015) postulated that Community Land Trust received the tenure security preventing residents from selling the properties. The residents, however, felt that they did not own the properties and as a result were unsatisfied with the residential quality of life. Wokekoro (2015) argued in a study conducted in Nigeria that post upgrade of the Port Harcourt informal settlement, residents perceived their residential quality of life to be low. Garbage was a consistent problem on the streets of their community. Moreover, there was lack of electricity and water supply as well as waste collection and disposal after the upgrade. Ibrahim and

Koster and Nuijten (2012) further argued that upgrading programmes, if not tackled in a holistic manner, pose a threat of negatively affecting the residential quality of life of the beneficiaries post upgrade. According to Huchermeyer (2011) and Hegazy (2016), housing interventions are clearly drafted, but wrongly implemented. Several assessments done worldwide have shown significant flaws as far as improvement in the residential quality of life is concerned.

### **1.2.2 The research purpose statement**

The purpose of this research is to assess the perceptions of beneficiaries of the improvements in safety and residential quality of life following the housing intervention programme in Itsoseng Informal Settlement. Initially, this study interrogated literature, with the aim to comprehend assessments carried out in various settings of housing interventions. The Maslow Hierarchy of Needs, the Quality of Life theory and the Human Needs theory of development were utilised as the theoretical framework to determine how beneficiaries perceive the development as far as their residential quality of life is concerned. A proposal is set out of the research strategy, design, procedure and

methods applicable to assessments of the housing intervention programmes in informal settlements. Data has been collected and analysed to determine whether the residents of Itsoseng Informal Settlement perceive the housing intervention programme has managed or failed to improve their residential quality of life. The acquisition of the beneficiaries' perceptions regarding improvement in their quality of life following the housing intervention has facilitated this research to reflect and assess their lived experiences. Furthermore, the findings could be utilised to inform future upgrading programmes to enhance user satisfaction and ensure improvement in the quality of life of residents in informal settlements.

Corburn and Sverdlik (2017) posited that housing interventions, such as the upgrading of informal settlements programme, have the capacity to enhance physical living conditions and provide holistic and sustainable human settlements. Similarly, Hegazy (2016) agreed with Corburn and Sverdlik (2017) that, in a broader spectrum, upgrading of informal settlements have the potential to improve the wellbeing of communities, solidify social and cultural capital networks, and improve current and future generational life opportunities. The thrust of the upgrading programmes is to improve the quality of life in informal settlements. Naceur (2013) further confirmed that gauging the perception of residents regarding quality of life is important because humanity values quality of life. The thrust is to maintain and enhance those aspects that could improve the residential quality of human lives.

### **1.2.3 The research questions**

1. What are the perceptions of the beneficiaries on the improvement in safety following the upgrading programme?

#### **Hypothesis 1**

There are differences in perception between male and female beneficiaries on improvements in safety following the upgrade programme.

2. What are the perceptions of the beneficiaries on the improvement in the residential quality of life following the housing intervention programme?

#### **Hypothesis 2**



There are differences in perception between male and female beneficiaries on improvement in the residential quality of life following the upgrade?

### **1.3 Delimitations of the research**

The assessment of perceptions of beneficiaries after a housing intervention relates to how they perceive the development a housing programme brought to their community. This qualifies this research to fall under the broader field of development because the beneficiaries are concerned about whether the housing intervention has brought an improvement (i.e. development) to their lives.

Desai and Potter (2014) confirmed that development has several facets, ranging from social, economic and cultural to political and environmental. This research has directed focus on social development aspects, following Lombard (1992) who argued that social development is concerned with the welfare of the community at large. The purpose of this research is to understand the perceptions of beneficiaries following the upgrading programme brought to their community. Marsden and Oakley (1998) further articulated that the community involved best validates the dimensions of its social development aspects.

This study focuses on beneficiaries' perceptions regarding the improvement brought to their community. SinghaRoy (2001) argued that social development places greater emphasis on empowering and enabling the society involved to articulate and express its views in words. Checking beneficiaries' satisfaction with housing conditions, sense of belonging to the community, safety, and tenure security is part of validating whether they perceive a social improvement was brought to them. Health, and access to education and employment are some of the components of social development that have been covered extensively in other research and were therefore avoided in this study.

### **1.4 Justification of the research**

An assessment of the perceptions of the beneficiaries of the Itsoseng Informal Settlement is critical in determining the success or failure of the upgrade in improving their quality of life. An understanding of the status quo will help devise strategies to improve future similar housing developmental programmes in informal settlements. Lombard (1992) explained that social development is concerned with the welfare of the community at large, with the prime focus being an improvement and the development

of services that concern humanity. Marsden and Oakley (1998) articulated that dimensions of social development are best validated by the community involved, which SinghaRoy (2001) confirmed to encompass the empowerment and enablement of societies involved to articulate and express their views in words and actions in a social environment free of inequities.

If the current position is not checked, several detrimental effects may occur to people's lives. Huchzermeyer (2011) confirmed that informal settlements are characterised by overcrowding and unhealthy living conditions, a major cause of morbidity and mortality. Taher and Ibrahim (2014), Milbert (2010) and Ziblim (2013) equally concurred that informal settlements are breeding grounds for socio-economic challenges such as crime, violence, drug addiction, alcoholism and poor sanitation. Furthermore, violence and crime have an effect of infusing loss in investor confidence resulting in low economic growth for a community. Taher and Ibrahim 2014, Iweka and Adebayo (2015) and Archer (2011) agreed that delayed tenure security has an effect of instilling loss of confidence to invest in a property. Jordus-Leir and de Wet (2013) and Wokekoro (2015) further stated that erratic supply of electricity and dysfunctional streetlights pose a threat to the safety of residents in the community after dark. Jota Samper (2011) concurred with Taher and Ibrahim (2014) in that the design of the house plays a major role in giving residents a sense of belonging. Failure to meet the needs of beneficiaries can result in distortion of their usual life patterns and can in some cases build resentment from residents.

Failure to implement programmes results in failure to deliver, as confirmed by the current South African policy on housing the poor, which involves total financing that is unsustainable and results in failure to clear housing backlogs. Department of Human Settlement (2011) and Turok (2001) equally contended that there is a huge backlog in Johannesburg in the provision by government of housing units for the poor

## **1.5 Preface to the research report**

This report consists of six chapters after this first introductory chapter.

Chapter 2 provides a description of the context of the informal settlement under study that has facilitated the articulation of the research problem. The discussion focuses on the background and history of informal settlements in South Africa, and gives a detailed description of the informal settlement under study. The housing intervention programme will be examined in detail, followed by a critical review of

literature in an attempt to comprehend the findings of previous studies that attempted to assess beneficiaries' perceptions of the improvement to their quality of life following housing interventions carried out in informal settlements. The acquisition of this information assisted in situating this research in development, which stipulates its key components, facts and debates, following the various approaches that have been used to assess development programmes on the upgrade of informal settlements. The Maslow Hierarchy of Needs, Quality of Life theory and Manfred Max-Neef theory of development are the relevant explanatory frameworks selected for this research. Lastly, the conceptual framework provides a roadmap of how the research intends to assess the beneficiaries' perceptions following the housing intervention.

Chapter 3 is set out to describe the research approach and design as well as the procedure and methods used in the collection, processing and analysing of empirical evidence during the assessment. It articulates the quantitative research strategy applied on a case study research design to analyse the unit case of Itsoseng Informal Settlement. It also sets out to show the systematic random sampling used to select the research participants. A self-administered structured questionnaire is used as a data collection instrument, with both open-ended and closed questions. This chapter further sets out the ethical considerations as well as the reliability and validity measures used in this research to ensure credibility. Furthermore, the technical and administrative limitations incurred are articulated.

Chapter 4 presents the research results attained from the empirical evidence on the attributes acquired from the questionnaire used to collect data. Furthermore, this chapter sets out the logic behind the beneficiaries' perceptions of safety and improvement to residential quality of life. A comparison of the research findings with those found by similar studies and assessments of perceptions following upgrade programmes is also given. The results are set out to provide a roadmap for discussion in chapter 5, which includes the interrogation of relevant frameworks used to explain the research findings. The most relevant framework to the findings is articulated, which then clearly defines the implications of the results.

Finally, chapter 6 provides a summary and conclusion to reconfirm the purpose of the study. Limitations of this study were mostly associated with the quantitative strategy adopted, a case study research design and the utilisation of a fully structured questionnaire. However, this does not compromise the findings of this study.

Recommendations are set out as a guide for further research and an addition to the body of knowledge.

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## 2 REVIEWING LITERATURE TO DERIVE THE CONCEPTUAL FRAMEWORK

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This chapter has four broad objectives; namely to understand the research problem (Sections 2.1 and 2.2), identify the knowledge gap (Section 2.3), develop a theoretical framework to interpret the findings (Sections 2.4, 2.5, and 0), and conceptualise the research approach (Section 2.7). Specifically, in Section 2.1, the study briefly describes the research context in preparation for Section 2.2, which details the research problem. Section 2.3 reviews literature on other studies that have attempted to assess housing interventions. Considering all this knowledge, the research falls within the scope of development studies and, as such, stipulates its key components and attributes in Sections 2.4 and 2.5. The Maslow Hierarchy of Needs, Quality of Life theory and Max-Neef's human needs theory of development is identified as the most relevant theoretical framework to interpret the findings for this research. The last Section (2.7) provides a roadmap of how this research intends to assess the upgrading of informal settlements in Itsoseng Informal Settlement in Johannesburg, South Africa.

### 2.1 The history and description of Itsoseng Informal settlement in Johannesburg

In order to understand the evolution of this study's research context, this section is going to elaborate on the current physical boundary of South Africa with its neighbouring countries. Furthermore, the nine provinces within South Africa are set out, with Gauteng as the province of concern. Gauteng is divided into cities and our focus is on the greater city of Johannesburg, which is one of the affluent cities in Gauteng province. The city of Johannesburg is set out into seven regions of which Region C is the home that house Itsoseng informal settlement our research physical context.

Wotela and Letsiri (2015) iterated that South Africa is situated around to its west by the Atlantic Ocean and Indian Ocean to its east. On its south, there are two more oceans while it is surrounded on its north by Namibia, Botswana, Zimbabwe, Mozambique and Swaziland towards the east. Lesotho is fully surrounded within the borders of South Africa. Within its borders are the nine provinces as shown in Figure 1 below. The focus province for this study is within the Gauteng province which is located to the north eastern side of the country.



**Figure 1:** The map of South Africa showing its neighbouring countries.

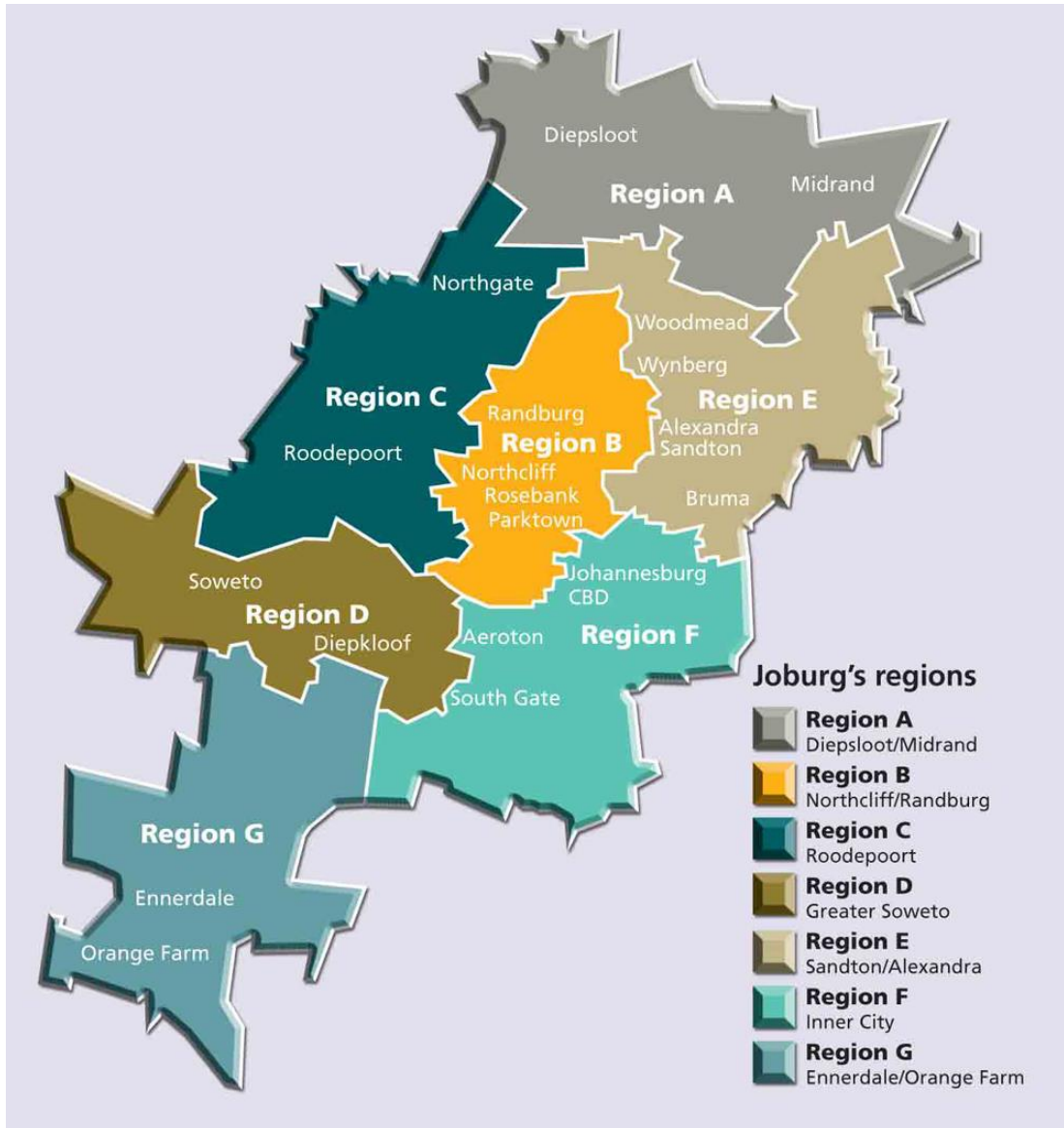
'Map of South Africa with English labels' by Htonl-Own work. Licenced under CC BY-SA 3.0 via Commons [https://commons.wikimedia.org/wiki/File:Map\\_of\\_South\\_Africa\\_with\\_English\\_labels.svg#/media/File:Map\\_of\\_South\\_Africa\\_with\\_English\\_labels.svg](https://commons.wikimedia.org/wiki/File:Map_of_South_Africa_with_English_labels.svg#/media/File:Map_of_South_Africa_with_English_labels.svg).

City of Johannesburg (2011) confirmed that the greater Johannesburg is one of the affluent cities located in the Gauteng province amongst the other four sub- regions of Eaststrand, Westrand, Pretoria and the Southern region. Ziblim (2013) concurred with City of Johannesburg (2017), stating that Johannesburg is the biggest and wealthiest city in South Africa with the potential to offer great opportunities to many people. The city hosts the largest national and international corporations in the country and is attributed to be the country's economic hub. Statistics South Africa (2016) estimated that 4.94-million people reside in the City of Johannesburg. Furthermore, the population of Johannesburg increased by 11,6% percent between 2011and 2016, which is an 8,9%

increase of South Africa's total population. City of Johannesburg (2017) confirmed that each month the city receives about 3 027 migrants in search of greener pastures.

The city of Johannesburg is further divided into seven regions as shown in Figure 2 below. Region C is the one that house Itsoseng, which is the research context of this study. Itsoseng is a small informal settlement within region C of the city of Johannesburg. It is located northwest of Johannesburg, within the geographic coordinates of 26°0'33"S 27°55'17"E. The site is also positioned northwest of the existing Cosmo City development and to the west of Malibongwe Drive (R512), south of the R28 and north of the K56 roads. The informal settlement is located on land previously owned by the Itsoseng Trust, with its property description as portion 133 of the farm Zandspruit 191IQ. Previously, Itsoseng Informal Settlement fell outside the urban zone of Cosmo City, having recorded about 2 000 informal settlement dwellers by 2008, a number that has kept growing to date. However, the City of Johannesburg purchased the land and incorporated it into the greater development of Cosmo City as a way of alleviating the informal invasion drive. The upgraded settlement of the Itsoseng Informal Settlement is interchangeably termed the Malibongwe Ridge.

Brown-Luthago (2016) postulated that safety is one of the greatest concerns in South African communities. Worldwide, South Africa is one country dominated by violence. The death rate has been pegged at 157.8 per 100 000 population which is considerably higher than the average rate of 139.5 per 100 000 population for the African continent which is double the global average of 86.9 per 100 000 population. SAPS (2014) posited that Honeydew policing cluster, which Itsoseng Informal Settlement falls under, recorded a dramatic increase in violent crimes. It has also been reported that the Honeydew cluster had the highest number of house robberies in Gauteng Province, totalling to 980, which reflects a 15% increase compared to 2013 statistics (Business Day Live article Nov 25, 2014). Honeydew cluster is composed of Douglasdale, Florida, Honeydew, Randburg and Roodepoort, which also covers Cosmo City and informal settlements of Zandspruit, Itsoseng, and Diepsloot. Despite all the efforts by the government to bring decency in housing the poor and providing a sustainable human settlement through the upgrading of Itsoseng Informal settlement, the issue still stands that the safety and residential quality of life of beneficiaries is still at stake.



**Figure 2: Map for the city of Johannesburg with its various regions**

Source: Integrated Development Plan City of Johannesburg (2017)

It is crucial to reflect on the dynamics of colonialism and apartheid, which form part of the history of South Africa. Furthermore, it is critical in this research to examine the aspects of urbanisation, migration and industrialisation embedded in the historical make-up of the city of Johannesburg. Joyce (2003) acknowledged that colonialism and apartheid systems in South Africa disrupted the existing traditional forms of living in the name of civilisation. In pre-colonial times, communalism and co-operation as well as mutual aid catered for welfare needs. Marais and Ntema (2013) similarly concurred with Joyce (2003) in that the existence of informal settlements in South Africa dates back to the apartheid era, considering the influx control mechanism, which inhibited the non-white races from reaching out to exclusive areas that were set



for the white minority. Department of Human Settlements (2011) further made a poignant remark that blacks were forcibly evicted from white areas and secluded to poverty-stricken homeland areas, which were far from urbanisation. Similarly, Huchermeyer (2016) agreed with Department of Human Settlements (2011), which posited that in an attempt to improve their economic status blacks ended up migrating from homelands to urban cities like Johannesburg in order to reside closer to work opportunities. The fact that non-white races were being paid wages that did not afford them the opportunity to secure decent housing, resulted in some workers settling in informal, illegal and inappropriate locations. Department of Human Settlements (2011) further confirmed that slums and informal settlements allowed for ease of access in terms of commuting to work. Ziblim (2013) agreed with Department of Human Settlements (2011) in that increased migration to seek employment in urban areas had resulted in some failing to acquire jobs as anticipated. Many of the jobless resorted to residing in squatter camps, crime, drug abuse and violence in order to sustain a living. However, Corburn and Sverdlik (2017) differed in positing that informal settlements partly exist on their own following the convenience they serve as vital holding places that facilitate accessibility to urban space at a low financial cost. This study will align to the circumstances created by colonialism and apartheid that contributed to the birthing of informal settlements.

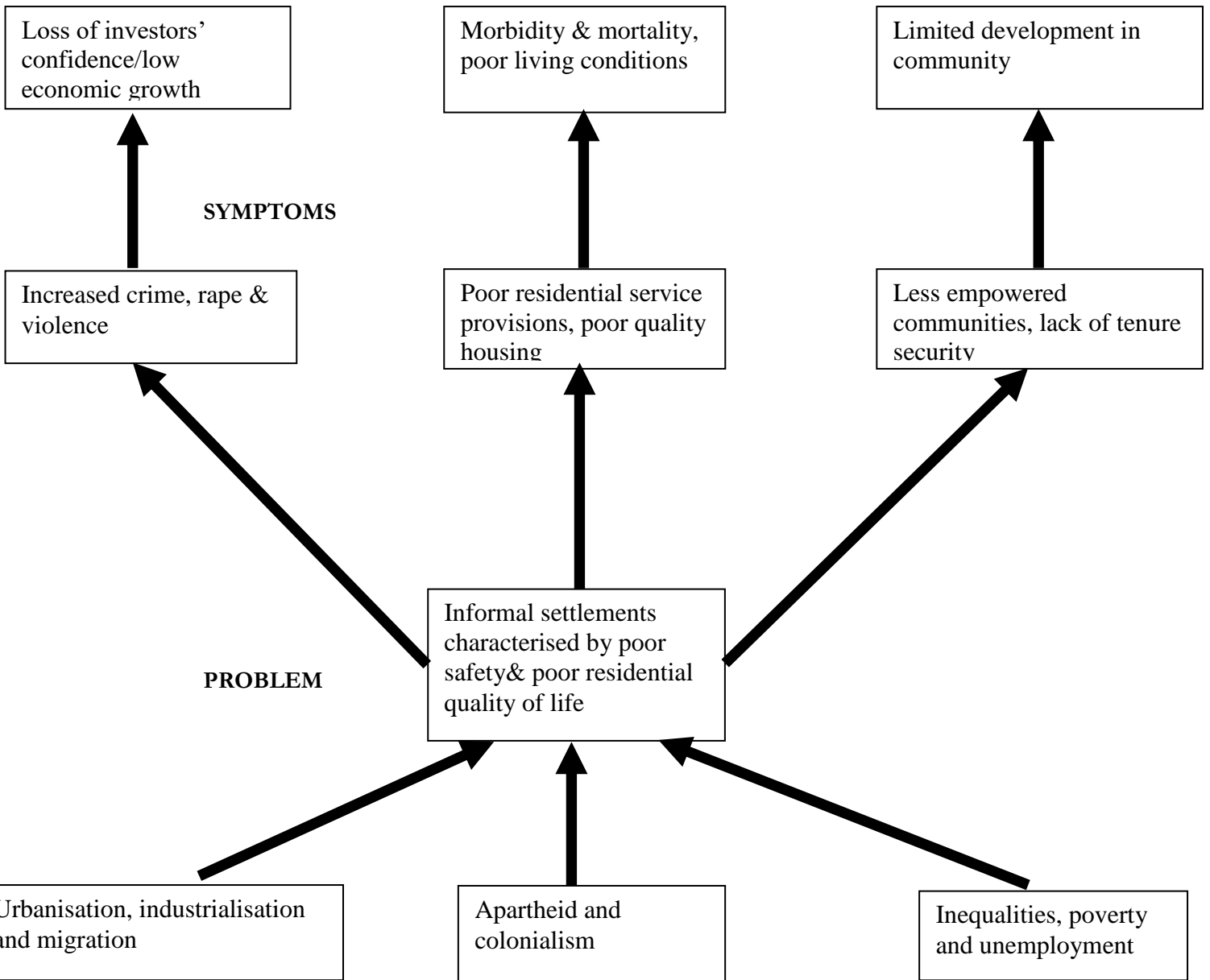
Patel (2005) confirmed that the discovery of minerals created a mining industry that has acted as the engine for industrialisation and urbanisation. Huchermeyer (2016) equally agreed that the discovery of minerals in Johannesburg has been a magnet leading to an influx of migrants. City of Johannesburg (2017) ascribed that Johannesburg is rich with prospects to render excellent opportunities to all its residents. Notwithstanding that, optimists like Akhmat and Khan (2011) constructively attached urbanisation as a similitude of socio-economic development. However, pessimists like Rana (2011) attributed urbanisation to be the source of slum creations. Marais and Ntema (2013) differed from Rana (2011), pointing out that informal settlements are an existence of many urban cities. There is a need for scrutiny on the depth and trends of informal settlements in order to formulate relevant policies that could mitigate the challenges encountered. Ackelman and Anderson (2008) further differed from Rana (2011) by attaching responsibility to governments and relevant stakeholders to develop appropriate strategies to improve the living conditions of informal settlement dwellers.

## **2.2 A detailed description of the informal settlements upgrading interventions in Johannesburg**

In this section, detailed description of the housing intervention is set out as way of articulating the key aims of the programme. Huchzermeyer (2009) confirmed that the upgrading programme focuses on key policy objectives to ensure tenure security, health and safety, and community empowerment. In order to appreciate the housing intervention from which the beneficiaries' perceptions are assessed, it has been considered crucial to further set out in this section, the symptoms, root causes and effects of the problem of poor quality of life in informal settlements that led to the implementation of the housing intervention as shown in Figure 3 below.

Aigbavboa and Twhala (2010) argued that considering the changing realities and various uncertainties faced by informal settlement dwellers, there has been a shift from just giving houses as a solution to ensuring that people settle in sustainable communities, which depicts a social structural change. Patel (2005) affirmed that South Africa was colonised by the Dutch from the mid-17<sup>th</sup> century to 1814, when the British colonised the Cape. The colonial system adopted socio-economic strategies that only favoured and benefited the perpetrators of colonialism. Joyce (2003) agreed with Patel (2005) that colonialism served the interests of only its agents in enhancing their development and sustainability. This had a negative effect on the non-white races in that the systems of colonialism disrupted their traditional forms of living. Considering the most affected black race, individual needs were met through wider community communalism, cooperation and mutual aid. Patel (2005) further articulated that apartheid followed colonialism, which witnessed the further segregation of the blacks and other non-white races.

## CONSEQUENCES



## ROOT CAUSES

### Figure 3: Problem Analysis

(Adapted from Department of Human Settlements (2011))

Patel (2005) argued that the discovery of minerals in South Africa in the 1860s birthed industrialisation. The onset of industrialisation further witnessed the distortion of the peasantry agrarian culture, which characterised the form of living for indigenous people. Rana (2013) pointed out that industrialisation required a large labour force,

which saw the coercion of blacks and other non-white races into wage labour. The Land Act passed in 1913 only reserved 10% of the land for Africans. This had an effect of depriving blacks from their popular peasantry agrarian means of food production. The 1970s and 1980s saw the rise of freestanding informal settlements in South Africa. Joyce (2003) agreed with Patel (2005) and Rana (2013) that the disruption of the peasantry agrarian means of production resulted in the creation of informal settlements as people moved to urban cities to seek employment. Rana (2013) differed from Patel (2005) and Joyce (2003) in that he pointed out that the apartheid government had plans to relocate residents out of urban areas, but there was a remarkable resistance from the communities, which then birthed strong community organisation. This caused the further mushrooming of illegal settlements and backyards for rentals.

Brunt and Penelosa (2012) posited that industrial revolution in the 18<sup>th</sup> and 19<sup>th</sup> centuries resulted in urbanisation, which created a demand for labour in the industries. Informal settlements emerged from urbanisation and urban migration. It has been interpreted that urbanisation resulted in the establishment of informal settlements due to urban sprawl as labourers tried to settle and gain access to work. Hegazy (2016) contended that there was an increase in urban migration, which was a source of informal settlement formation. Ziblim (2013) agreed with Hegazy (2016) that many jobseekers who migrate to urban areas usually face a challenge in securing employment. This has resulted in failure to afford the costs of accommodation and having to resort to urban slums. Brunt and Penelosa (2012) concurred with Ziblim (2013) and Hegazy (2016) in deducing that there is a solid relationship between urbanisation, migration and unemployment in informal settlements. Failure to secure jobs forced some informal settlement residents to resort to crime and violence as a means of survival.

Huchermeyer (2011) confirmed that informal settlements are characterised by overcrowding and unhealthy living conditions, a major cause of morbidity and mortality. Taher and Ibrahim (2014), Milbert (2010) and Ziblim (2013) equally concurred that informal settlements are breeding grounds for socio-economic challenges such as crime, violence, drug addiction and alcoholism, and poor sanitation. Furthermore, violence and crime lead to a drop in investor confidence resulting in low economic growth for a community. Taher and Ibrahim (2014), Iweka and Adebayo (2015), and Archer (2011) agreed that delayed tenure security has an effect of instilling loss of confidence to invest in a property, which further retards improvement in the quality of life. Jordus-Leir and De Wet (2013) and Wokekoro (2015) further stated that

erratic supply of electricity and dysfunctional streetlights poses a threat to the safety of residents in the community during the night. Jota Samper (2011) concurred with Taher and Ibrahim (2014) that the design of the house plays a major role in giving residents a sense of belonging.

Department of Human Settlements (2011) confirmed that the 1994 post-apartheid government developed a new urban policy to lift apartheid restrictions, and passed several legislations, such as the Housing White Paper of 1994, the Housing Act of 1997 and the 1996 Constitution of the Republic of South Africa. Focus was purely on the quantitative delivery of houses, but realisation of changing realities in informal settlements resulted in the formulation of the Housing Code of 2000 and the Breaking of the New Ground of 2004. This is a broader policy of the programme to upgrade informal settlements, with the focus on improving the lives of slum dwellers.

Muzondi (2014) stipulated that the upgrading of Informal settlements comes in form of grants allocated to municipalities. Municipalities utilise the grants to fulfil the demands of upgrading informal settlements. The Housing Act of 1997 of the Republic of South Africa also emphasises that all government entities have a mandate to ensure that all citizens have access to safe housing as well as sustainable services. Aigbavboa and Twhala (2010) confirmed that the demand comes in the form of land provision, municipal service infrastructure and social amenities. Aigbavboa and Twhala (2010) and Muzondi (2014) equally agreed that the upgrading programme also entails a united force of multi-sectoral partnerships, outstretched commitment and political resilience.. There are two dominant approaches considered in the upgrading of Informal settlements, which are in situ and total redevelopment. Franklin (2011) iterated that total redevelopment involves the evacuation and relocation of informal settlement residents into another identified Greenfield elsewhere. The in situ approach, which was implemented at Itsoseng, allows for the development of the existing informal settlement.

Huchermeyer (2009) to some extent criticised the upgrading process and articulates that the policy is well spelt on paper whilst the implementation is going in an opposite direction within so many governments. Richards et al (2007) contends that the current South African policy on housing the poor involves total financing, which to a more extent is unsustainable and so the reason why there is failure in clearing the housing backlog. Similarly, Turok (2001) agreed with Richards et al (2007) that there is a huge backlog in Johannesburg for the housing units provided for the poor by the

government. Furthermore, budgets on housing can only supply less houses compared to the demand for housing by the people in informal settlement residents. Department of Human Settlement (2011) posited that there is a greater need for more proactive actions in order to form strong economic base and proper financial discipline in order to attain the desired outcome in the upgrading process. Despite all the efforts by the government to bring decency in housing the poor and providing a sustainable human settlement through the upgrading of Informal Settlement, the issue still stands that the improvement in the lives of beneficiaries is still compromised.

### **2.3 Methods, data, findings, and conclusions of studies on and assessments of informal settlements upgrading**

Considering that at this point the researcher has a detailed understanding and appreciation of the research problem as well as the intervention programme, it is crucial to set out a review of similar past studies and assessments. The following sections set out a discussion of the research approaches, designs, procedures, methods applied, findings and conclusions reached in assessments of upgraded informal settlements regarding quality of life. In the process, an elaboration of the knowledge gaps of the various discussions is set out.

The study by Wokekoro (2015) assessed residents' satisfaction with their quality of life in the upgraded informal settlements of Port Harcourt, Rivers State, Nigeria. This study utilised a quantitative research strategy and employed a cross-sectional research design using a face-to-face self-administered pre-coded questionnaire. Port Harcourt residents perceived that their residential quality of life was low because of delays in the collection of garbage from the streets in their neighbourhoods. The research further exposed significant differences between the perceptions of male and female residents, with women more concerned about the conditions in their community despite the upgrades done, particularly with regard to electricity and water supply, and waste collection and disposal. Furthermore, female residents perceived that their safety was at stake, following the erratic supply of electricity as well as dysfunctional streetlights. Furthermore, consideration of residents' perceptions and concerns when making decisions is important to attain user satisfaction.

Research done by Galiani, Gertler, Cooper, Martínez, Ross and Undurraga (2014) assessed the impact of providing in-situ upgraded houses to slum dwellers in El Salvador, Mexico and Uruguay. The study used a quantitative research strategy with an

experimental design and baseline survey. The findings showed that the in-situ upgrading programme managed to improve housing conditions and hence the residential quality of life of the beneficiaries. There was a drastic improvement in the residential quality of life for people in upgraded settlements as compared to those in informal settlements where no intervention had taken place. Furthermore, there was a statistical difference between the perceptions of males and females regarding the improvement of housing conditions, with females stating that they strongly felt there was ample space for them to arrange their family's belongings. The study concluded that it is important to use subjective indicators – such as housing conditions, space and design of the upgraded house – when determining quality of life. The findings also gave a clear indication that improvement in the above indicators is a greater function for the equation to improve the residential quality of life and well-being of beneficiaries.

Short and Hammett (2013) in their study highlighted the complex relationship that existed between housing and health within an upgraded informal settlement in Cape Town. Descriptive data were obtained from a quantitative survey. Several shortcomings occurred in analysing the data despite the fact that research team members received refresher training. Failure to answer some questions was reported, while other questions were incorrectly interpreted. There was various traces of limited analysis of certain variables. The results showed that people living in upgraded informal settlements were exposed to poor and unsafe living conditions. Poor lighting, poor social facilities and limited economic opportunities were listed as posing a threat to the improvement in residential quality of life of most residents. There was a statistically significant difference in the perceptions of female and male residents about safety, with 81% of female residents feeling very unsafe in the community due to poor lighting as compared to 19% of males.

Devoto, Duflo, Dupas, Parienté and Pons (2012) used a quantitative research strategy on an experimental design to assess perceptions of the installation of a piped water connection and improved basic sanitation in the Morocco urban settlement. The research findings noted that residents preferred the improvement of individual piped water to their respective homes followed by the improvement in sanitation. This has shown significant results on improvement in residential quality of life. There were significant differences in the perceptions of males and females, with women citing that improved water connections and basic service conditions reduced the time spent to fetch water.

Archer (2011) utilised a qualitative research strategy in which a case study research design was conducted to assess the perceptions of residents and community leaders on an upgrade in Bangkok, Thailand. In-depth interviews were conducted with residents and community leaders to gauge their perceptions of the upgrade capacity to improve their residential quality of life. The thrust was to explore how the residents perceive the outcomes of the upgrading. The challenge of delayed tenure security was a setback for residents as they were hesitant to develop their upgraded properties because of the uncertainties. However, residents were satisfied with the participatory approach to the upgrading, which made them feel to be a part of the development brought to the community.

Naceur (2013) employed a quantitative strategy with a longitudinal survey design in examining the effects of urban improvement on Bouakal residents in Algeria. Data collection utilised the fully structured questionnaire. The study aimed to understand how the intervention improved informal settlement residents' perception about safety. This enabled the study to determine if there was an improvement in the quality of life. There was improvement in the physical structure of the housing, sanitation facilities, water supply and lighting system in the streets of the constructed roads. There was a statistically significant difference between male and females concerning perceptions about safety. The upgrading managed to instil positive perceptions about female safety in the community and improve the quality of life of female residents.

Brown-Luthago et al. (2016) engaged in a qualitative research strategy through a case study research design. The study aimed to understand the experiences of Freedom Park residents following an upgrade programme in the city of Cape Town, South Africa, and to consider whether their quality of life had improved. Data was collected from residents through in-depth interviews, focus groups as well as community crime mapping. Following the upgrading to the Freedom Park informal settlement, the majority of female residents felt unsafe from gang violence and rape. It was concluded that physical upgrading of informal settlements is vital as long as it is complemented by a holistic and integrated package of improvement in quality of life. Some residents felt that the houses could collapse anytime because of the poor quality of materials used. Residents also confirmed that some roofs were leaking, which is a hazard to the health of residents. Furthermore, attaining tenure security for beneficiaries



implied that beneficiaries felt safe, capacitated and motivated to belong and have confidence to improve their lives further.

Samper Jota (2011) posited in a study done in Fevela Bairro, Rio de Janeiro, Latin America, that urban upgrading of informal settlements had a positive effect on perceptions of safety and hence the overall residential quality of life. The study employed a qualitative strategy with semi-structured interviews with beneficiaries of the upgrading. The study concurred that there was improvement to the roads and streetlights in the community. Furthermore, the design and tenure security arrangements of the upgrading aligned to the preferences of the residents, awarding them with a sense of belonging since they confirmed that their decisions were considered. Positive perceptions of safety, tenure security and design of the house also induced a positive overall perception of the residential quality of life.

Iweka and Adebayo (2014) postulated some insights from an assessment of a housing upgrading programme done in Lagos, Nigeria. The aim was to infer the sustainability of housing upgrading programmes done in informal settlements. Community Land Trust got the tenure security with a mandate to circumvent residents from selling the properties. A qualitative research study was done utilising a case study research design. Residents felt that since the properties and land belonged to the community trust, they did not own their properties, leaving them unsatisfied as far as improvement to the residential quality of life was concerned.

Jordhus-Leir and De Wet (2015) confirmed in a qualitative study done with the Bungeni residents of the Joe Slovo informal settlement in Cape Town, South Africa, that residents were caught by surprise as the market-driven agenda and bureaucratic process of slum upgrading overtook and compromised the informal settlement's improvement. Low-quality houses and poor sanitation facilities were provided, resulting in extra costs being incurred to rehabilitate leaking houses and sewer systems. Furthermore, there was a lack of maintenance, which was witnessed through dysfunctional streetlights. After the upgrading, most female residents felt unsafe from gang violence and rape because of the dark surroundings.

Taher and Ibrahim (2014) confirmed that in a qualitative study involving a case study research design in an informal settlement in Dhaka, Bangladesh, that residents perceived their residential quality of life had not improved. The designs of the upgraded settlement that replaced the informal settlements had ignored the residents' usual patterns of living. Horizontal slums replaced vertical slums and were void of space

for social activities and for children to play. Female residents experienced a lower sense of belonging than their male counterparts, and residents felt that they were neither consulted nor their preferences considered before construction.

## **2.4 An introduction to development and its key components**

It is in this section; the broad field of study identified is discussed. Development discourse is unpacked with the thrust to describe the diversity of meanings and interpretations of development. Further, the purpose of development is articulated in a way to understand the value that development serves in societies. Major components, processes and established facts in development are further presented in this section in order to understand the various elements that comprise development. This enables the appreciation of what has been done for a long time in development as well as generally accepted norms in the development space. Key issues and debates are discussed with a goal of grasping the crucial aspects that surround the development discourse, and hence to direct effort to such aspects in the communities under research. Reflecting on the purpose of this research, all that beneficiaries are concerned about is whether there has been an improvement in their lives.

### **2.4.1 Describing development**

Sumner and Tribe (2008) acknowledged that development is a complex and ambiguous field of study, which is contested both politically and within the theoretical space. Crush (2005) elaborated further that development rarely seems to work and the intended goals are never attainable. Yet development seems to be persistently extending its borders or could it be about what it says it does and not actually a social reality? Cornwall and Eade (2010) confirmed that the development discourse is influenced by the buzzwords and fuzzi words, which is a representation of an evasive and deceptive convincing game, yet the world still seems to run with it.

Crush (2005) further iterated that development is reproduced around power and material relationships. People should not be fascinated by the words brought in the name of development, but rather appreciate that those in power are the ones to define development. Brown -Luthago (2016) articulated that development could be further analysed as rooted in the historic power of capitalism, modernity and the globalisation

of Western States as well as a mechanism of exploitation. It is an effort to produce and reproduce disciplined and well governable citizens.

Szirmai (2005) distinguished two different approaches that can be used in development discourse discussions. Development can be viewed in the light of the fight against poverty. Sumner and Tribe (2008) concurred with Szirmai (2005) that development is associated with the implementation of short-term outcomes of desirable targets. The fight-against-poverty approach is associated with the paradigm of heavy involvement with the challenges occurring in the developing world. Secondly, an analysis of long-term socio-economic goals can be undertaken with the thrust to compare development in different countries, regions and historical periods. Sumner and Tribe (2008) agreed with Szirmai (2005) by explaining development as structural society rejuvenation. The long-term goals aid in gaining an understanding of parameters that cause long-term effects on the dynamics of socio-economic development. However, Sumner and Tribe (2008) differed from Szirmai (2005) by adding a further aspect of development, which articulates it as an elaboration of Western modernity.

#### **2.4.2 The purpose of development**

Crush (2005) contended that the backbone of development in the 1950s and 1960s emanated from the passion to free people. All the knowledge and language around development has to be considered in the light of bringing a real positive change to the lives of people and challenges faced by societies. Crush (2005) articulated that the purpose of development is to bring a positive change to humanity and societies. However, Crush (2005) differed from Swanepoel and De Beer (2006) in stating that recent approaches for development seem to have diverted focus from people to aspirations of liberalisation of economies. Focus is directed to post-modernisation approaches of short-term development and policy analysis rather than long-term transformation goals of societies and economies.

Brown -Luthago (2016) considered the fact that development needs to be conceptualised in the context of the real freedoms that can be brought to humanity and pertaining to people's desires and values. Political, economic, social and cultural freedoms are key aspects in satisfying the purpose of development in societies. A change in the living standards of people is one key aspect worthy of attention in understanding the dynamics and purpose of development. Swanepoel and De Beer (2006) concurred with Desai and Potter (2014) by clearly articulating that development serves a purpose

of creating an enabling environment for humanity to have the freedom to enjoy long, healthy and creative lives.

However, Crush (2005) differed from Swanepoel and De Beer (2006) by positing that development is accused of birthing all the challenges being faced particularly by third-world countries. A development study is viewed as irrelevant to what is actually happening in several third-world communities. Furthermore, it is accused of having a colonial-laden intent, with Western powers trying to impose their view of the development path on many developing countries.

### **2.4.3 Major components of development**

Desai and Potter (2014) articulated that there are multi-disciplinary dimensions of development. The thrust of development is to bring variant disciplines in order to alleviate humanity and societies from poverty and inequalities. Development encompasses a range of aspects, from economic and social to political, cultural and environmental. Rana (2011) and Rogers, Jalal and Boyd (2008) further posited that environmental development is key in cementing sustainability of all other aspects of development. The five components of development will be discussed below, as illustrated in Figure 4.

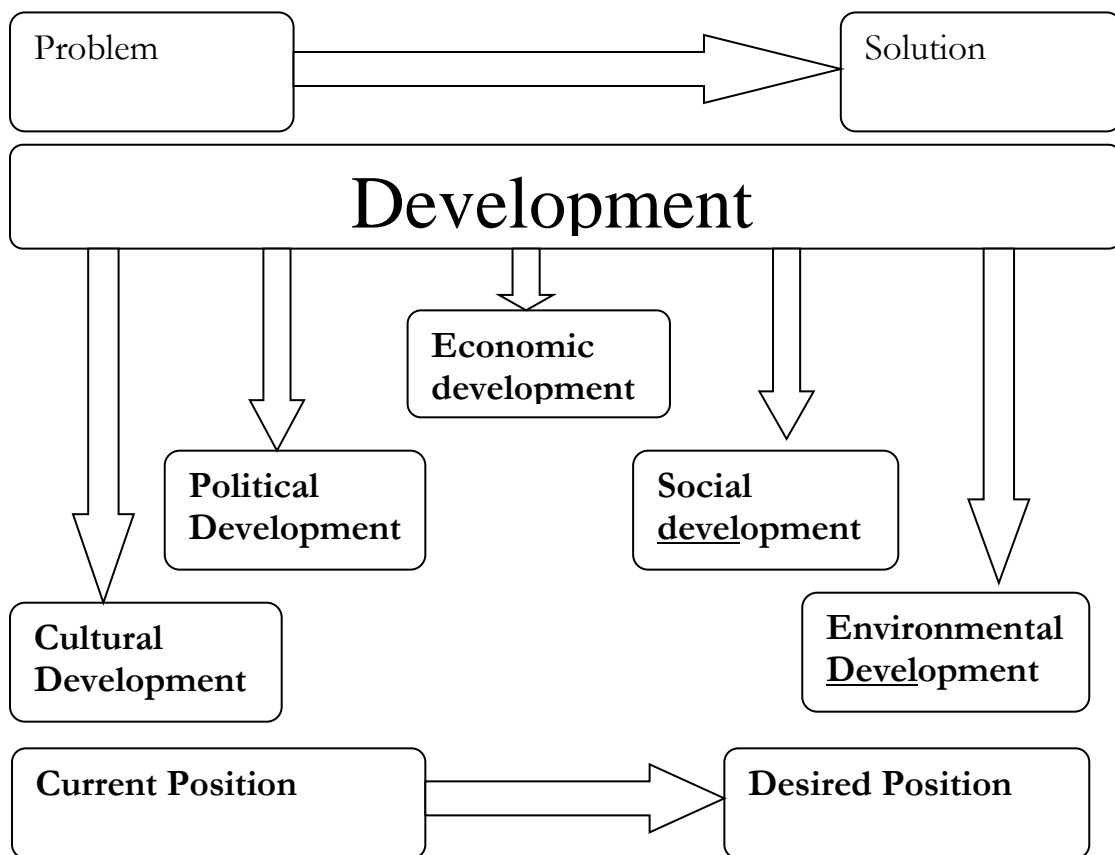
#### **2.4.3.1 Economic development**

Szirmai (2005) pinpointed that economic development is concerned about the increase in per capita growth. Economic growth is realised when production per worker increases, and is enhanced by tools, implements and machinery, which can be referred to capital accumulation. Szirmai (2005) argued that capital accumulation is linked to the emergence of industrialisation, which explains why economic development is highly linked to industrialisation and structural change. Desai and Potter (2014) differed from Szirmai (2005) by pointing out that economic development comes as a necessary though not sufficient condition for the improvement of social lives as well as the sustainability of other components of development.

#### **2.4.3.2 Social development**

Desai and Potter (2014) expounded that social development is concerned with the welfare of the community at large. Health, education, recreation, safety, housing and culture are part of the social services catered for in social development. The prime focus

of social development is human development and improvement of the services that concern humanity. Rana (2011) articulated that the community involved best validates the dimensions of social development. Rogers, Jalal and Boyd (2008) further stated that the core dimension of social development is to place greater emphasis on empowering development beneficiaries. It is crucial to enable the society involved to articulate and express their views in words and actions in a social environment free of inequities. This aligns appropriately with the purpose of this study, which seeks to understand the perceptions of beneficiaries following the upgrade of the informal settlement.



**Figure 4: Five components of Development**

Source: Wotela (2017)

#### 2.4.3.3 Political development

Desai and Potter (2014) argued that political development boils down to the level of community participation in political issues and processes. It is also about the contribution the community is awarded in the political space, and the establishment of structures, systems and institutions that facilitate and ensure that political progress is maintained and developed. Rana (2011) contended that it is crucial to grant a political capacity that enables society to make choices aligned to and compatible with real

development. Desai and Potter (2014) concurred that political development entails community involvement in political processes in a democratic way.

#### **2.4.3.5 Cultural development**

Brown -Luthago (2016) expounded that cultural development entails the development of art, beliefs, customs, institutions and other attributes that relate to humanity with consideration of time and regarding a specified social group. Du Preez (2004) postulated that cultural development also focuses on the development of institutional frameworks that guide the beliefs of humans. Desai and Potter (2014) posited that modernised perspectives view culture as static and a hindrance to development.

#### **2.4.3.6 Environmental development**

Desai and Potter (2014) posited that environmental development concerns the sustainability of activities to meet the needs of the present generation without compromising the benefits to be accrued for future generations. Rogers, Jalal and Boyd (2008) iterated that environmental development is a way of formulating policies that allows for comparison of costs and benefits in order to strengthen environmental protection into the future. Rana (2011) agreed with Desai and Potter (2014) in that it also entails the development of the ecosystem, the gifts of life that comprise the air and sea. Degradation of the ecosystem may result in meaningful loss for human welfare.

### **2.4.4 Major processes of development**

Rana (2011) acknowledged that there is confusion in the development discourse, with development considered, on the one hand, as an imminent and unintentional undertaking and, on the other hand, as an immanent and intentional activity. This research draws from this argument that two processes can be considered to occur in development, as either an intentional or unintentional occurrence. Desai and Potter (2014) argued that economic development could be considered as the distinctive factor between imminent and intentional processes of development.

#### **2.4.4.1 Intentional Occurrence**

Desai and Potter (2014) elaborated that the intentional process of development can be considered as willingly driven, the kind that is deliberately done, for example, to improve third-world economies. Sumner and Tribe (2008) concurred that there is a calculated and cautious will for development that is usually set in terms of national or international goals, such as the Millennium Development Goals.

Furthermore, Cornwall and Eade (2010) contended that in some circumstances, such as in Australia during the earliest convict days, economic development had to be made to happen because of underlying circumstances associated with a hostile environment where there were floods, drought and pests.

#### **2.4.4.2 Unintentional Occurrence**

Cornwall and Eade (2010) contended that there is an unintentional occurrence, which can be classified as underlying circumstances that occur on their own. This can be further defined as a historical occurrence, the kind of development that comes into play without anyone wishing for it. The process of development in this case is viewed as an activity that is not exclusively assigned to governments. Desai and Potter (2014) concurred that economic development is a historical process that occurs without any individual wishing for it to happen. Cornwall and Eade (2010) further described this kind of development as an immanent process, which constitutes the unfolding of the potential embedded within humanity in order to enhance materials and resources in life.

#### **2.4.5 Established facts in development**

Cornwall and Eade (2010) posited that there are several aspects that have been done for a long time and are therefore generally accepted in the development discourse, which will be discussed in this section. Swanepoel and De Beer (2006) argued that development is political. Any political ideologically system will surely affect the development of any nation or society. Development is a direct result of the political policies that are passed and implemented, probably in favour of the equitable distribution of resources and prioritisation of public services such as housing, education and health.

Brown -Luthago (2016) pointed out that economic growth is a vehicle necessary to attain a nation's developmental goals with the thrust to bring about economic development to a nation. However, Desai and Potter (2014) stated that economic growth is necessary, but not sufficient for social development or even for economic development. An increase in output per capita income may not be channelled into an improvement for people's lives, neither be fairly distributed to benefit the population at large nor does it pay attention to improvement of public goods as health and education.

#### **2.4.6 Key issues in the study of development**

Crush (2005) postulated that development words and statements must be considered with much caution. People should not be fascinated or engrossed by the words; rather it is critical to understand that development is about power. Nations or people with power dictate development. Cornwall and Eade (2010) articulated that beneficiaries must be the key players in identifying and selecting their priorities in development.

Sizirmai (2005) posited that even if there different views on development, it is important to understand that there is need for one to critically engage and evaluate development statements in the light of available empirical evidence. Pursuing development through modernisation goals is not a standard, but rather a choice. It is not rule of thumb that everyone must pursue development in that manner. Cornwall and Eade (2010) articulated that accomplishing freedoms is key to attaining development. There is no common standard of development.

Sumner and Tribe (2008) posited that ethical considerations are a key fact in development. It is important to understand what should be done and how to conduct yourself, particularly when different cultures can be involved in interventions. The argument persists as to whose ethical consideration should be taken on board. Should it be that of the researchers and facilitators of the development intervention or that of the participants? This study will focus on development with an ethical consideration of the beneficiaries, as Desai and Potter (2014) posited that development is about giving priority to the beneficiaries of the development.

#### **2.4.7 Describing social development**

Cornwall and Eade (2010) viewed social development as a planned social transformation, formulated with a holistic goal of promoting the improvement of the population's wellbeing. Focus is on developing the wider community's social processes and structures. On the other hand, the aim is to integrate social and economic development, bearing in mind that social development cannot occur without economic development, and economic development would not become meaningful if it did not translate into social welfare of the population involved.

Desai and Potter (2014) that social development is about improving humanity. It is further contended that social development is deeply rooted in the empowerment of marginalised groups, which is closely linked to the dynamics of legitimate sharing as well



as the distribution and redistribution of power and resources. Patel (2005) stated that social development encompasses the empowerment of disadvantaged societies and acceptance of human diversity, coupled with a concern for meeting human needs. Patel (2005) argued that social development is associated with the empowerment of the community to improve their way of life and educative processes. Crush (2005) postulated that Nations or people with power dictate development. Desai and Potter (2014) articulated that beneficiaries must be the key players in identifying and selecting their priorities.

#### **2.4.8 The purpose of social development**

Desai and Potter (2014) expounded that at the heart of social development is the thrust to harmonise social policies with measures that facilitate economic development. Patel (2005) posited that the purpose of social development is to enhance social and economic development in societies and communities. Patel (2005) further contended that empowerment of the marginalised is a key goal for social development. Social development plays a part in the process to create social and economic power.

Sumner and Tribe (2008) articulated that the goals of social development include promoting the participation of the socially excluded. Enabling the poor and disadvantaged to be key actors in identifying and addressing what they prioritise best in their lives also sets up the aims of social development. Patel (2005) further articulated that social development aims at attaining tangible improvements in the quality of life for the people to pave a way towards human development. This study aligns with Patel (2005) because its focus is on understanding the improvement in the lives of beneficiaries. Patel (2005) concurred that social development has a social welfare attachment, with the purpose of improved social and welfare services and quality of life in communities.

#### **2.4.9 Major components of social development**

Desai and Potter (2014) articulated that social development is concerned with upgrading the quality of life and granting opportunities to the disqualified and those who have been denied opportunities in societies. Welfare services, social security and social wellbeing have been considered to form the components of social development in this discussion.

#### **2.4.9.1 Welfare services**

Tassington (2013) posited that welfare services are considered to be social development categories where focus is on social improvement of the needy and underprivileged. Social welfare could be further elaborated as a way in which social development provides effective solutions to social challenges in communities.

#### **2.4.9.2 Social services**

Tassington (2013) contend that social services are an act of assistance in improving the education level and development of skill in communities. The action of helping to improve the health status of communities as well as the housing standards and is considered to be part of social services. Desai and Potter (2014) argued that social development is concerned with the social service improvements that benefit the community at large. Health, education, recreation and housing are social services that can benefit a community.

#### **2.4.9.3 Social security and social well being**

Tassington (2013) contend that social security is the art of providing protection and a safety net within communities. Social wellbeing is an element of social development that goes beyond the provision of physical and tangible components that make up a society. Desai and Potter (2014) concurred that social wellbeing encompasses the emotional and perceptive aspects of a community.

### **2.4.10 Processes of Social Development**

Desai and Potter (2014) posited that social development could be considered to evolve through some aspects in life, which are considered in this research as processes of social development. Social development is considered by nature to be a process that induces an improvement or transformation of the current situation. Desai and Potter (2014) posited that there is a debate on whether there is a need for the active intervention of the state and other agencies in social development. Others believe that intervention actually distorts the whole process of social development. Finally, controversial is the fact that social development needs a prescription in order to attain social developmental goals.

Patel (2005) articulated that the process of change follows the process of social development. The transformation period is facilitated by various policies and interventions to bring an end to or reduce the effect of the challenge in society. The end of the process is a phase in which social development goals are attained.

Desai and Potter (2014) stated that social development is interventionist in nature. There is a deliberate plan to attain social development, which denies a natural occurrence through the forces of the economic market and unforeseen historical forces. Human beings have a willpower to influence their destiny and so make deliberate choices to implement plans they set.

## **2.4.11 Established facts about social development**

Social development consists of facts that have been there and accepted for a while in the social development discourse. The following aspects are set out in this section as established facts in the development space. Fulfilment of these aspects have the capacity to improve efficacy of upgrading programmes in enhancing sustainable lives.

### **2.4.11.1 Human orientation**

Swanepoel and De Beer (2006) posited that in the process of satisfying people's concrete needs it is crucial to ensure that their basic human needs are satisfied. The physical developmental agenda cannot be separated from the abstract human aspect. Developmental projects must be planned in such a way that the aspect of humanity is embedded and naturally flows with the concrete goals. Swanepoel and De Beer (2006) argued that human dignity needs to be embraced with caution and care. It is vital to remember that a human being is more important than the respective needs. Tassington (2013) further posited that development in people's social lives could only be attained if attention is directed towards that which matters to the beneficiaries of an intervention. This entails a respect of people's freedom and choices.

### **2.4.11.2 Participation**

Swanepoel and De Beer (2006) argued that there is a need for clarity on what participation means in bringing development to society. It is not just about involving people, but rather about people becoming part of the project, so that they are involved in the decision-making process and planning of the development. Ashley and Carney (1999) concurred with Swanepoel and De Beer (2006) that people become involved in the implementation, evaluation and management of the project.

### **2.4.11.3 Empowerment, ownership and release**

Swanepoel and De Beer (2006) contended that empowerment is the privilege of having decision-making power. Skill is not a prerequisite to empowerment, but a tool

for enablement. Empowerment can be enhanced by providing people with information to incorporate into their decision-making. Brown -Luthago (2016) posited that people need to be mobilised and motivated to take up responsibility for their own development. Self-reliance, dignity and releasing people from poverty allows development to manifest in society.

#### **2.4.12 Key issues and debates in social development**

Brown -Luthago (2016) posited the notion that economic development is a necessary and sufficient condition for social development. High growth rates do not automatically translate into an improvement in the social wellbeing of humanity. Various factors affect the attainment of social development, including equitable income, increased gender equity and political democracy.

Tassington (2013) contended that there is a debate in social development, with the Residualist approach advocating for scarce and limited resources to be allocated to the marginalised, poor and the disadvantaged, while the institutional approach insists on extensive government involvement in issues pertaining to the social welfare of all citizens. This further implies that there is a need for social policies aligned to economic development objectives. Tassington (2013) further posited that while it is anticipated that social development brings social progress, it is important to note that social improvement in several countries is only marginally noticed. It is a long-term process; moreover, it has been debated that various nations that have witnessed economic development transcend into lower social development.

### **2.5 Key social development attributes for assessing residents' perceptions on residential quality of life following a housing upgrade.**

This section is going to discuss the key attributes that constitute social development. These key attributes of social development are crucial in elucidating how upgrading informal settlement programmes have the capacity to bring sustainable lives through a development brought to their communities. Patel (2005) and Swanepoel and De Beer (2006) labelled social development as a multi-disciplinary field with its key components considered to be social services, social welfare, social well-being and social security. Various attributes stem from these components, which Wokekoro (2015) concurred to include housing, sanitation, tenure security, safety and a sense of

belonging. This study focuses on perceptions on the conditions of the previously mentioned attributes following the upgrading of the informal settlement.

### **2.5.1 Housing Conditions**

Winslow (1941) articulated that the primary importance of a house is to provide shelter from harsh external elements as well as to provide an internal environment that enables a person to function to improved merits. Sub-standard housing made from poor-quality material is void of warmth in winter and lacks ventilation in summer, making it incompatible with decent living for humanity. Similarly, Town, Africa, Shortt and Hammett (2013) concurred that housing is viewed as a form of shelter that provides a shield against the harshness of the external environment. Tassington (2011) contended that it is important to take caution regarding the quality of products utilised in the upgrading of settlements. Brown-Luthago (2016) also confirmed that poor quality material results in further costs to rehabilitate leaking roofs and cracks. Fast-cracking and leaking houses can become a threat to the safety of the dwellers. Department of Human Settlements (2011) confirmed that housing is key to restoring dignity to the residents of the informal settlement, which needs to be complemented by the provision of other social services. Wokekoro (2015) and Brown -Luthago (2016) equally confirmed that data on housing conditions is collected through data on housing conditions can be collected through Census of Population and Dwellings, House Condition Surveys, Assessments and Evaluations carried out following some housing interventions. Strength in the quality of houses, ventilation conditions, satisfaction with the living space are aspects that data collection can focus in understanding the overall housing conditions.

### **2.5.2 Basic services provision**

Tassington (2013) iterated that basic service provision are critical services that enhances life in humanity. This implies facilitating the accessibility of a community to sanitation, refuse removal and electricity supply. Luthago et al (2016) and Department of Human Settlement (2011) postulated that physical improvements to the settlement complemented by a full package of basic services such as electricity supply, sewage disposal, water supply, drainage and household refusal improves the quality of life for residents. Jota-Samper (2011) and Naucer (2013) equally agreed that efficient basic services provisions act as a life enhancer in meeting the community's basic needs. Data on basic service provision is collected through a Census of Population and Dwellings, House Condition Surveys, Assessments and Evaluations carried out following some

housing interventions. Parameters considered includes the condition in sewage facilities, refuse collection, clean water access, drainage conditions and electricity supply.

### **2.5.3 Safety**

Osuide (2004) concurred with Amao and Benjamin (2015) that safety is one of the vital elements of life that any person needs for a sense of protection. Dignity in humanity is enhanced through a sense of safety and so facilitates human development. Brown-Luthago et al (2016) stated that poor physical settings characterised by inadequate infrastructure and poor service provision are capable of infusing violence within communities. Frustration with poor living conditions causes a sense of exclusion, which then leads to violent activities like rape and gang robberies. Jordus-Leir and De Wet (2013) confirmed that unemployment and drug abuse in poor settlements could also result in gang violence. Residents of Mitchell's Plain in Cape Town experienced an unsatisfactory improvement in their settlement following upgrades because of increased levels of gang violence. Most of the perpetrators were drug addicts and involved in gang violence despite their settlement being upgraded. Ibrahim and Taher (2014) confirmed that in some cases settlements are built too close to the main road, which is a threat to the safety of children. Furthermore, Jordus-Leir and De Wet (2013) confirmed that dysfunctional street lights followed by erratic electricity supply provides fertile conditions for rape and violence since it's not safe to move around at night. Ibrahim and Taher (2014) and Amao and Benjamin (2015) similarly confirmed that data on safety is collected through Census of Population and Dwellings, Safety Surveys, Assessments and Evaluations carried out following some housing interventions. Occurrence of crime, safety for children when playing in the surroundings and occurrence of rape and violence are some of the aspects on which data is collected to determine safety in communities.

### **2.5.4 Sense of belonging**

Taher and Ibrahim (2014) iterated that in the majority of upgrades of informal settlements, the designs of the houses are incompatible with the usual living patterns of the residents. In some cases, vertical buildings have replaced horizontal slums. This was done to utilise space more effectively and increase the number of houses constructed in the limited space available. The usual pattern of living of residents is disrupted and ignored. This has resulted in residents losing their sense of belonging as far as their upgraded homes are concerned. Jota Samper (2011) concurred with Taher and Ibrahim

(2014) that the designs of the houses play a major role in enhancing the residents' sense of belonging. Wokekoro (2015) and Giannis (1996) equally agreed that some residents believed that the number of rooms provided were too few considering the fact that they had large families. Furthermore, high-rise buildings were void of social space for residents to network and children to play. Swanepoel and De Beer (2006) argued that there is need for clarity on what participation really means in bringing development to society. It's not just about involving people, but rather about people becoming part of the project, particularly as far as the design of the houses is concerned. They become involved in the decision-making process and the planning for the development. Ashley and Carney (1999) agreed with Swanepoel and De Beer (2006) that people become involved in the implementation, evaluation and management of the project. Data on sense of belonging is acquired through a Census of Population and Dwellings, Surveys, Assessments and Evaluations carried out following some housing interventions. Parameters considered includes satisfaction with the design of the house, feeling of satisfaction with the sense to of belonging to the community and the living space given to a household.

### **2.5.5 Tenure security**

Iweka and Adebayo (2015) and Archer (2011) equally described tenure security as a legal confirmation awarded to house beneficiaries to guarantee stay and immunity to displacement except in specified situations. Taher and Ibrahim (2014) posited that tenure security is considered to be the ownership rights to a house or settlement. Ownership rights motivate the residents to improve that which is guaranteed to belong to them. Tenure security can further encourage residents to leverage their property to finance other investments or lease it out to generate income. Iweka and Adebayo (2015) and Archer (2011) iterated that delayed tenure security negatively impacts the development of properties by residents due to uncertainties in ownership structures. Archer (2011), Taher and Ibrahim (2014) confirmed that data on tenure security is collected through Census of Population and Dwellings, Property Rights Surveys, Assessments and Evaluations carried out following some housing interventions. Conditions of tenure security available, property rights on the land and house, availability and satisfaction with the tenure security are some of the aspects on which data is collected to determine satisfaction with the tenure security conditions available to beneficiaries.

### **2.5.6 How selected social development attributes fulfils the research questions, purpose and address the research problem**

Wokekoro (2015), Patel (2005) and Midgley (2005) equally confirmed that housing, the provision of basic services, tenure security, safety and a sense of belonging are considered as key aspects to humanity. They are satisfiers to people's needs for subsistence and protection, which are key determinants of whether there has been an improvement to the residential quality of life. Understanding the improvement in the residential quality of life, which is the provision of basic services, tenure security, safety and a sense of belonging, will help confirm whether the upgrading programme has significantly contributed to an improvement in the residential quality of life of the beneficiaries.

Understanding the status quo on how residents of Itsoseng Informal Settlement perceive the upgrading to have improved their housing, provision of basic services, tenure security, safety and sense of belonging will enable the researcher to gain insight on whether they feel that their residential quality of life has actually improved. The status of housing, basic services provision, tenure security, safety and a sense of belonging is determined by the level of satisfaction expressed by beneficiaries with their respective lives considering the development done in their community.

As attributed in Neef (1991) Max- Neef theory of human development, the quality of life is determined through the satisfaction of human needs. This research focuses on the residential quality of life, which is qualified as housing, basic services provision, tenure security, safety and a sense of belonging. Understanding how the residents perceive the upgrading to have brought development to their housing, basic services provision, tenure security, safety and a sense of belonging will address the research problem. The researcher will be able to know from beneficiaries whether the housing intervention has improved their residential quality of life or if it is still questionable.



## 2.6 Established frameworks that can interpret empirical findings on informal upgrading interventions

In this section, the research interrogated selected theories on how the housing intervention brings about social development. How does a housing upgrade improve on residential satisfaction and sense of belonging, and how does it provide tenure security and safety? The theories tried to postulate how the satisfaction of various needs has a capacity to bring development to societies.

### 2.6.1 The Maslow hierarchy of needs

Maslow (1943) argued that human beings get motivated to attain certain needs and that some needs are awarded greater value than others. Physical survival is highly prioritised which is the initial determinant for human behaviour. In the process of striving to attain certain needs, once a need has been satisfied it acts as a catalyst to strive for attainment of the next level of needs, as shown in the hierarchy of needs in Figure 5 below. MacLeod (2017) equally agreed with Maslow (1943) that the Maslow hierarchy of needs is a theory of personality, which emanated from the desire to understand what motivates people in life. Human beings have a motivation system linked to neither rewards nor unconscious desires.



**Figure 5: Maslow hierarchy of needs**

Source: MacLeod (2017)

The theory was formulated from a humanistic point of view, where people's behaviour is believed to be void of influence by mechanical pressure or physical push, but rather is an expression of their own potential. The lower levels in the pyramid represent lower needs, while the higher levels denote the higher levels of needs. The need to meet basic needs is stirred by deficiency and prolonged duration in meeting these needs. When the basic needs are met in people's lives, then follows the desire for growth needs, MacLeod (2017)

MacLeod (2017) further posited that the only reason people fail to move in the positive direction towards self-actualisation is the hindrance brought about by the societies in which they live. The Maslow hierarchy of needs facilitated the design of houses that are physical shelters and not homes. Shelter is an important aspect of fulfilling one of the basic needs in people's lives. Once the need for shelter is met, it drives the need for a higher level of need to be met, which in a way is a driver for growth in society. The Maslow hierarchy of needs is hierarchical, however, which is not always a social reality in the day-to-day lives of people.

### **2.6.2 The Quality of Life theory**

Carley (1981) posited that the quality of life theory is considered to be a ranked need satisfaction of the aggregate community. The greater the need satisfaction (from lower-order to higher-order needs), the greater the quality of life (QoL) of that society. Sirgy (1986) has iterated that QoL theory was developed from the Maslow's human development theory. The QoL theory states that in developed countries, people are preoccupied with the satisfaction of higher order needs such as self-esteem and self-actualisation. In developing countries like South Africa, most community members are usually concerned about satisfying lower-order needs, which include biological needs as well as safety. QoL is defined in terms of hierarchical needs satisfaction of the majority of community members. It is clearly articulated that the greater the need satisfaction of the community, the higher the perceptions of the community regarding improvement in the QoL. The major goal of the QoL theory is to enhance satisfaction of human development needs as defined by the respective community or society. People's progression of satisfaction in improvement of the QoL is dependent upon progression from satisfaction of the lower hierarchy needs up to the highest level of need. It should be acknowledged that the hierarchical needs are not a social reality in people's daily lives, which is a shortcoming of the QoL theory.

### **2.6.3 The Manfred Max-Neef's theory of human needs**

Neef (1991) postulated a theory of human needs for development. The Max-Neef theory of human needs was developed with the aim of articulating that development concerns people and not necessarily objects. Concern of how to understand the qualitative growth experienced by people in development has been mentioned.

Jolly (2010) further argued that the best measure for progress in people's lives is by determining the improvement in their quality of life. Determinants on people's quality of life are realised through the possibilities available to facilitate their adequate satisfaction of crucial needs. The satisfaction of the fundamental human needs is what the Max-Neef human theory refers to as the quality of life. It is important to note that the human theory of needs does not subscribe to the hierarchy of needs, but rather differentiates between needs and satisfiers. The human theory contends that needs do not vary according to culture, but rather variations are brought about by the different satisfiers employed to satisfy the respective needs. Needs are finite, few and classifiable. A need is not only explained in relation to deprivation, but also in the context of the potential it possesses. For example, food and shelter are not considered as needs, but rather as satisfiers of the need for subsistence. Education is also considered to be a satisfier for understanding, while health is a satisfier of the need for protection. The theory posited that a satisfier has the capacity to satisfy various needs at once, while a need may demand more satisfiers in order to be met.

For the reason that needs are viewed as deprivation and potential, the term actualise is then deployed instead of satisfy. A satisfier is considered as a way of being, a way of doing and having that people engage to actualise their needs. Development is viewed as subjective, as a way of enhancing qualitative growth in peoples' lives. Objects facilitate ways of doing and having, increasing and decreasing the efficiency of a satisfier to actualise the need. The human theory of needs' posited strength is of being non-hierarchical. Emphasis is directed to the fact that development is about people and not objects. Quality of life has been used as a measure for development in human life. The major determinant of the quality of human life has been determined in the human theory of needs as the satisfaction of the basic human needs. Murray et al (2005) posited that the human needs theory aided in differentiating between needs and satisfiers, and therefore clearly defined people's needs. Furthermore, it prevented confusion when understanding what is a need, satisfier and requirement. The human needs theory is not

based on a hierarchy of needs, but rather has managed to embrace and accommodate people to express and differentiate themselves with regard to various traditions. Furthermore, a non-hierarchical view of human needs overcomes a limited view with respect to the function of a house. This somewhat does away with the view of a house as merely a physical shelter, and rather considers it as a holistic satisfier for all human needs. The fact that humans are poor does not simply imply that their needs are limited in comparison to other more advantaged people. However, the human needs theory does not clearly explain how the satisfiers actualise the needs.

## **2.7 Assessing beneficiaries' perceptions on a housing upgrade in Itsoseng informal settlement, a conceptual framework**

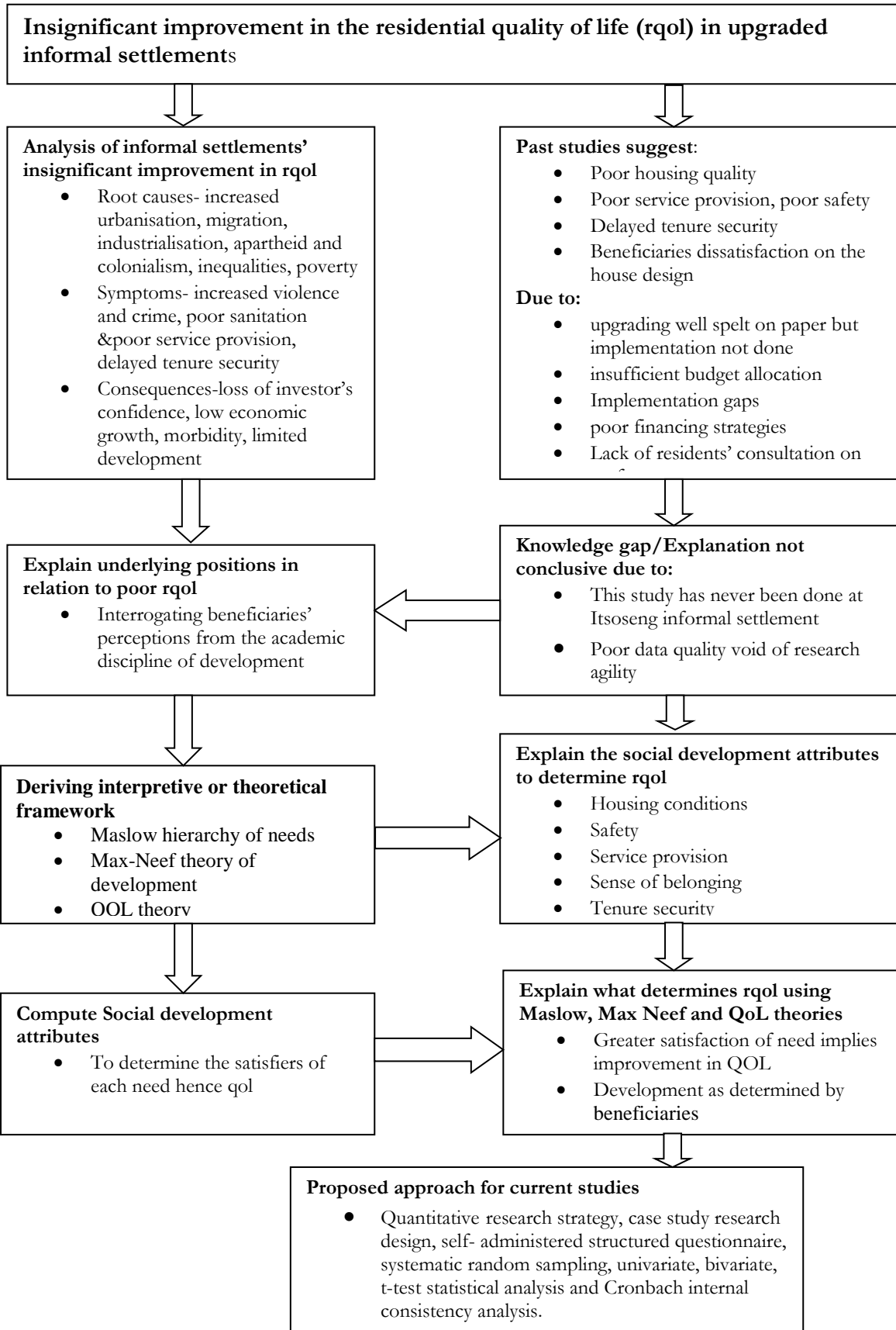
Initially in this chapter, a brief description of the history of the city of Johannesburg as well as the Itsoseng Informal Settlement was unpacked. Colonisation, apartheid, urbanisation and migration have had an impact on the formation of informal settlements in the greater South Africa, with the city of Johannesburg not spared.

The city of Johannesburg, which houses Itsoseng Informal Settlement under Region C, was described in section 2.1 as one of the biggest and wealthiest cities in South Africa and as such the country's economic hub. The discovery of minerals in the 1860s created a mining industry, which was considered as the engine of industrialisation, urbanisation and migration. This resulted in the influx of migrants, both nationally and internationally, who usually settle in slums as they search for economic freedom. The quality of life in these settlements is compromised and this research sought to assess if the housing intervention managed to improve the safety and residential quality of life of beneficiaries in Itsoseng Informal Settlement. This research specifically focuses on safety and the residential quality of life.

Figure 6 posited a summary on how the research question connected to the literature that articulates its origin and how the problem is resolved. Considering the housing upgrading programmes implemented, insignificant improvement in the residential quality of life has been witnessed in several upgraded informal settlements. Our preliminary studies (Section 2.2) as well as past research studies (Section 2.3) pointed out that poor housing quality, poor service provision, concern about safety, delayed tenure security and the dissatisfaction of beneficiaries with regard to the design of upgraded houses are considered to be the stumbling blocks to residents' perceptions on improvement in their residential quality of life. Some researchers further confirmed

that the current South African policy on housing the poor involves total financing, which is unsustainable and the reason for the failure in clearing the housing backlog and improving the residential quality of life of beneficiaries. Other researchers confirm that the budget set aside for housing the poor is too little to be holistic in approach, and even fails to supply decent quality of housing.

However, so far studies to assess the capacity of upgrade programmes to improve the residential quality of life of beneficiaries in informal settlements were done in settings other than Itsoseng Informal Settlement. Other studies were trapped in challenges of administration shortcomings, with several questions not answered by any of the respondents, while some were interpreted incorrectly. There were various traces of limited analysis of certain variables too.



**Figure 6: Assessing beneficiaries' perceptions on a housing upgrade, a conceptual framework**

It is at this point that we articulated our research questions as: What are the perceptions of beneficiaries on the improvement of safety and in the residential quality of life following the upgrading programme? What are the underlying factors of the upgrading programme that have contributed to such an insignificant/significant improvement in the quality of life for beneficiaries? A choice was made in this research to do a study on the perceptions of Itsoseng beneficiaries because it has not yet been done. The thrust was to try to understand if beneficiaries felt that the upgrading brought an improvement to their lives. If not, what do they consider to be the setbacks? This research opted to understand beneficiaries' perceptions, which assists in bringing satisfaction to the community for which the upgrade is intended. Furthermore, this research targeted to resolve the problem of poor data dimension by ensuring that all the questions presented to research participants were simple and completed appropriately. Analysis was attended with due diligence, competency and accuracy on all variables.

Considering that a housing upgrade is a development that has been brought to informal settlement beneficiaries, it has been deemed important in this research that all that the beneficiaries are concerned about in the housing intervention is the improvement that has accrued in their lives, which can be considered as a development that has been brought to their lives. This takes us further, to critically discuss the development discourse, its processes, purpose and dimensions in order to understand what qualifies this research to fit into the body of development.

Development is articulated by various authors in Section 2.4 as a structural society rejuvenation, which serves a purpose of transforming people's lives for the better, while others view it as a Western, modern agenda designed to impose the so-called civilisation and bring up disciplined citizens. Various dimensions of development were elaborated in this chapter, ranging from economic to social and political. Social development is considered to be the appropriate dimension of development in this research by virtue of the intention of the research. It is about beneficiaries' perception of the development that has been brought to their community. A housing upgrade develops humanity through an improvement in quality of life, especially if the upgrade is holistic and sustainable. Further breaking down social development into various attributes assists the researcher to understand the parameters at play when considering an improvement in the residential quality of life of beneficiaries.

Key attributes of social development have been nominated for this research in Section 2.5 as housing conditions, basic service provision, tenure security, safety and a

sense of belonging. They are the basic building blocks that facilitate and perpetuate the initiation of a holistic and sustainable social development in humanity. Various theories have been identified to explain the link between these social attributes in bringing about an improvement or lack thereof in the quality of life in communities, as discussed in Section 2.6.

Maslow's hierarchy of needs theory has assisted in informing this research in understanding the personality of humanity as well as what motivates people in life. It assisted this research in understanding that there are basic needs such as housing, sanitation, tenure security, safety and a sense of belonging, which when satisfied can be considered by respective beneficiaries to have improved their quality of life, which is a social development to humanity.

The quality of life theory has aided this research in showing that the greater the need satisfaction of the community, the higher the perceptions that communities attach to improvement in QOL. The major goal of the QOL theory is to enhance satisfaction of human development needs as defined by the respective community or society. People's progression of satisfaction in improvement of the quality of life is dependent upon the progression in satisfaction of lower hierarchy needs up to the highest hierarchy level of need.

Max-Neef has further posited the theory of human needs for development. This is more relevant to this research because it disregards needs as occurring in a hierarchy, but rather acknowledges the importance of differentiating between needs and satisfiers. The main aim of the theory is to articulate that development concerns people and not necessarily objects. It is important to focus on the qualitative growth that is experienced by beneficiaries. This theory outlined that the determinants of the improvement in people's quality of life are realised through the possibilities available to people that facilitate them to adequately satisfy their crucial needs. The satisfaction of the fundamental human needs is what the Max-Neef human theory refers to as the quality of life. In this research, the satisfaction of the beneficiaries of the housing intervention regarding the improvement in their quality of life was determined and measured against the capacity of the intervention in satisfying their needs on housing, sanitation, tenure security, safety and a sense of belonging.

Department of Human Settlement (2011) stipulated that the upgrading of informal settlements programme is a housing initiative that thrives to bring sustainable development to challenges faced by informal settlement dwellers. Sustainable lives is



shown by realising the role and benefits brought by a housing development to beneficiaries. Assessing perceptions of Itsoseng informal settlement seeks to understand the role that the housing upgrading programme has managed to positively affect other dimensions of the beneficiaries' lives. Having noted that a housing upgrade is a development awarded to informal settlement beneficiaries, it has been deemed important in this research that all that the beneficiaries are concerned about in the housing intervention is the improvement that has accrued in their lives, which can be considered as a development that has been brought to their lives.

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## **3 RESEARCH STRATEGY, DESIGN, PROCEDURE AND METHODS**

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This chapter identifies and describes the research approach and design as well as the procedure and methods committed to in this research in collecting, processing and analysing empirical evidence. Broadly, it has six objectives: to identify and describe the research strategy (Section 3.1), the research design (Section 3.2), and the procedure and methods applied to assess beneficiaries' perceptions of safety and residential quality of life following the housing intervention (Section 3.3). Section 3.4 iterates on research strengths by further emphasising the reliability and validity measures undertaken in this study. Section 3.5 concludes this section by citing the technical and administrative limitations incurred during the research study.

### **3.1 Research Strategy**

Bryman (2016) articulated that research strategy is a placement adopted in carrying out a research. It encompasses the approach utilised in determining the relationship between theory and research, which is either quantitative, qualitative or mixed methods. The aim is either to determine theory or test theory or rather both, of which this study adopted the option to test theory. Neuman (2014) and Bryman (2016) similarly related research strategy as the language of research in which emphasis is either on variables and hypothesis or cases and context or rather both. This study opted to determine variables and hypothesis hence influencing the choice of quantitative strategy. Bryman (2016) differs from Kumar (2014) and Neuman (2014), pinpointing that research strategy constitutes a way of viewing social reality either as an external objective reality or as a constantly drifting endowment inherent in people from the advent of creation or both. This study viewed the social reality of challenges in upgraded informal settlements as an objective reality hence influencing the adoption of a quantitative research strategy. This research adopted the use of hard data in understanding beneficiaries' perceptions, which aligns to quantitative research strategy as argued by Neuman (2014) and Kumar (2014), who contended that quantitative research strategy explains the hard nature of data that the research uses. This study also adopted the technique of testing hypothesis and theories following arguments by Bryman (2016) that quantitative research strategy is orientated on testing theories and hypothesis. Punch (2014) and Bryman (2016) differed from Neuman (2014) and Kumar (2014) by contending that quantitative strategy has the capacity to conceptualise reality by

measuring variables. This study adopted the conceptualisation of reality by using different variables in measuring beneficiaries' perceptions, which then awarded this research an option to understand the relationship that exists between beneficiaries' perceptions and the residential quality of life.

A similar study by Naceur (2013) employed a quantitative strategy. The thrust was to examine the effects of urban improvement on Bouakal residents in Algeria. The study sought to understand how the upgrading intervention had improved the perceptions of residents of the informal settlement regarding safety. The use of a quantitative research strategy enabled the study to use hard data to measure variables in order to determine if there was an improvement in the quality of life following the upgrading. There was an improvement in the physical structure of the housing, sanitation facilities, water supply and lighting on the constructed roads. The upgrading managed to instil positive perceptions about safety within the community as well as improve the quality of life of residents.

In another comparable research by Wokekoro (2015) aimed at assessing residents' satisfaction regarding the residential quality of life of residents of Port Harcourt. This study selected a quantitative research strategy because the intention of the research was to use hard data to measure variables of satisfaction regarding residential quality of life. The quantitative research method gave the research an objective capacity to increase the efficiency of the research in the modelling of random effects, which then facilitated for realistic problems to be confirmed in the research.

A research study by Darteh, Kumi-Kyereme and Awusabo-Asare (2016) aimed to investigate the factors influencing the perception of risk of HIV within adolescents residing in an urban slum in Ghana. This research selected a quantitative research strategy because it gave the study the option to do an objective analysis, using hard data that could measure perception variables of risk of HIV among residents residing in the informal settlement. The quantitative research strategy awarded the research an objective platform, which facilitated efficiency in the depiction of inferences that make up the backbone of the final recommendations.

Similar studies by Brown Luthago et al (2016), Iweka and Adebayo (2014) Samper Jota (2011) and Archer (2011) utilised the qualitative research strategy to acquire in-depth insight of beneficiaries' perceptions. However, Naceur (2013), Wokekoro (2015) and Darteh et al (2016) differed and adopted a quantitative research strategy as reflected in the advantages gained by this study. This study collected and utilised hard

data to measure the variables, as was done by Naceur (2013), Darteh et al (2016) and Wokekoro (2015) that enabled the conceptualisation of reality on the differences in perceptions about quality of life. Furthermore, use of the quantitative research strategy benefited this research in understanding the relationship that exists between the various attributes that determine improvement in the residential quality of life, including safety. Utilising the quantitative research strategy in this study assisted in determining the degree to which beneficiaries perceived that the intervention had improved their lives. Use of the quantitative research strategy by Wokekoro (2015) benefited this study in formulating hypothesis, which assisted in inferring whether there were perception differences between various demographic variables on improvement in beneficiaries' lives. Darteh et al (2016) differed from Naceur (2013) and Wokekoro (2015) by providing this research with an objective platform to assess claims of relationship between the various aspects determining the satisfaction in residential quality of life.

### **3.2 Research Design**

Bryman (2016) confirmed that research design is a framework that a research can adopt and implement in the collection and analysis of data. Wagner, Kawulich and Garner (2012) contended that research design is comparable to an architectural design that guides the construction of buildings. Research design as articulated by Bryman (2016) and Wagner et al (2012) informed this research on how to conduct the research with harmony of all the components for the success of the research. As agreed by Bryman (2016) and Wagner et al (2012), this research managed to adopt and demonstrate that research design is an outline that enhances the collection of evidence appropriately selected to respond to intended research question(s). Creswell (2014) agreed with Bryman (2016) and Wagner et al (2012) by positing that research design is a form of inquiry within qualitative, quantitative and mixed-method approaches that are designed to provide clearly articulated instructions encompassing the directions that a research study has to follow. Bryman (2016) differs from Creswell (2014) and Wagner et al (2012) by nominating the designs as experimental, cross-sectional, longitudinal, case study and comparative designs.

This research has committed to a case study research design for the reason that it focused on a unit case, which is the Itsoseng Informal Settlement. Bryman (2016) posited that a case study research design involves a comprehensive and rigorous analysis of a unit case, which in this study is Itsoseng Informal Settlement. The intense focus

was directed to a particular setting, usually stated in relation to location such as a community or particular entity, which aligned to the Itsoseng Informal Settlement community on which this study focused. Creswell (2014) agreed with Bryman (2016) that the unit of analysis be clearly articulated with the case as the unit of study in its own right. In this study, Itsoseng Informal Settlement was the point of departure from where this research intended to articulate specific perceptions of safety and residential quality of life.

As iterated by Kumar (2014), the unit case under study entailed a community of which the total population was treated as an entity. Considering a case study research design, the case selected was the focal point for holistic investigation of aspects. In this study, assumptions were made that the case considered for research was typical of other similar cases, hence insight was drawn. Utilising a case study enabled clarification of thoughts and at the same time facilitated the linkage and adjustment of measures of abstract ideas with specific and actual lived experiences. Kumar (2014) differed from Bryman (2016) and Neuman (2014) by acknowledging that a case study is mainly used for qualitative studies, but in some cases for quantitative studies, as followed in this study.

A similar study by Brown-Luthago et al (2016) adopted a case study research design. The research aimed to understand experiences of residents of an upgraded informal settlement in Freedom Park in the city of Cape Town, South Africa. It considered whether the lives of residents had changed after the upgrade. To acquire this information, the research sought the perceptions of residents, to understand how they perceived the benefits of the upgrading of their informal settlement. This research concerned a community composed of informal settlement residents. It was a case of a specific community. The intense focus was directed on a particular setting, stated in relation to location of such as a community.

Research by Swart and Jurd (2012) aimed to explore the level of awareness and perceptions of informal settlement residents close to the Cape Town Stadium in relation to the impacts of the 2010 FIFA World Cup. Swart and Jurd (2012) selected a case study research design because the research was for a particular bounded community of Joe Slovo informal settlement residents. The benefit that this research derived from utilising a case study research design was of getting a holistic appreciation of the impacts of the FIFA World Cup on the social, legal, economic and sports aspects of the residents in the Joe Slovo informal settlement. Utilising a case study research

design allowed for the impacts on Joe Slovo informal residents to be understood in totality. It was an advantage to utilise the case study research design because the case selected was a focal point for holistic investigation of aspects of the impacts of the 2010 FIFA world Cup on informal settlement residents.

The article by Darteh, Kumi-Kyereme and Awusabo-Asare (2016) aimed to investigate the factors influencing perceptions of risk of HIV within adolescents residing in an urban slum in Ghana. The research selected a case study research design because the research pertains to an intensive study for a selected few exemplary individuals within a bounded unit of an urban slum. The thrust was to articulate factors influencing the perceptions of risk of HIV within adolescents living in the slum. It is a case of a specific community. The intense focus was directed on a particular setting, stated in relation to location of such as a community, which has awarded the research to reveal exclusive aspects encompassed in the case.

The studies by Short and Hammett (2013) and Wokekoro (2015) utilised the cross-sectional research design because the studies intended to analyse data at a specific point in time. However, studies by Darteh et al (2016), Brown-Luthago et al (2016) and Swart and Jurd (2012) differed and used case study research designs, the benefits of which have influenced this study to adopt the same research design. The benefit attained by Brown-Luthago et al (2016) in using the case study research design was that aspects in the pooled sample obtained a rich picture, which was used as a prototype for learning. This has benefited this study by gaining clarity and subsequently facilitating linkage and the adjustment of measures of abstract ideas on perceptions about residential quality of life. Furthermore, specific and actual lived experiences, with their unique features, were measured in detail in determining whether there was a difference in perceptions. This research also benefited from the strengths experienced by Swart and Jurd (2012) in using the case study research design. It has facilitated this research to do a holistic and contextual study of the case. Detailed insights into the existence of events in a group were drawn from the case study of Itsoseng Informal Settlement residents, as adopted from the study by Swart and Jurd (2012). Wholeness, unity and integrity of aspects of improvement in residential quality of life were maintained with a case study research design, following the benefits attained in the study by Darteh et al (2016). This research also benefited from using the case study research design following the study done by Darteh et al (2016) in that adopting the design was useful for testing whether the scientific theories tabled model the real social world of what informal settlement

residents perceive about the upgrade. Realistic responses were gained from using the case study research design.

### **3.3 Research Procedure and methods**

Section 3.3 is set out to articulate the procedure and methods applied in assessing the perceptions of beneficiaries of the housing intervention. Sub-sections 3.3.1 and 3.3.2 specify the ideal instruments used to collect data and further elucidate the target population as well as sampling procedures utilised. Sub-section 3.3.3 confirms measures taken to protect the participants in this research. Data collection and storage is set out in Sub-section 3.3.4, while Sub-section 3.3.5 elaborates the data processing and data analysis of the empirical results of the study. A clear description of the respondents who participated in the study is set out in Sub-section 3.3.6

#### **3.3.1 Data collection instrument**

Bryman (2016) contended that a data collection instrument is a tool used to collect data from the selected sample with the thrust to answer research questions, which aligns to what this study has adopted. This study equally agreed with the notion by Wagner et al (2012), Bryman (2016) and Kumar (2014) that data collection instruments are tools used to record and document what is arising in a setting targeted for the research. Kumar (2014). However, Bryman (2016) differed from Kumar (2014) and Wagner et al (2012) by emphasising that the type of data collection instrument used is directly dependent upon the type of information the research intends to gather. Bryman (2016) clearly articulated that there are two types of data collection instruments, that is observation schedule and interview schedule.

This research commits to the use of an interview schedule. This research formulated and pooled questions through the guidance of previous studies and literature in which Bryman (2016) confirmed that an interview schedule is a pool of questions given to research participants to respond to questions asked. Kumar (2014) agreed with Bryman (2016) that an interview schedule consists of a written list of questions that are either open-ended or closed, and to this end a list of both open-ended and closed questions were written down for this research. This study designed an interview schedule that followed a consistent and organised format, which facilitated for uniformity and comparability of data. Kumar (2014) and Wagner et al (2012) differed from Bryman (2016) by acknowledging that an interview schedule is the same as a questionnaire, with the only difference being that in a questionnaire the respondents

record the responses, while in an interview schedule the interviewer questions the respondents and records their responses. Furthermore, questionnaires can be either handwritten or completed via the internet, while interview schedules are instruments used to collect information either telephonically or face-to-face. This study adopted the argument by Kumar (2014) and Wagner et al (2012) that an interview schedule is the same as a questionnaire, which this study used as a data collection instrument.

Kumar (2014) posited that data collection instrument structure is the design, format and content of questions as well as how one intends to word, ask and order the questions. Bernard (2013) concurred with Kumar (2014), stating that this data collection instrument structure is versatile and useful to obtain information on the research participant's lived experiences. Kumar (2014), Bernard (2013) and Bryman (2016) agreed that the fully structured instrument involves asking questions with limited flexibility and subject to strict adherence. This study adopted and used a questionnaire with questions of limited flexibility as well as directed with strict adherence to a given structure. There was a certain manner of asking questions, which have been previously formulated and phrased in an array following an interview schedule. This study, however, did not follow the semi-structured data collection instrument that utilises an interview guide. Kumar (2014), Bryman (2016) and Bernard (2013) equally confirmed that three research data instrument structures exist, namely structured, semi-structured and unstructured.

This research committed to a fully structured interview schedule (questionnaire), which Kumar (2014) described as a research instrument where the researcher strictly adheres to prearranged set of questions that are both open-ended and closed and utilise the same phrasing and direction, as articulated in the interview schedule. Bryman (2016) similarly agreed with Kumar (2014) in confirming that an interview schedule (questionnaire) is a data collection instrument that utilises standardised questions aimed at recording almost standardised responses using an interview schedule. Wokekoro (2015) did a similar study that utilised the fully structured interview schedule. The aim of the study was to assess residents' satisfaction with their residential quality of life in two informal settlements of Port Harcourt, Rivers State, Nigeria. Wokekoro (2015) selected a fully structured questionnaire because the study intended to strictly adhere to a prearranged set of open-ended and closed questions that utilise the same phrasing and direction as articulated in the fully structured interview schedule. The advantage that this study attained from using a fully structured data collection instrument was that it allowed for the collection of standardised responses.



Furthermore, fixed optional answers made it easy for coding, which reduces the turnaround time and hence cuts research costs. Respondents were also granted the option to personally respond to simple and clear questions.

The research by Swart and Jurd (2012) aimed at exploring the level of awareness and perceptions of informal settlement residents close to Cape Town Stadium in relation to the impacts of the 2010 FIFA World Cup. The reason why this research selected a fully structured questionnaire was to utilise a specific guide in answering questions provided in the research. Most of the questions were simple, clear and close-ended in order to allow the research participants to choose their answers from a limited set of responses. This technique was appropriate in the study area, considering that most of the respondents targeted could be less privileged and hence struggle to comprehend complicated questioning. Furthermore, the use of a pre-arranged set of questions with the aim of getting standardised responses has benefited this study to acquire uniform information that enables researchers to gain certainty in comparability of the data collected on the perceptions of informal settlement residents.

The research by Darteh, Kumi-Kyereme and Awusabo-Asare (2016) aimed at investigating the factors influencing the perception of risk of HIV within adolescents residing in an urban slum in Ghana. The reason why this study selected a fully structured questionnaire was to utilise standardised questions with the aim of recording almost standardised responses. This allows for easy coding and so cuts down on time and costs. Considering the nature of people in an informal settlement, the use of simple and clear questions with a standardised response option allowed for easy and appropriate responses.

This study utilised the fully structured questionnaire to collect data as presented in Appendix 1.1. There was uniformity of data collected, which allowed for ease in comparability of data on perceptions of informal settlement residents as adopted from Wokekoro (2015). Furthermore, some of the beneficiaries of the housing intervention were not be able to comprehend complicated questions that required critical thinking so they were more easily able to comprehend and respond to standardised questions. The structured questions were simple and clear, but did not compromise the quality of data collected. This study leveraged on a confined set of standardised questions with the thrust to record standardised responses as adopted from the benefits realised by Darteh (2016). This has enhanced the study by providing leeway for easy coding and reduced time and costs. Swart and Jurd (2012), Wokekoro (2015)

and Darteh (2016) utilised tried and tested questions in their questionnaires. This study had an advantage of adopting questions that were mostly derived from similar previous studies that had utilised the questionnaire as a data collection instrument.

### **3.3.2 Targeting and selecting respondents**

#### **3.3.2.1 Target population**

Bryman (2016), McNabb (2013), Muijs (2011) and Punch (2014) identified a target population as a study population about which a researcher intends to gain information from which to generalise and draw conclusions. Punch (2014) and McNabb (2014) further iterated that a target population is a large group, especially of people, about which the researcher is keen to gain knowledge, but owing to size and time can only draw a sample from this group to do the research. This research used the upgraded Itsoseng Informal Settlement as its target population. The target population in this study was relevant and appropriate to answer the research questions and achieve the intended purpose of assessing resident's perceptions following the housing upgrade..

Wokekoro (2015) did a similar research to this study and used residents of an informal settlement as the target population. The aim of the study was to assess the residents' satisfaction with residential quality of life in two informal settlements of Port Harcourt, Rivers State, Nigeria. Considering the selected target population, inference could be drawn for the target population, which acted as a benefit to the research. The study selected a random sample from the target population that allowed for generalisation of the results to the target population.

The research by Swart and Jurd (2012) aimed to explore the level of awareness and perceptions of informal settlement residents close to the Cape Town Stadium in relation to the impacts of the 2010 FIFA World Cup. This research derived a sample from a target population of Joe Slovo informal settlement residents in Cape Town. The benefit of using this population was that the residents of the informal settlement were the appropriate respondents to give perceptions in relation to the impacts of the World Cup. The target population was used as a base for the sample from which the researcher made conclusions about the target population.

The research by Darteh, Kumi-Kyereme and Awusabo-Asare (2016) aimed to investigate the factors influencing the perception of risk of HIV within adolescents residing in an urban slum in Ghana. The target population was appropriate to fulfil the research purpose and answer the research questions. It consisted of adolescents aged

between 10 and 19 years living in Kwesimintsim Zongo, an informal settlement in Ghana. This research benefited from using the target population in that it was able to draw a sample from it, which enabled the study to gain information and draw conclusions. Knowledge of factors influencing perceptions of risk of HIV on adolescents could be obtained through a sample drawn from the target population.

In this research, the target population was beneficiaries of the Itsoseng Informal Settlement upgrading programme. This was the appropriate group of people to draw a sample from to gather perceptions on the improvement of life following the settlement upgrades. Moreover, the target population of Itsoseng Informal Settlement beneficiaries of the upgrading intervention was the platform from which this research intended to gather information and draw conclusions from the questions and for the purpose of the study. Furthermore, City of Johannesburg (2011) confirmed that Itsoseng Informal Settlement is one of the fastest growing informal settlement in region C of the City of Johannesburg. In 2008, Itsoseng recorded about 2 000 informal settlement dwellers which City of Johannesburg (2011) reported to keep on increasing up to date. The target population of 144 beneficiaries of the Itsoseng Informal Settlement upgrading programme was considered following a household list provided by the City of Johannesburg, region C offices. A random sample of 48 households was selected from the population using the systematic random sample.

### **3.3.2.2 Sampling or selecting respondents from the target population**

Bryman (2016) considered sampling as the utilisation of a probability or non-probability approach on the selection of some elements of a population that is considered for the research. Babbie (2016) equally concurred with Bryman (2016) by stating that sampling refers to a procedure of selecting units for either observation or interviewing in a research.

This research employed a probability sampling technique called systematic random sampling. Bryman (2016) posited that systematic sampling is a variation of simple random sampling from which units are directly selected from the sampling frame according to a fixed interval after selecting the first element of household number through random sampling. In this study, 144 households were the target population and 48 households was the sample size. Every 3rd unit household in the list was chosen for inclusion in the sample. A list of research participants was provided by the City of Johannesburg, region C offices, which facilitated the application of systematic sampling

method as confirmed by Babbie (2016). The factor used was attained by dividing the total size of the targeted population (144 households) by the sample size (48), which then gave the sample interval of 3. The first unit was randomly selected and every third unit was selected to make up a sample size of 48 households.

A similar study that utilised systematic random sampling was done by Wokekoro (2015) to assess residents' satisfaction with residential quality of life in two informal settlements of Port Harcourt, Rivers State, Nigeria. Wokekoro (2015) selected systematic random sampling because of the nature of the target population within the research. There already existed a clearly defined residents list of the two informal settlements. Similarly, the use of systematic random sampling helped this research to generate a randomly selected sample, which allowed for generalisation of the findings to the targeted population of the settlement.

A similar type of sampling technique was utilised by Darteh, Kumi-Kyereme and Awusabo-Asare (2016) in a study aimed at investigating the factors influencing perception of risk of HIV within adolescents residing in an urban slum in Ghana. There already existed a household list of adolescents residing in the informal settlement, which made it easy to derive the sample systematically. A randomly selected sample enhanced the validity of the research findings.

Similarly, the research by Oldewage-Theron and Slabbert (2010) utilised the systematic random sampling method. The aim of the study was to investigate the depth of poverty in an informal settlement in the Vaal region of South Africa. This study chose systematic random sampling because it could attain a broader representation of the population within the considered area of study, which was the informal settlement in the Vaal region.

This study has benefited from using systematic random sampling following the studies by Wokekoro (2015), Oldewage-Theron and Slabbert (2010) and Darteh et al (2016) in selecting a clear random sample of 48 households out of the total target population of 144 households. The random sampling necessitated the generalisation of the findings to the target population of Itsoseng Informal Settlement. A randomly selected sample also increased the validity of the research findings.

### **3.3.3 Ethical considerations when collecting research data**

Bryman (2016) outlined that ethics is the general code of conduct that determines the integrity and discipline of a research. In this study various principles were adhered to in a way of ensuring that ethics were conformed to with the thrust to

avoid causing harm to participants, ensuring that participants sign informed consent forms attached in Appendix 1.1, avoiding invasion of privacy and not deceiving the participants. Wagner et al (2012), Kumar (2014) and McNabb (2013) concurred that ethics in research is the discipline that guides moral values as far as human conduct is concerned, which agrees with what was done in conducting this research.

Following what Kumar (2014), Bryman (2016) Wagner et al (2012) and McNabb (2013) postulated on describing what ethics entails, this study managed to mitigate all the risks that could befall research participants. The risks could be physical, emotional, legal, economical or via any other form of harm. This research applied maximum effort to avoid any of the risks by ensuring that participants were not exposed to partial truths or lies to encourage their participation in the research. The study managed to minimise risk of causing pain, discomfort, anxiety or any other kind of harm to research participants (Wegner et al, 2012). This study sought for clearance of the proposal and questionnaire from the Witwatersrand Business School Faculty Academic Ethics Committee and City of Johannesburg to ensure protection of the participants as shown in the attached confirmation letters in Appendix 2.1.

Participants were granted an opportunity to understand the purpose of the research and given the liberty to withdraw from the research at any time they wish without having to incur penalties (Kumar, 2014). The Research provided a declaration letter to confirm all the details of the research as shown in the declaration letter attached in the Appendix 3.1

This study did not force any research participant into taking part in the research. Participation was voluntary, a consent form was signed by the participant as proof of participation out of free will. A questionnaire was given to research participants to complete as shown in a completed sample questionnaire attached in Appendix 4.1. All participants were given clear information about what the researcher requires from them as well as the reason as to why the information is required. The purpose, duration, methods and potential uses of the research information was given to participants, (Bryman, 2016). The manner in which the research participants were anticipated to be part of the study as well as the possible negative and positive effects that they could encounter during the research was elaborated before giving the participants the option to sign the consent forms.

The anonymity of research participants as well as confidentiality of data collected during the research was preserved. The identities of research participants as

well as their house numbers were concealed in a way avoiding embarrassment and causing harm to participants. McNabb (2013) confirmed that information provided by the participants should remain anonymous which was exactly followed in this study. Data collected was stored in a safe and secure place and not identified by any individual who participated in the research.

### **3.3.4 Data collection and storage**

#### **3.3.4.1 Data Collection**

Kumar (2014) posited that research data collection is a process of gathering required information from which to make inferences and draw conclusions for the research. The independence and flexibility in the structure and approach of gathering data is one of the major determinants of the classification of study. Kawulich et al (2012) and Bryman (2016) agreed that research data collection concerns the gathering of information to answer the research questions at hand. Wegner (2012) differed from Kumar (2014) and Bryman (2016) by further iterating that the method used in collection determines the accuracy and bias in the data. Bryman (2016) confirmed that the various modes of research data collection are observations, interviews (face-to-face, telephone and internet-based), focus groups and documents. Wagner et al (2012) differed from Kumar (2014) and Bryman (2016) by explicitly pointing out that self-administered and collective questionnaires are part of the interview mode of data collection, which this study has adopted.

This research adopted the interview mode, more specifically a self-administered questionnaire data collection mode. As confirmed by Kumar (2014), this study utilised a self-administered questionnaire that gave the respondents the option to personally answer to the list of questions. This study followed Kumar (2014) and Wagner (2012) in that the respondents used their own discretion to read the questions, to deduce what was being asked and then respond. This research employed a research assistant, who clarified questions in vernacular language to those participants who struggled to understand some concepts in English. Questions drafted were interactive, clear and simple to be understood by research respondents. As stated by McNabb (2013) and Bryman (2016), the questions in the self-administered questionnaire were flexible, so that it could be tailor-made to gather information that would clearly answer the research questions. This study utilised tried-and-tested questionnaires that had been

designed for other research, which also enhanced the reliability and validity of the research.

Some previous studies have utilised a self-administered questionnaire as a mode of data collection. The study by Wokekoro (2015) used the self-administered questionnaire to collect data to assess residents' satisfaction with residential quality of life in two informal settlements of Port Harcourt, Rivers State, Nigeria. The questionnaires were given to each research participant and allowed them to respond in the way in which they comprehended the questions. Some questions were adopted from previous research, which enhanced the validity and reliability of the research.

The research by Swart and Jurd (2012) aimed to explore the level of awareness and perceptions of informal settlement residents close to the Cape Town Stadium in relation to the impacts of the 2010 FIFA World Cup. The study adopted a self-administered questionnaire, which allowed for the collection of the required data in a short space of time, saving on the costs of the research.

The research by Darteh, Kumi-Kyereme and Awusabo-Asare (2016) aimed to investigate the factors influencing the perception of risk of HIV within adolescents residing in an urban slum in Ghana. The study adopted a self-administered questionnaire, which helped the study to gather primary data. The respondents were granted the opportunity to read the questions using their own discretion, to deduce what is being asked and respond as to how they best understood the questions. Further, the study benefited from adopting some of the questions from questionnaires of previous studies, which enhanced research the validity and reliability of the research. The use of self-administered questionnaires helped the study to grant the participants an opportunity to clarify some of the questions.

This study has benefited from adopting the use of self-administered questionnaires from the study by Wokekoro (2015). Research participants responded as to how they comprehended the questions. Some questions were adopted from previous research, which enhanced the validity and reliability of this research. As shown in the study by Swart and Jurd (2012) which used the self-administered questionnaire data collection mode, this research managed to quickly collect the required data for the study in the space of one week, which turned out to be less costly for the research. In this study, questionnaires were self-administered to research participants, which allowed participants to gain clarity through confirmation on unclear questions.. This study

benefited from adopting some of the questioning that was used in the previous study by Wokekoro (2015), which enhanced research viability and reliability.

#### **3.3.4.2 Data storage**

As confirmed by Kumar (2014) and Bryman (2016), this research stored original copies of the questionnaires in a locked and secure place that was only accessible to the research team. Captured data was also stored in files encrypted with a password in order to protect the data. A backup of all the files with data were kept in a separate hard drive that were locked up in a secure place.

### **3.3.5 Data processing and analysis**

#### **3.3.5.1 Data processing**

Kumar (2014) posited that research data processing refers to a set of procedures a study undertakes after collection of data in order to extrapolate answers to the research. Bryman (2016) iterated that data processing involves the conversion of collected information into data. In quantitative research, this entails the quantification of selected variables. As articulated by Kumar (2014), Bryman (2016) and Neuman (2014), this study adopted and rearranged data into an appropriate format for capturing into the computer, presented in visual forms and summarising the characteristics as well as explaining the meaning of the findings attained. Wagner et al. (2012) and Neuman (2014) contended that disoriented data collected deserves to be coded, entered into a computer system and cleaned before analysis as adopted in this study. The steps for data processing involve data coding, entry and cleaning, all of which this study performed after collecting data.

#### **Step 1- Data Coding**

This study aligned to Neuman (2014) who asserted that data coding refers to a systematic process of rearranging data that is straight from collection. Data collected in this study was reorganised into a more structured layout that enabled it to be analysed. This was done by utilising statistical methods on the computer of data collected as numbers, as well as assigning codes to open-ended questions. As articulated in Babbie (2016) and Neuman (2014), this study converted raw data into set standards and formats viable for processing in a machine and for analysis.

#### **Step 2- Data Entry**

As confirmed by Babbie (2013), data entry in this study was done through a process of transforming numerical information dispensed and logged in a questionnaire



with the intention of giving it a format acceptable to a computer statistical package. Punch (2014) confirmed what was done in this study, that coded data was converted into a format that could be read and manipulated by a statistical programme. In this study, data was entered using the pre-arranged coded values for each option for all closed questions, for instance, the Likert scale with codes that range from 1 to 5, with strongly disagree coded as 5. Qualtrics (2015) has iterated that this allows for easy analysis and the formulation of the central tendency and frequent tables.

In a similar study by Wokekoro (2015), which aimed to assess residents' satisfaction in relation to the residential quality of life of residents of Port Harcourt, the information that was logged in the questionnaire was captured in a computer statistical package using the code sheet of the Likert scale for manipulation and further analysis. In this study, data was entered manually into a computer after collection. The use of systematic random sampling helped this research to generate a randomly selected sample that allowed for generalisation of the findings to the targeted population of the settlement of data.

### **Step 3- Data Cleaning**

In this study, data cleaning was done by removing errors incurred during coding and entering data into a computer system. It was crucial to appreciate that errors could occur during the process of capturing data and so cleaning of data reduced the chances of misleading results and the threat to validity (Neuman, 2014). In this study, data cleaning was done using two processes, namely code and contingency cleaning. Code cleaning involved the cross-checking of accuracy in coding, while contingency cleaning entailed checking for logically incompatible variable combinations (Neuman, 2014).

In a comparable study by Darteh et al (2016), which aimed to investigate the factors influencing the perception of risk of HIV within adolescents residing in an urban slum in Ghana, data cleaning was done by confirming accuracy of the Likert scale coding that was done on the questionnaires.

#### **3.3.5.1 Data analysis**

This study concurred with Wegner et al (2012) that data analysis pertains to the method of determining the meaning of the data collected relative to the research questions at hand. This study agrees with Neuman (2013) and McNabb (2013) that research data analysis manipulates and gives a summary of numbers and information

collected for a specific research data set. McNabb (2013) and Babbie (2016) further agreed that research data analysis in quantitative data analysis points to a process that provides an understanding of how widely spread the participants' responses are within the selected sample. It is also part of analysis to articulate how subjects under study are distributed across the research study variables, as was adopted in this study. Analysis depicts how the different variables interlink and relate to one another, which all align to the value that this study attached to analysis. Neuman (2013), Wegner et al (2012) McNabb (2013) and Babbie (2016) equally concurred that there is a quantitative and qualitative data analysis method or a mixed mode. However, McNabb (2013) differed from Babbie (2016) by further explaining that in qualitative research, the analysis of research data involves the establishment of an operational skeleton that will facilitate the provision of a meaningful clarification and argument, which differs to the quantitative method used for this study.

This research has committed to quantitative data analysis. This involves univariate analysis, bivariate analysis, paired sample t-test statistics and one-way analysis of variance (ANOVA). Bryman (2016) posited that univariate involves the analysis of variables one at a time, which includes descriptive statistics. Descriptive statistics are depicted through frequency distribution tables, diagrams such as bar charts, pie charts and histograms and means. McNabb (2013) and Wagner et al (2012) agreed with Bryman (2016) that univariate analysis involves descriptive statistical analysis. Descriptive statistical analysis is a measurement that is utilised in giving a summary of a set of numbers, which articulates a similar meaning for every member of that respective set. This entails a measure of central tendency and measure of variability within a data set. Punch (2014) confirmed that one-way analysis of variance (ANOVA) comparison of groups is done on some dependent variable. One way of classifying the group is available for analysis. McNabb (2013) and Muijs (2011) similarly agreed that one-way ANOVA is a basic procedure that entails the comparison of two or more groups' means across a single factor. ANOVA is used to test if there are significant differences in the various groups under study. Bryman (2016) and Wagner et al (2012) argued that bivariate analysis involves the analysis of two variables at once to determine the existence of a relationship between them. In this study, an enquiry was sought on whether there was any relationship between gender and perception about improvement in the quality of life following an upgrading programme. Bryman (2016) articulated that when doing analysis, it is imperative to determine the degree of confidence one has with

the findings. This is done through various tests of statistical significance such as establishing the null hypothesis and level of significance one considers appropriate as well as determining the statistical significance of the findings under research.

Wagner et al (2012) described inferential statistics as the estimation of the target population from the sample considered for the research. This involves hypothesis testing using a t-test for an independent sample test. The hypothesis articulated will be tested considering that the study is investigating unrelated individuals (male and female beneficiaries of the upgrading programme) pertaining to their difference in perceptions of the improvement in the quality of life. Bryman (2016) articulated that the test of statistical significance could be utilised in rejecting or accepting the null hypothesis that was used in this study.

In this research, data was analysed using IBM SPSS Statistics, as shown in the consistency matrix in Table 1 below. Following the benefits experienced in using quantitative analysis in the study by Wokekoro (2015), descriptive statistics were run in this study to produce and present basic features of the study sample in the form of frequencies, percentages and means. Frequency tables and pie charts were utilised to determine the pattern of occurrence in the variables used. Learning from the study by Wokekoro (2015), descriptive statistics were used in this study to depict the measure of central tendency and variability within the collected data set. The thrust was to determine the level of perceptions of beneficiaries regarding the upgrades to their settlement and if the improvement rating scores on the five main areas of the housing intervention differed significantly from each other. As done in the study by Wokekoro (2015), the paired sample t-test and one-way analysis of variance (ANOVA) was utilised when testing the significance of differences in perceptions regarding improvements in safety, housing conditions, basic services, sense of belonging and tenure security based on the respondents' biographical profiles. The Tukey HSD test was performed to identify in which types of beneficiaries those differences existed. Statistical significance testing was done at the 95% confidence level and hence where the significance (p-value) reported in the various tests is less than 0.05, a statistically significant difference exists in the outcomes between the respondent groups or variable categories compared. Conversely, where the indicated p-value is greater than 0.05, any observed differences in outcomes between the respondent or variable categories being compared were not statistically significant and could have been due to mere chance.

Another comparable study by Wokekoro (2015), which aimed to assess residents' satisfaction considering their quality of life in Port Harcourt, selected descriptive statistics to reflect the differences that existed on the demographic variables in each group. Bivariate analysis was considered because of the need to determine whether the variables that determined the residential quality of life were related. The research utilised the analysis of variance (ANOVA) to test the significance of differences in perceptions. Furthermore, the test statistical analysis was used to reject the null hypothesis. This allowed the study to conclude that there was evidence to confirm a difference in perceptions between male and female residents under study on various variables that made up the residential quality of life.

Other similar research by Darteh, Kumi-Kyereme and Awusabo-Asare (2016) investigated the factors influencing perception of risk of HIV within adolescents residing in an urban slum in Ghana. This study used bivariate analysis and tabulated the results in presenting the data. This enabled the platform to show case the relationship between the variables. Similar research by Oldewage-Theron and Slabbert (2010) utilised a quantitative analysis technique. The aim of the study was to investigate the depth of poverty in an informal settlement in the Vaal region, South Africa. The study also used descriptive analysis to determine the mean standard deviation to measure the degree of poverty in the informal settlement.

This research used quantitative analysis following the benefits realised from studies by Oldewage-Theron and Slabbert (2010), Darteh et al (2016) and Wokekoro (2015). The study by Wokekoro (2015) realised an advantage in utilising descriptive statistics to depict the differences that existed in the demographic variables in each group, which influenced this study to use descriptive statistics. Oldewage-Theron and Slabbert (2010) and Darteh et al (2016) benefited from using univariate analysis, which influenced this study to understand variables in a singular form at a point in time. Bivariate analysis was done to determine whether the variables that determined the residential quality of life were related, as was reflected as an advantage in the study by Wokekoro (2015). Following the advantage realised by Wokekoro (2015) and Darteh et al (2016) in utilising analysis of variance (ANOVA) in determining the significance of differences in perceptions, this study benefited in adopting the same method for testing significance differences in the perceptions of beneficiaries. The research also utilised the test statistical analysis with the t- test data output analysis attached in Appendix 5.1, used to reject the null hypothesis. This allowed the study to conclude that there was no

evidence to confirm a difference in perceptions between male and female residents under study on various variables that made up the residential quality of life.

**Table 1: Consistency Matrix on data analysis**

<b>Research Question/ Hypothesis</b>	<b>Source of the data</b>	<b>Specific question/ item numbers</b>	<b>Statistical test</b>
RQ1. What are the perceptions of the beneficiaries on the improvement in safety following the upgrading programme	Questionnaire	Section 4, Questions 4.1- 4.4	Descriptive and Inferential Statistics, frequency table, bar-graphs
H1: There are perception differences between male and female beneficiaries on improvement in safety following the upgrading programme	Questionnaire	Section 4, question 4.1-4.4	Descriptive Statistics, bar graphs, Independent sample t-test, ANOVA, F statistics
RQ2. What are the perceptions of the beneficiaries on the improvement in the residential quality of life following the housing intervention programme?	Questionnaire	Section 2, 3, 5 and 6. Questions 2.1-2.4 Questions 3.1-3.6 Questions 5.1-5.3 Questions 6.1-6.3	Descriptive and Inferential Statistics, frequency table, bar-graphs
H2: There are significant perception differences between male and female beneficiaries on improvement in residential quality of life following the upgrading?	Questionnaire	Section 2, 3, 5 and 6. Questions 2.1-2.4 Questions 3.1-3.6 Questions 5.1-5.3 Questions 6.1-6.313-15	Descriptive Statistics, bar graphs, Independent sample t- test, ANOVA, F statistics

### **3.3.6 Description of the respondents**

Considering that focus was given to a unit case in this study, respondents were strictly considered as beneficiaries of the Itsoseng Informal Settlement upgrading programme. Babbie (2013) iterated that the respondents have to be the appropriate candidates to respond to the research question. Homeowners whose names were on the list of beneficiaries for the housing intervention were the target population from which the sample was extrapolated. A total of 46 households out of a sample of 48 appropriate participants expressed their perceptions about the upgrading. The sample was systematically selected from the target population of 144 official household owners.

In this study, as shown in Table 2, there was an overall response rate of 96%, with 46 of the total sample size of 48 residents participating. There was a 100% completion rate on all the demographics responses as further demographic responses are shown graphically and in charts in Appendix 6.1. The majority (76%) of the respondents were female, while 24% were male. A total of 17% of the study participants were aged between 18 and 30 years, with 37% aged 31-40, 24% 41-50 and the remainder (22%) 50 years or older. About three-quarters (74%) of the respondents were single, 24% married and 2% widowed. Furthermore, two-thirds (65%) of the respondents had secondary school as their highest level of education and 20% had only gone as far as primary school. The percentage that had attained tertiary level education was 15%. The majority (83%) of the respondents were unemployed, while 11% were formally employed and the remainder (6%) self-employed.

**Table 2: Demographics Responses**

<b>Demographics Attribute</b>	<b>Options</b>	<b>Frequency</b>	<b>Percentage Responses</b>
Gender	Female	35	76
	Male	11	24
	Total	46	100
Employment	Employed	8	17
	Unemployed	38	83
	Total	46	100
If employed, state the employment status	Formally employed	5	10,9
	Self employed	3	6,5
	Unemployed	38	82,6
	Total	46	100
Education level	Primary	9	20
	Secondary	30	65
	Tertiary	7	15
	Total	46	100
Marital status	Single	34	74
	Married	11	24
	Widowed	1	2
	Total	46	100
Age	18-30	8	17
	31-40	17	37
	41-50	11	24
	50+	10	22
	Total	46	100

### **3.4 Research strengthens—reliability and validity measures applied**

Bryman (2016) stated that validity and reliability are crucial aspects to consider in ascertaining the quality of a research.

Bernard (2013), Punch (2014) and Babbie (2016) equally agreed that reliability is the capacity an instrument has to attain the same results if measured several times. Reliability is the extent to which research findings can be replicated with the thrust to convince all stakeholders on the trustworthiness of the research. Punch (2014) and Bernard (2013) similarly articulated that research reliability describes the consistency in a research to provide a stable result if that same research was done to the same people within the same circumstance, with only varied time. This study took several measures

to ensure reliability of the research as articulated by Punch (2014) in that detailed, thorough descriptions of the research were provided and all procedures correctly followed. This study also conformed to what Bernard (2013) stated in that it ensured that different team members in the research agreed on what was elaborated in questions from the self-administered questionnaires in order to ensure research reliability. Bryman (2016) and McNabb (2013) posited that Cronbach's alpha is utilised in testing the internal consistency between multiple measurements of variables. The Cronbach's alpha internal consistency reliability measure is set at a minimum acceptable value of 0.6. The Cronbach's alpha is dependent on the size of the scale and so there is a need to consider the average inter-item correlation. The average inter-item correlation minimum acceptable value is 0.3, which confirms a reasonable level of internal consistency between measurements of variables. In this study, the Cronbach's alpha internal consistency reliability measure was 0.88, which is above the minimum acceptable value of 0.6 out of the 17 items. Since the items were many, an average inter-item correlation of 0.48, which is above the minimum acceptable value of 0.3, affirms reliability of the research as shown in a Data Output Scale reliability table in Appendix 7.1.

This research further implemented advice and guidance from experienced supervisors, thereby ensuring reliability. The data collection mode of questionnaire, with closed and open-ended questions with predictable Likert-scale, was adopted from previous studies (Swart and Jurd (2012), Shortt and Hammett (2013) and Darteh et al (2016)) and their reliability has been confirmed. This increased the validity and reliability of this study.

Bryman (2016) postulated that research validity pertains to the integrity attached to the conclusions attributed to a specific research. It is not feasible to determine a definitive validity of a measure, but rather agreement is done on its relative validity. Kumar (2014) and Punch (2014) agreed that research validity relates to the capacity a research demonstrates in finding out what it has been designed to measure. Pearson (2014) differed from Bryman (2016), Kumar (2014) and Punch (2014) by further contending that research validity is the truthfulness of a research and judges whether the findings of a research are a true reflection of what aspires in reality, which aligns to what this study applied in ensuring research validity. Punch (2014) differed from Babbie (2016) and Bernard (2013) by further stating that validity qualifies a research's accuracy and efficacy, a line that this study sought to confirm to enhance



validity. Four measures of validity are considered, namely measurement validity, internal validity, external validity and ecological validity.

Bryman (2016) articulated that measurement validity is concerned with the measure of compatibility of a hypothesis deduced from theory to the concepts under research. Babbie (2016) and Kumar (2014) equally expounded that measurement validity refers to a measure that accurately reflects the concepts that the research is purported to measure. In this study, measurement validity was enhanced by the use of raw primary data in order to increase the accuracy and efficacy of the research.

Bryman (2016) defined internal validity as the determination of whether there exists robustness in the causal relationship between two or more variables, which is not applicable to this study since no causal relationships were established. However, this study agrees with the definition by Kumar (2014) and Punch (2014) that internal validity determines the levels at which the findings are able to capture what really exists and how congruent the findings are with reality. This study managed to confirm internal logic and consistency within the research's arguments through experienced supervisors. Punch (2014) and Bryman (2016) differed from Kumar (2014) in that they posited that internal validity resonates with the degree to which relationships between variables are correctly explained. Internal validity measures in this study were safeguarded by ensuring that the independent variable (perceptions regarding improvement in residential quality of life) was really or partly answerable for whatever variation will befall the dependent variable (e.g. sex, age, education status of the respondents). The outcome variable was beyond the control of this study since it was not experimentally designed. Causality between variables could not be established but only inferred.

Bryman (2016) stated that external validity pertains to the extent to which a result attained within a study can be generalised to other research context far above the settings in which it was conducted. Babbie (2016) and Punch (2014) similarly concurred that external validity is the extent to which findings can be applied to other situations. The findings can be generalised, and transferred to a different setting and contexts. Bryman (2016) differed from Babbie (2016) and Punch (2014) by further pointing out that in order to ensure external validity the researcher has to consider using random samples. In this study, a random sample was used and enabled the research findings to be generalised to the target population. However, for the reason that this research used a case study research design, generalisation to other upgraded informal settlements was not possible, hence a limitation of external validity.

Bryman (2016) expounded that ecological validity is concerned with whether social scientific findings are compatible with the everyday natural social surroundings exposed to humanity. It is a concern about whether social research produces findings that are technically viable but void of social reality. There is a need to bring down the research to as natural sense as possible that is compatible with nature and social reality. Wagner et al (2012) iterated that ecological validity is the extent to which the study can be generalised to another geographical context. Considering this research study, perceptions of informal settlements residents following an upgrading done in their settlement was critical in decision-making.

This study benefited from the advantages of ensuring internal validity realised in the study by Wokekoro (2015) to determine the degree to which relationships between variables were correctly explained. Informed decision-making, as postulated in a similar study by Swart and Jurd (2012), has enhanced the relevancy of this study as far as improving the residential quality of life is concerned. This is a social reality faced by informal settlement residents and understanding their perceptions about an upgrading is appropriate to everyday natural settings.

### **3.5 Research weaknesses—technical and administrative limitations**

This research study has limited itself to a quantitative research strategy and case study research design utilising a fully structured questionnaire. However, this does not imply in any way or rather compromise the findings of this study. The following are the constraints that occurred during this research.

#### **3.5.1 Technical limitations**

##### **3.5.1.1 Research strategy and design limitation**

This study used a questionnaire with structured closed and open-ended questions. Kumar (2014) mentioned that a quantitative research strategy utilising a questionnaire with closed questions is void of depth and multiplicity. The responses of research participants are limited to the available options thereby restricting the participants in their expression of opinion. The use of a case study research design in this study also implied that results could not be generalised to informal settlements in South Africa, which was a threat to external validity.

### **3.5.1.2 Data collection mode constraint**

This study utilised a self-administered structured questionnaire, which acted as a constraint in understanding the opinions that research participants articulated. Babbie (2016) posited that a self-administered questionnaire is superficial and a weak technique to gain insight into humanity and factors that determine its rich complexity.

### **3.5.1.3 Respondent error**

Kumar (2014) further posited that a questionnaire is only limited to a research population that can read and write, is not blind or handicapped. In this study, some of the research participants were not fully literate. This posed a challenge in that some could not even understand the questions. However, this was mitigated by the employment of a research assistant to clarify concepts in vernacular.

## **3.5.2 Administrative limitations**

### **3.5.2.1 Accessibility to research respondents**

The planned targeted population was 2 000 households. However, delays in project implementation meant that only 537 houses were constructed. From those 537 houses, only 144 houses were officially allocated and some residents invaded the rest illegally. This limited the target population to the 144 households, which presented a threat to external validity. Some targeted research participants were hard to access since they were away for work and other engagements. However, this study ensured that all effort was committed until respondents were reached.

### **3.5.2.2 Acceptance in the community**

The fact that researcher is of foreign nationality, with elementary knowledge in local languages, was considered a threat to the community when accepting the purpose of the study. The research assistant could speak vernacular fluently, so she managed to convince them to accept the researcher into the community.

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## 4 PRESENTATION OF RESEARCH RESULTS

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Having considered in general the two research questions tabled in Chapter 1, the primary objective of this study is to determine the beneficiaries' perceptions of safety following the upgrade programme in their community, while the secondary objective is to determine the perceptions of the beneficiaries regarding improvements to their residential quality of life. A research framework was provided in Chapter 2 (Section 2.7), which expounded on the physical context of the research problem in Sections 2.1 and 2.2. Section 2.3 subsequently eluded to the research knowledge gap, complemented by the attributes of interest embedded in the academic settings (Sections 2.4 and 2.5). The relevant theoretical frameworks that could interpret the empirical results were set out in Section 2.6. A proposal was pre-set for the previously mentioned research framework, which gave a detailed research strategy, design and procedure as well as methods (Chapter 3) utilised to collect, process and analyse the empirical research information. The results are to be presented as a roadmap to confer the frameworks to discuss the research findings in Chapter 5.

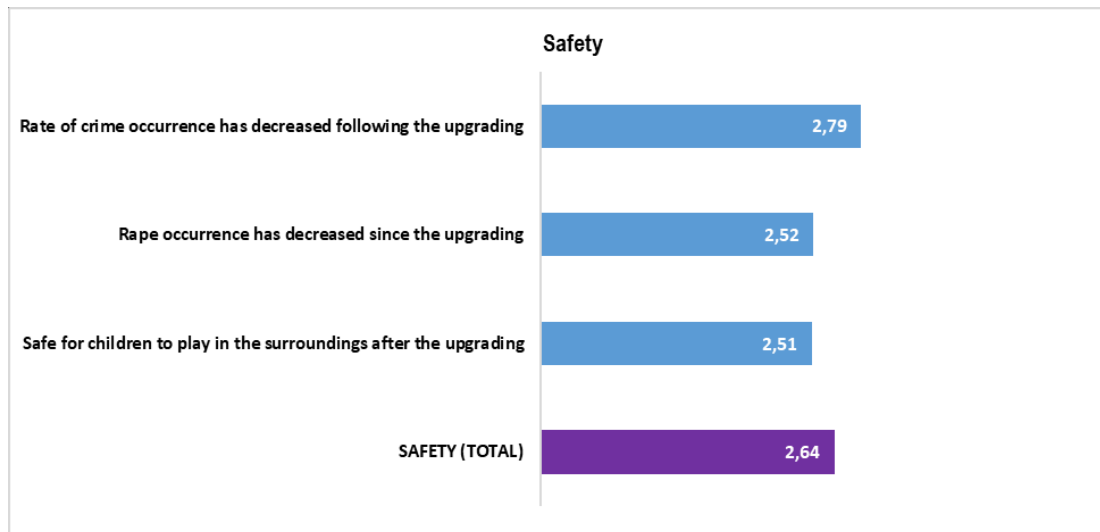
### **4.1 Perceived beneficiaries' logic on the improvement in safety following an upgrading programme: A case of Itsoseng Informal Settlement, Johannesburg**

This study utilised a fully structured questionnaire with both closed and open-ended questions to collect evidence for this research, as shown in Appendix 1.1. The questions sought to understand beneficiaries' perceptions following the housing intervention in Itsoseng Informal Settlement. The research questions were clearly linked to the attributes discussed in (Section 2.5) as well as providing answers to research questions (Section 1.2.3). Data was analysed according to the two sections set in the questionnaires, as presented below.

#### **4.1.1 Presentation of results**

Perceptions regarding improvement in safety were assessed on a 5-point scale, in which respondents had the option to (1) strongly disagree, (2) disagree, (3) agree, (4) strongly agree, or (5) I don't know, with an assertion pertaining to these factors. On analysis, option 5 was disregarded, as it implies no opinion hence the highest possible mean rating was considered as 4.00. The closer the value to the 4.00 threshold, the more positive the rating. As shown in Figure 6 below, there was a list of three attributes

regarding perceptions of improvement in safety, and the factor with the highest rating confirmed a decrease in crime incidence (2.79), while scores on decrease in rape and safety for children were virtually the same at 2.52 and 2.51 respectively. The overall mean rating score on safety was 2.64; a score fairly agreeing to a decrease in crime and rape hence confirming an improvement of safety in the upgraded community.



**Figure 7: Perception ratings of safety**

Following hypothesis 1, which states that, “*There are perception differences between male and female beneficiaries on improvement in safety following the upgrading programme...*”

The independent samples t-test was used to compare perceptions of male and female beneficiaries on improvement in safety following the upgrading programme. There was no significant difference in perceptions of improvement in safety between female beneficiaries (M=2.56, SD=0.85) and male beneficiaries (M=2.89, SD=0.72), as shown in Table 3 below, with  $t=1.162$  and  $p=0.25$ , as shown in Table 4 below. We therefore failed to reject the null hypothesis and concluded that male and female beneficiaries held similar perceptions on improvement in safety following the upgrading programme.

**Table 3: Descriptive statistics on perceptions of safety improvement by gender**

Gender	N	Mean	Std. Deviation	Std. Error Mean
Female	34	2.56	0.85	0.15
Male	11	2.89	0.72	0.22

**Table 4: T-test results on perceptions of safety improvement by gender**

		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	0.785	
	Sig.	0.38	
T-test for Equality of Means	T	1.162	1.2668
	Df	43	19.831
	Sig. (2-tailed)	0.25	0.219
	Mean Difference	-0.33	-0.33
	Std. Error Difference	0.29	0.26
	95% Confidence Interval of the Difference	Lower Upper	-0.91 0.24

The respective mean scores on safety improvements according to other respondents' demographics were determined using the Analysis of Variance (ANOVA), as shown in Table 5 below. The only statistically significant difference in perceptions on safety was by marital status ( $F=5.075$ ,  $p=0.01$ ), as shown in Table 6 below. Specifically, the lone widowed beneficiary gave a significantly lower mean rating (1.70) on safety compared to the single (2.48) and married (3.28).

There are interesting insights from the open-ended answers, which revealed that a significant percentage (24%) confirms the need for a wall around the complex as well as speed humps (22%) to ensure the safety of children. A few (13%) confirmed the need for play areas (parks) for children and (13%) the need for police patrols to ensure improvement in their safety as shown in Table 5 below. Considering this results, it can be deduced that improvement in safety of beneficiaries' surroundings is key to improve residents' perceptions a residential quality of life following a housing upgrade.

**Table 5: Open ended percentage responses on safety perceptions**

<b>4.4 What do you suggest should be done to ensure safety in your upgraded community?</b>	<b>Percent</b>
Perimeter wall/fence	24%
Speed humps	22%
Playgrounds/parks	13%
Police patrols	13%
None	11%
Street lights	9%
Other	7%
Police station	7%
Electricity	4%
Private security	4%
Boom gate	2%

**Table 6: Rating of safety by demographics**

<b>Safety</b>		<b>N</b>	<b>Mean (4-point scale)</b>
Gender	Female	35	2.56
	Male	11	2.89
Age	18-30	8	2.79
	31-40	17	2.68
	41-50	11	2.65
	50+	10	2.44
Marital status	Single	34	2.48
	Married	11	3.28
	Widowed	1	1.70
Education	Primary	9	2.47
	Secondary	30	2.68
	Tertiary	7	2.71
Employment status	Employed	8	2.94
	Unemployed	38	2.58
<b>Total</b>		<b>46</b>	<b>2.64</b>

**Table 7: ANOVA table on safety ratings by demographics**

<b>Safety</b>	<b>Sum of</b>	<b>Df</b>	<b>Mean</b>	<b>F</b>	<b>Sig.</b>
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	<b>Squares</b>		<b>Square</b>		
Gender	0.917	1	0.917	1.351	0.25
Age	0.604	3	0.201	0.280	0.84
Marital status	5.856	2	2.928	5.075	<b>0.01*</b>
Education	0.346	2	0.173	0.245	0.78
Employment status	0.861	1	0861	1.267	0.27

**p<0.05\* = statistically significant**

#### **4.1.2 Comparison of research results to those found by similar studies and assessments**

In Chapter 2 (Section 2.3), a review was tabled of selected similar studies and assessments done in relation to beneficiaries' perceptions on improvement in safety following a housing upgrading programme. Research approaches, designs, procedures and methods utilised in these studies were articulated, including the results findings and conclusions. Considering that the thrust is to depict the subject knowledge gap in general and in relation to the upgraded informal settlement, it has awarded this study a milestone to propose some methodological options that have been utilised in Chapter 3. Most of the studies on assessments of the upgrading programmes in relation to perceptions of residents utilised the qualitative method to analyse data. In Chapter 3, this study adopted some methodological options and improved on the weaknesses articulated in some of the previous assessments done using the quantitative method to analyse data. A comparison of the research results of these studies with this study's results presented in Section 4.1.1 is undertaken below.

In general, our results on safety perceptions are similar to Naceur (2013) and Samper Jota (2011), who noted that upgrading managed to instil positive perceptions of safety within the community. However, they are different from those of Wokekoro (2015), Short and Hammett (2013), Jordhus-Leir and De Wet (2015) and Brown-Luthago et al, (2016) who stated that residents perceived that their safety had not improved following the upgrades.

Specifically, our results are similar to Naceur (2013), who noted that most residents felt there was improvement in safety following the upgrading because they now had a safe home with proper windows and doors that could be locked. Furthermore, Samper Jota (2011) noted that the lighting system in the streets of the constructed roads made residents feel safer in their environment. However, the study by



Short and Hammett (2013) noted that residents felt unsafe due to poor lighting and poor social facilities where children could play safely. Jordhus-Leir and De Wet (2015) also cited that dark surroundings made most female residents feel unsafe from rape and crime as compared to male residents. Wokekoro (2015) reported that erratic electricity supply and dysfunctional streetlights in the upgraded community made residents feel their safety was at stake. Moreover, Brown-Luthago et al (2016) and Wokekoro (2015) identified some statistically significant differences between male and female beneficiaries regarding perceptions about safety following the upgrading. The majority (71%) of female residents in the Freedom Park informal settlement felt unsafe from gang violence and rape compared to their male (29%) counterparts.

## **4.2 Perceived beneficiaries' logic on the improvement in residential quality of life following an upgrading programme: A case of Itsoseng Informal Settlement, Johannesburg**

### **4.2.1 Presentation of results**

The respondents were asked to express their perceptions regarding the residential quality of life following a housing upgrading programme. The questions were classified into four parameters making up the residential quality of life, namely housing conditions, basic service conditions, sense of belonging and tenure security. A 5-point Likert scale was used, where 1 represented "very poor", 2 "poor", 3 "fair", 4 "good" and 5 "excellent". In line with this scale, the larger the average (mean) score for an attribute or factor evaluated in the study, the better that factor was rated.

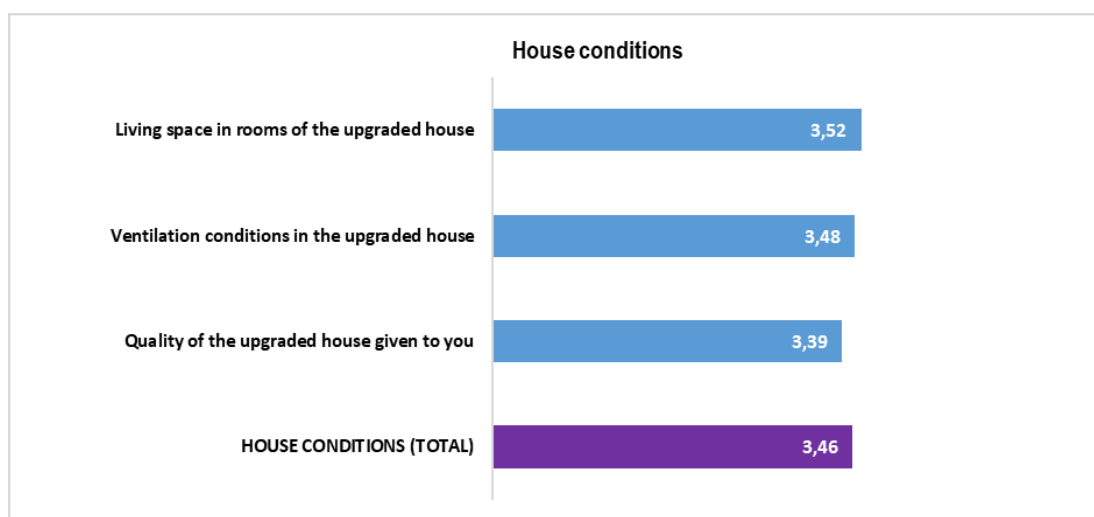
#### **4.2.1.1 Housing conditions**

Beneficiaries' perceptions of improvements to housing conditions was based on a list of three attributes and the mean rating scores for each of these was noted, as shown in Figure 7. The housing condition factor with the highest rating pertained to the living space in the rooms (3.52), while the lowest rated was on the quality of the upgraded house (3.39). The overall mean rating score on housing conditions was 3.46, a score that fell in the "good" rating, in view of the scale used. Furthermore, insights from open-ended questions showed that about 20% of the residents felt that the plumbing installed in houses was not strong. However, 13% of the residents expressed that they were happy with the design of the house, while 20% confirmed that they would have wanted electricity connections to their upgraded houses as shown in Table 7 below. It can be understood that beneficiaries' perceptions on improvement in residential quality

of life can be well driven by satisfaction with provision of basic services like electricity and good plumbing system.

**Table 8: Open ended responses on housing conditions**

State the reason why to your answer in 2.1	Percent
No electricity	20%
Plumbing faults	20%
Attractive/good design	13%
Better than previous dwelling	11%
Stable/strong structure	11%
Enough space/rooms	9%
Intact/no cracks	7%
Not strong/stable enough	7%
Inadequate water taps	4%
Not spacious enough	4%
Poor quality/workmanship	4%
Other reasons	15%



**Figure 8: Perceptions rating of house conditions**

#### 4.2.1.2 Basic services

Beneficiary perceptions on improvements to basic services were evaluated, as shown in Figure 8 below. The rating was done on a list of five attributes and the factor with the highest rating pertained to access to clean water (4.41), while the lowest was electricity supply (1.27). The overall mean rating score on basic services was 3.49, a score that fell in the good rating, in view of the scale used. Most residents had an “excellent” rating on improvements to sewage facilities, refuse collection, access to clean water and drainage conditions. Most residents, however, rated electricity the lowest since there are no connections. Furthermore, insight from the open-ended questions

showed that 24% of the residents would have wanted a clinic and 17% a school to be part of the basic service provision to the community as shown in Table 8 below

**Table 9: Open ended responses on basic service provision**

<b>S3.6 Which other basic service condition do you wish to have been improved after the upgrading of your house?</b>	<b>Percent</b>
Electricity	26%
Clinic	24%
School	17%
None	13%
Playground/park	13%
More space	7%
Other	7%
Speed humps	4%
Tiles	4%
Ceiling	2%
Perimeter fence/wall	2%
Refuse collection	2%
Toilet	2%
Water taps	2%

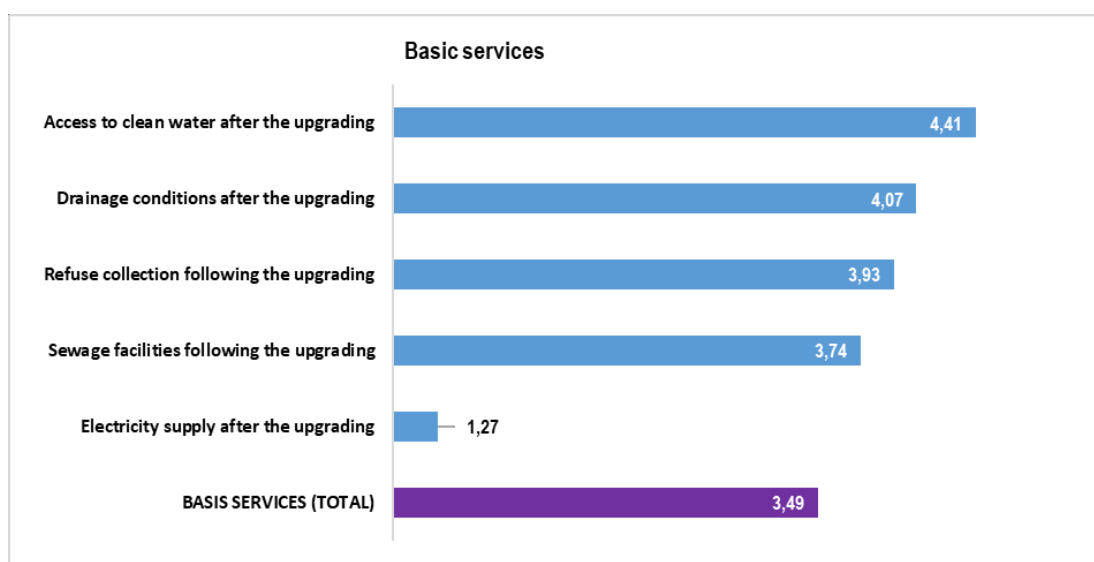


Figure 9: Perceptions ratings of basic service conditions

Perceptions regarding sense of belonging and tenure security were evaluated on a 5-point scale, in which respondents had the option to (1) strongly disagree, (2) disagree, (3) agree, (4) strongly agree, or (5) I don't know, with an assertion pertaining to these factors. On analysis, option 5 was disregarded, as it implies no opinion hence the highest possible mean rating was considered as 4.00. The closer the value to the 4.00 threshold, the more positive the rating.

#### 4.2.1.3 Sense of Belonging

The evaluation of sense of belonging was based on a list of three attributes, as shown in Figure 9 below. The factor with the highest rating was satisfaction with the design of the upgraded house (3.29), while the lowest was the living space in the rooms (2.91). The overall mean rating score on sense of belonging was 3.14 and implies general affirmation by the beneficiaries of improvement in this regard.

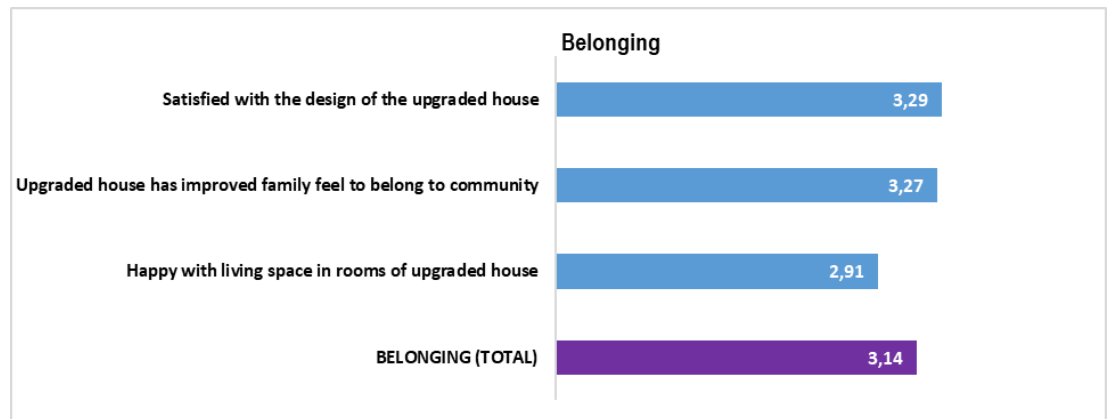


Figure 10: Perceptions ratings on sense of belonging

#### 4.2.1.4 Tenure Security

The evaluation of tenure security was based on a list of three attributes, as shown in Figure 10 below. The factor with the highest rating was satisfaction with ownership conditions (3.09), while the lowest was the ability to improve the house (2.88). As shown in figure 9, the overall mean rating score on tenure security was 3.03, which is a good affirmation from beneficiaries of improvement in this regard. Insight from the open-ended questions revealed that residents were satisfied with the ownership conditions of the upgraded houses.

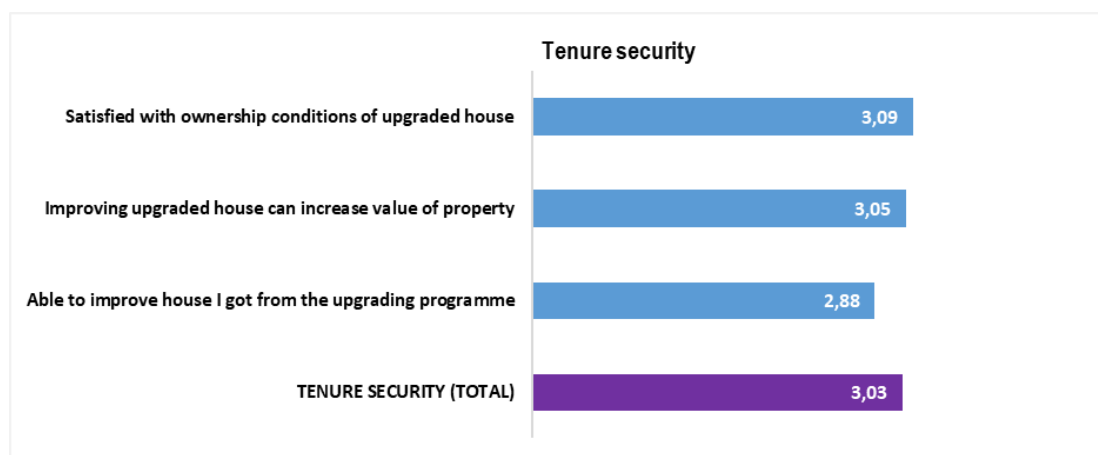


Figure 11: Perception ratings on tenure security

Residential quality of life encompassed the following attributes: housing conditions, basic services provision, sense of belonging and tenure security. Considering hypothesis 2, which states, “*There are perception differences between male and female beneficiaries on improvement in residential quality of life following the upgrading?*” The independent samples t-test was used to compare the perceptions of male and female beneficiaries regarding improvement in the residential quality of life following the upgrading programme. There was no significant difference in perceptions of improvement in residential quality of life between female beneficiaries as shown in table (M=3.36, SD=0.46) and male beneficiaries (M= 3.27, as shown in Table 7 below, SD=0.45),  $t = 0.553$ ,  $p = 0.58$  as shown in Table 8 below. Since  $p > 0.05$  we fail to reject the null hypothesis and conclude that male and female beneficiaries held similar perceptions regarding improvement to their residential quality of life following the upgrading programme.

**Table 10: Descriptive statistics on perceptions of residential quality of life by gender**

Gender	N	Mean	Std. Deviation	Std. Error Mean
Female	35	3.36	0.46	0.08
Male	11	3.27	0.45	0.14

**Table 11: T-test results on perceptions of residential quality of life by gender**

		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	0.046	
	Sig.	0.83	
T-test for Equality of Means	T	0.553	0.557
	Df	44	16.971
	Sig. (2-tailed)	0.58	0.58
	Mean Difference	0.09	0.09
	Std. Error Difference	0.16	0.16
	95% Confidence Interval of the Difference	Lower Upper	-0.23 0.41

The respective mean scores on improvements to housing conditions according to respondents' other demographics were done and tested using ANOVA. The results

confirmed that there was no statistically significant difference by gender. The only statistically significant difference in perceptions of improvements to housing conditions was by level of education ( $F=5.191$ ,  $p=0.01$ ), as shown in Table 9 below. Specifically, beneficiaries with primary-school-level education gave a significantly higher mean rating (4.26) on housing conditions compared to those with secondary-school-level (3.28) and tertiary education (3.24).

**Table 12: ANOVA table on house conditions ratings by demographics**

House conditions	Sum of	Mean			
	Squares	Df	Square	F	Sig.
Gender	0.932	1	0.932	1.164	0.29
Age	1.858	3	0.619	0.758	0.52
Marital status	2.883	2	1.441	1.862	0.17
Education	7.034	2	3.517	5.191	<b>0.01*</b>
Employment status	0.075	1	0.075	0.092	0.76

**p<0.05\* = statistically significant**

The respective mean scores on improvements to basic services according to respondents' demographics were noted. The ANOVA confirmed that there was no statistically significant difference in perceptions by gender. The only statistically significant difference in perceptions was by age ( $F=3.004$ ,  $p=0.04$ ), as shown in Table 10 below. Specifically, beneficiaries aged between 18 and 30 years gave a significantly lower mean rating (3.04) compared to those aged 41 years and older. As far as this study is concerned, no previous study has confirmed the same hypothesis.

**Table 13: ANOVA table on basic services ratings by demographics**

Basic services	Sum of	Mean			
	Squares	df	Square	F	Sig.
Gender	0.337	1	0.337	0.864	0.36
Age	3.096	3	1.032	3.004	<b>0.04*</b>
Marital status	0.867	2	0.434	1.119	0.34
Education	1.098	2	0.549	1.437	0.25
Employment status	0.251	1	0.251	0.638	0.43

**p<0.05\* = statistically significant**

The respective mean scores on the sense of belonging according to respondents' demographics were done. The ANOVA results confirmed that there was no statistically significant difference in perceptions by gender. The only statistically significant difference was by level of education ( $F=4.781$ ,  $p=0.01$ ), as shown in Table 11 below. Specifically, beneficiaries with primary-school-level education gave a significantly higher mean rating (3.59) on sense of belonging compared to those with secondary-school level (3.03) and tertiary education (3.06). As far as this study is concerned, no previous study that has confirmed the same hypothesis.

**Table 14: ANOVA table on sense of belonging ratings by demographics**

Belonging	Sum of		Mean		
	Squares	df	Square	F	Sig.
Gender	0.037	1	0.037	0.131	0.72
Age	0.253	3	0.084	0.293	0.83
Marital status	0.549	2	0.274	0.999	0.38
Education	2.247	2	1.123	4.781	<b>0.01*</b>
Employment status	0.011	1	0.011	0.039	0.84

**$p<0.05*$  = statistically significant**

The respective mean scores on tenure security according to respondents' demographics were done. The ANOVA results further confirmed that there was no statistically significant difference in perception on tenure security by gender and neither of any of the demographics parameters. All the  $p$  values  $> 0.05$  as shown in Table 12 below. Respondents tended to share largely similar opinions regarding tenure security regardless of gender, age, marital status, education or employment status.

**Table 15: ANOVA table on tenure security ratings by demographics**

Tenure security	Sum of		Mean		
	Squares	df	Square	F	Sig.
Gender	0.066	1	0.066	0.145	0.70
Age	1.655	3	0.552	1.266	0.30
Marital status	1.256	2	0.628	1.444	0.25
Education	1.830	2	0.915	2.170	0.13
Employment status	0.029	1	0.029	0.064	0.80

**$p<0.05*$  = statistically significant**

#### **4.2.1 Comparison of research results on residential quality of life to those found by similar studies and assessments**

In general, our results on the perceptions of residential quality of life are similar to the studies by Archer (2011), Samper Jota (2011) and Naceur (2013), who discovered that residents were satisfied with the improvement in their residential quality of life following the upgrading that had been brought to their community. However, they are different to the studies by Wokekoro (2015) and Brown-Luthago et al (2016), who argued that residents felt that their residential quality of life was neglected despite the upgrades within their community.

Specifically, our results on perceptions of the housing conditions are similar to those of Archer (2011), Giliani et al (2014) and Naceur (2013), who noted that residents were satisfied with the ventilation, living space and design of the upgraded houses allocated to them. However, our results differ from the study by Brown-Luthago et al. (2016) and Jordus-Leir and De Wet (2015), which posited that residents felt that their houses could collapse at any time because of the poor quality of building materials. Residents further confirmed that some roofs were leaking and felt that their residential quality was low despite the upgrading. Moreover, our results are different from those of Giliani et al. (2014), who stated that there was a statistical difference between female and male residents on perceptions of housing conditions, with females stating that the living space gives them more room for their family belongings. Different insights from our study in the open-ended questions confirmed a disgruntlement with the plumbing of the upgraded houses, which could be the reason why residents did not strongly perceive an improvement in their housing conditions.

In relation to the basic service conditions, our results were similar to the studies by Naceur (2013) and Samper Jota (2011), who stated that there was an improvement in sanitation, water supply and lighting in the streets. Devoto et al (2012) similarly concurred that residents were satisfied with the piped water connection to their respective households. However, our study findings differed from those of Devoto et al (2012), who noted a significant difference between female and male perceptions of improvements in basic service provision. It was stated that female strongly perceive there to be improvements, citing that the upgraded water connections and basic service conditions reduced the time spent fetching water and allowing for more time to attend to other household chores.



Moreover, these results differed on the aspect of electricity because our results indicated that electricity was not yet installed in the upgraded community. Our results further differed from the studies done by Wokekoro (2015), Jordus-Leir, and De Wet (2015), who noted the concern of beneficiaries regarding conditions around their upgraded community, which included poor sanitation, erratic water supply, and waste collection and disposal.

Specifically, in relation to sense of belonging, our results are similar to the study of Samper Jota (2011), which showed that the design of the upgraded houses were aligned to resident's preferences. Beneficiaries had an elevated sense of belonging since they confirmed that their opinions had been considered. However, our study differs from that of Taher and Ibrahim (2014), which stated that the designs of the upgraded settlement had ignored the residents' usual patterns of living. The horizontal slums were replaced with vertical upgraded designs, leaving residents with no space for social activities and for the children to play. Residents did not feel a sense of belonging since they were not consulted before construction of the residence.

Lastly, considering the studies on tenure security, our results are similar to studies by Brown-Luthago et al (2016) and Samper Jota (2011), which reported that attaining tenure security made beneficiaries feel safe, capacitated and motivated to belong and gave them the confidence to further improve their houses. Beneficiaries' sense of belonging was boosted, which induced positive overall perceptions of the residential quality of life. However, our studies are different from those of Archer (2011) and Iweka and Adebayo (2015), who argued that delayed tenure security as well as uncertainty in property ownership was a setback for residents as they were reluctant to develop and upgrade their properties.

In this study, the sample t-test and the one-way analysis of variance (ANOVA) method was used to test the significance of differences in perceptions of improvements in the housing conditions, basic services, safety, sense of belonging and tenure security based on the respondents' gender. The results showed that there was no statistically significant difference in terms of gender in any of the four parameters of the residential quality of life.

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## 5 DISCUSSION OF RESEARCH FINDINGS

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Considering Chapter 2 (Section 2.6), a cross-examination of relevant frameworks was done in order to construe their relevancy and efficacy on the interpretation of our empirical research results. This section discusses and interprets the findings through theories and literature and then concludes with implications. The discussion of the findings is divided into two sections: the first section discusses and interprets the findings from the first research question, namely “what are the beneficiaries’ perceptions on improvement in safety following the upgrading?”; while the second focuses on discussions about the perceptions of the beneficiaries regarding improvement to their residential quality of life following the upgrades. Lastly a general overview is given as a reflection on needs satisfaction as a building block for development.

### **5.1 Perceived beneficiaries’ logic on the improvement in safety following an upgrading programme: A case of Itsoseng Informal Settlement, Johannesburg**

This section set out to discuss the results to the question “what are the beneficiaries’ perceptions on improvement in safety following the upgrading?” As reflected by the results in Section 4.1, the overall mean rating score on safety fairly agreed with a decrease in crime and rape within the upgraded community, hence confirming positive perceptions of improvements to safety. This section presents these discussions under these themes, motivation in beneficiaries’ lives and hierarchical needs satisfaction and hindrance in realising needs in the hierarchy.

#### **5.1.1 Motivation in beneficiaries’ lives**

Maslow (1943) and McLeod (2017) equally posited that the Maslow hierarchy of needs is a theory of personality, which emanated from the desire to understand what motivates people in life. He further contends that human beings have a motivation system that is linked to neither rewards nor unconscious desires. The theory was formulated from a humanistic point of view, where people’s behaviour is believed to be void of influence by mechanical pressure or physical push, but rather is an expression of their own potential. In the process of striving to attain certain needs, once a need has been satisfied it acts as a catalyst to strive for attainment of the next level of needs,

which in a process leads to development. Our research findings confirms what the Maslow hierarchy of needs theory articulates in that an expression of the desire to attain certain needs like decent shelter, which when satisfied probes the desires to feel safe from the outside world. An upgraded house managed to provide a sense of safety due to the safe surrounding conditions attributed to the upgraded house. Similarly our results confirms to Naceur (2013) and Samper- Jota (2011) who noted that most residents felt there was improvement in safety following the upgrading because they now had a safe home with proper windows and doors that could be locked. Furthermore, residents felt that they were protected from intruders therefore confirming their safety from rape and home breakings. The peace of mind paused a chance for residents to feel a sense of development in their lives, which confirms that a housing upgrade managed to improve perception of safety in Itsoseng community. Our results also confirms what some literature postulated by Muzondi (2014) and Ziblim (2013) which stipulated that the upgrading of informal settlements are implemented to actively respond to the demands of upgrading informal settlements including their safety and improvement in the standards of living. Furthermore insights from open ended responses indicated that residents felt motivated to have more provision of electricity, schools and clinics in order to improve their satisfaction with the residential quality of life.

### **5.1.2 Hierarchical Needs Satisfaction**

Shelter is an important aspect of fulfilling one of the basic needs in people's lives. Once the need for shelter is met, it drives the need for a higher level of need to be met, which in a way is a driver for growth and development in society. MacLeod (2017) agreed with Maslow (1943) that the Maslow hierarchy of needs acknowledges that people have various needs that they anticipate to be satisfied. The desire to fulfil basic needs for survival is highly prioritised before satisfaction of higher needs. Physiological needs are the foundation of the Maslow hierarchy of needs, which includes the need for food, air, water and shelter for living. Safety needs follow the physiological needs in the hierarchy of needs. The results findings in this study confirmed positive perceptions of safety following the provision of upgraded housing, which is a physiological need for shelter. Maslow (1943) confirmed that once the need for shelter is met, the priority moves to a higher level of need having to be met, which in this study is the development of a society. Similarly, the studies by Naceur (2013) and Samper Jota (2011) noted that upgrading managed to instil positive perceptions of safety within the community. These findings are well supported by literature where Hegazy (2016) agreed with Corburn and

Sverdlik (2017) that, in a broader spectrum, upgrading of informal settlements has the capacity to improve beneficiaries' perceptions of safety and community wellbeing if implemented holistically. Open-ended responses highlighted the need to improve on plumbing, safety walls and speed humps to ensure children's safety. Once the need of shelter has been satisfied, ignites a further desire for protection.

### **5.1.3 Hindrance in realising needs in the hierarchy**

However, this study's results findings differ from those of Short and Hammett (2013), who noted that residents felt unsafe due to poor lighting and poor social facilities where children can play safely. In the research done by Jordhus-Leir and De Wet (2015), the dark surroundings made most female residents feel vulnerable to rape and crime. Findings from the study by Wokekoro (2015) differ from those of this study, reporting that erratic electricity supply and dysfunctional streetlights around the upgraded community made residents lack confidence in their feel as if their safety. Department of Human Settlement (2011) and Turok (2001) also expressed concern about the failure to complete the upgrading, resulting in a worsening of the safety of beneficiaries. The negative perceptions confirm Maslow's (1943) statement that the only reason people fail to move in the positive direction in realising their needs in the hierarchy is the hindrance brought about by the societies in which they live. This resonate with our results from the open ended questions in that failure to get electricity and safety walls in Itsoseng community could be the reason why residents did not have very strong perceptions on improvement in safety.

## **5.2 Perceived beneficiaries' logic on the improvement in residential quality of life following an upgrading programme: A case of Itsoseng Informal Settlement, Johannesburg**

This section set out to discuss about the perceptions of the beneficiaries regarding improvement to their residential quality of life following the upgrades. Considering the results that have been outlined in Section 4.2, residential quality of life has been described using four attributes, namely housing conditions, basic service provision, sense of belonging and tenure security. An overall mean on perception ratings of residential quality of life was good, which confirmed a good level of satisfaction with the upgrades. This section presents these discussions under these

themes, motivation in beneficiaries' lives, quality of life as a ranked need satisfaction, quality of life improvement as a measure for progress

### **5.2.1 Motivation in beneficiaries' lives**

Maslow (1943) and McLeod (2017) postulated that shelter is one of the basic needs in the Maslow hierarchy of needs. Maslow's hierarchy of needs theory has influenced this research in understanding that human personality as well as what motivates people in life. Human beings derives utility in needs satisfaction. Once the need for shelter is met, for example, then the need for safety kicks in, which further drives the need for a sense of belonging and therefore acts as a driver of growth in society.

Further acumen acquired through the open-ended questions validates why the residents did not strongly perceive an improvement in residential quality of life. Most of the residents were concerned about the absence of electricity connections within their households, which they have been waiting for since allocation of the houses. This phenomenon is explained in the Maslow hierarchy of needs theory, which emphasises that basic needs is stirred by deficiency and prolonged duration to meet these needs.

### **5.2.2 Quality of life as a ranked need satisfaction**

Our research findings further confirm what was posited by Carley (1981) and Sirgy (1986), who iterated that the Quality of Life (QoL) theory was developed from Maslow's hierarchy of needs theory. The QoL theory is considered to be a ranked need satisfaction of the aggregate community. The greater the need satisfaction (from lower-order to higher-order needs), the greater the quality of life of that society. The theory states that in developed countries, people are preoccupied with the satisfaction of higher order needs such as self-esteem and self-actualisation. In developing countries like South Africa, however, most community members are concerned with satisfying lower-order needs, which include biological needs as well as safety, and then followed by sense of belonging. Our findings confirms with what the study of Samper Jota (2011), highlighted in that the design of the upgraded houses were aligned to resident's preferences. Beneficiaries had an elevated sense of belonging after getting a satisfaction on a shelter need through the upgraded house. Murray, Pauw and Holm (2005) who stated that quality of life is defined in terms of the hierarchical needs satisfaction of the majority of community members also confirm our results in literature. It is clearly articulated that the greater the need satisfaction of the community, the higher the perceptions of the community regarding improvement in the quality of life. The major

goal of the QoL theory is to enhance satisfaction of human development needs, as defined by the respective community or society. In our research findings, the respective beneficiaries of the intervention defined positive perceptions on residential quality of life. People's progression of satisfaction in improvement of the quality of life is dependent upon progression from satisfaction of the lower hierarchy needs to the highest level of need, as confirmed in this study findings.

### **5.2.3 Quality of life improvement as a measure for progress**

Our research findings confirm what Neef (1991) posited in the Max-Neef theory of human needs for development. The Max-Neef theory of human needs was developed with the aim of articulating that development concerns people and not necessarily objects. Focus is directed towards understanding the qualitative growth experienced by people in development. Jolly (2010) argued that in the Max-Neef theory, the best measure for progress in people's lives is determined by the improvement in their quality of life. Murray, Pauw and Holm (2005) further confirms our study results by stating that the determinants on people's quality of life are realised through the possibilities available to facilitate their adequate satisfaction of crucial needs. The satisfaction of the fundamental human needs is what the Max-Neef theory refers to as the quality of life. Our research findings implied a good satisfaction with the improvement in the residential quality of life of beneficiaries, which is a good indication that development was realised.

## **5.3 Needs satisfaction as a building block for development**

The Max-Neef theory of human needs for development is the most appropriate framework in relation to our research findings presented in Section 4.1 and 4.2. According to this framework, our results have the following three implications. Firstly, our research results have helped provide a clear analysis of the patterns and relationships that exist between the design of a house, its surrounding conditions and current utility, which assists in understanding how the existing designs and surrounding interlink with possible human needs. Secondly, our research findings have managed to articulate the measure for progress in people's lives, which is a qualitative growth that is articulated through the possibilities people have available to them to satisfy their

fundamental human needs. Lastly, our research findings could be utilised to improve the design of homes so that they are holistic in satisfying human needs.

This has enhanced an understanding that development is about people not objects, as well as an understanding that it is vital to steer the development process towards improving the residential quality of life of people. There has to be a measure of progress of growth in people's lives through the measurement of the residential quality of life. The residential quality of life and safety was determined through the satisfaction of fundamental human needs. The housing upgrade is a development that was brought to informal settlement beneficiaries and our research findings have confirmed through the human needs satisfaction and the theory of human needs for development. The most important aspect to the beneficiaries was the improvement that the upgrade has brought to their lives, through satisfaction of needs and the motivation for development. Development is a structural society rejuvenation, which serves the purpose of transforming people's lives for the better. In the context of our research findings, the housing intervention managed to instil positive perceptions in safety and the residential quality of life. According to our research findings, a housing upgrade managed to bring development to humanity through the confirmation of good perceptions of improvement in safety and residential quality of lives. Satisfaction of basic needs are the building blocks that facilitate and perpetuate the initiation of a holistic and sustainable social development in humanity. In our research findings, satisfaction of beneficiaries of the housing intervention on improvement in safety and the residential quality of life was determined and measured against the capacity of the intervention in satisfying their needs for safety, housing conditions, tenure security and a sense of belonging.

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## 6 SUMMARY, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

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In this chapter, the problem statement, research questions, research purpose and knowledge gap are set out in a summary to conclude the whole research. The findings and conclusions that confirm the purpose of this study are also set out in this section, followed by the limitations incurred during the research and then the recommendations, with the aim of adding to the body of knowledge.

### 6.1 Summary

Despite all the efforts directed by several governments worldwide to upgrade informal settlements, insignificant improvements are still a matter of concern as far as safety and residential quality of life is concerned to bring decency in housing the poor. Several studies have been done to assess beneficiaries' perceptions in various settings around South Africa and internationally, but none had been carried out in Itsoseng Informal Settlement. This study aimed to assess whether residents of the Itsoseng Informal Settlement had experienced the same challenges as those faced in other informal settlements following the housing upgrades. Safety, housing conditions, basic service provision, sense of belonging and tenure security were the parameters this study used to determine whether the residents perceived an improvement in their safety and overall residential quality of life.

A random sample of beneficiaries of the housing intervention was selected in Itsoseng Informal settlement (Malibongwe Ridge) and their perceptions obtained using a structured questionnaire that included both open-ended and closed questions. The study further performed the paired sample t-test and the ANOVA analysis to determine whether there was any statistically significant differences by gender. Initially, the Maslow hierarchy of needs articulated what motivates people in life. Once a person's need for shelter or housing is met, the focus turns to satisfying higher-level needs, which can be said to act as a driver for development in society. The quality of life theory allowed for further understanding of the findings around perceptions that the quality of life is determined by the satisfaction of hierarchical needs of the majority of community members. Lastly, the theory of Human Needs for Development significantly posited that the best measure for progress in people's lives is by determining the improvement in people's quality of life. This theory emphasised that the determinants of people's quality of life are realised in the adequate satisfaction of people's crucial needs.



Considering the first research question and the respective hypothesis

1. What are the perceptions of the beneficiaries regarding the improvement in safety following the upgrade programme?

Hypothesis 1

There are differences in the perceptions of male and female beneficiaries on the improvements to safety following the upgrading programme.

The overall mean rating score on safety fairly agreed with a decrease in rape cases and crime. There was greater evidence from the findings that indicated good perceptions on the improvement of safety following a housing intervention programme. Open-ended questions gave further insights, with almost a quarter of the residents (24%) highlighting the need for a dura wall, while another 24% pointed out the need for speed humps to ensure the safety of children and to further improve safety around the upgraded community. The need for these issues to be addressed could explain why beneficiaries did not strongly agree regarding improvements to the safety of the upgraded community. There were no significant differences in perceptions by gender and so not enough evidence to accept the hypothesis that there were perception differences between male and female beneficiaries on improvement in safety following the upgrading programme.

Considering the second research question and hypothesis:

2. What are the perceptions of the beneficiaries regarding the improvement in the residential quality of life following the housing intervention programme?

Hypothesis 2

There are perception differences between male and female beneficiaries regarding improvements to their residential quality of life following the upgrading?

Evidence from the findings confirmed good positive perceptions of improvement in the residential quality of life parameters. This indicated a good rating on perceptions about the improvement in residential quality of life, which was broken down into housing conditions, sense of belonging, basic service provision and tenure security. Further insights were also gained through open-ended questions, with more than half (52%) of the residents expressing satisfaction with the space around the house. However, most of the residents (74%) highlighted the need for electricity connections in their upgraded houses. There were no significant differences in perceptions by gender and so not

enough evidence to accept the hypothesis that there were perception differences between male and female beneficiaries regarding improvements to their residential quality of life following the upgrading programme.

## **6.2 Conclusions**

Generally, the findings show that there was a good level of agreement on beneficiaries' perceptions of improvement in safety and residential quality of life following the upgrading programme in Itsoseng Informal Settlement. A full package of improvement in housing conditions, safety, basic services, building a good sense of belonging and tenure security goes a long way towards enhancing improvement in the residential quality of life. An improvement in safety and residential quality of life implies development in the lives of beneficiaries following an upgrading programme, as articulated in the theoretical frameworks considered in this research. The study shows a good appreciation of the improvements brought to a community, as shown in various comparable studies in South Africa and worldwide. The study, through open-ended responses, further supports a holistic approach to the improvement of safety and the residential quality of life of the beneficiaries of upgrading programmes as a means to develop poor communities.

Our research results clearly depicted the relationship that exists between the design of a house, its surrounding conditions and current efficacy. Furthermore, the findings have clarified how the designs and surroundings intertwine with possible human needs. Our research findings have managed to articulate the simplicity of determining the measure for progress in people's lives, which is the qualitative growth of people's lives. The possibilities available to people to adequately satisfy their fundamental human needs were also articulated.

Informal settlement upgrading should be viewed from an integrated approach, not only as the responsibility of the Department of Human Settlements. There should be multi-sectoral engagements between a wider range of stakeholders to address community development priorities. The needs and preferences of the beneficiaries should also be taken into account from programme inception to implementation in order to ensure programme efficacy.

Our research findings could be utilised to improve the design of the houses so that it follows a holistic approach in satisfying human needs rather than just focusing on the physical aspects of the house. This highlights that development is about people not objects, and that it is vital to steer the development process towards improving the

quality of life of the people. There has to be a measure of progress of growth in people's lives through measuring the residential quality of life. The residential quality of life is measured through the satisfaction of fundamental human needs. Lastly our research finding could be used to add to the body of knowledge in as far as the upgrading of informal settlements programmes could be formulated and implemented.

### **6.3 Limitations**

This research study utilised a questionnaire with structured closed and open-ended questions, which limited depth and multiplicity of the findings. The responses of the research participants were confined to available options, thereby limiting the participants' ability to express their opinion. Moreover, the use of a case study research design constrained the results from being generalised to informal settlements in South Africa, which is a threat to external validity. Insight into humanity was further limited by the use of guided questions. Some beneficiaries were not fully literate, which made it hard for them to understand some questions and so had to be explained further in vernacular language by the research assistant.

The planned targeted population was 2 000 households. Delays in project implementation, however, meant that only 537 houses were constructed. From these 537 houses, only 144 houses were officially allocated, while residents invaded the rest. The 144 households then became the limited target population and sample size, which was a threat to external validity. Some targeted research participants were hard to access since they were away for work and other engagements. However, this study ensured that all effort was committed until respondents were reached.

At the time that the study was conducted, the Councillor for Region C admitted that relations between the Itsoseng community leadership and the City of Johannesburg were sour. Apparently, some illegal intrusions had occurred in some houses before the city of Johannesburg could formally allocate them to residents. The councillor did not personally assist with a formal introduction to the community leadership, but appointed the Community Liaison Officer to introduce us to the security officers guarding the premises. However, for ethical purposes we took a risk and requested that the security officers call the community leadership so that we could introduce ourselves and explain the purpose of our visit. One Monday we met the community leadership team, who at first did not want to engage with us, citing that we had been sent by the City of Johannesburg with a hidden agenda. It took many hours to convince the team that we were in the informal settlement to conduct research for

academic purposes. The leadership team postponed our visit to Wednesday, saying that they needed to meet with other team members on the Tuesday so that they could table our request. On the Wednesday met with the community leadership team at the site and they agreed to our research visit and provided a team of three people to escort us through the community. They confirmed that this was for purposes of our safety because the community members who had illegally invaded the upgraded housing were sensitive to eviction and so there was a possibility that they could attack us, as what had happened to another researched in the previous week. The fact that the researcher is of foreign nationality and only has elementary knowledge of local languages was a threat to the community in accepting the purpose of the study. Thanks to the research assistant, who could speak vernacular fluently and managed to convince the leadership team to accept us into the community.

## **6.4 Recommendations**

Considering the findings of this study, this research suggests the following recommendations for deliberation in undertaking similar housing upgrading programmes.

- A holistic approach needs to be valued in implementing housing upgrading programmes in order to ensure that crucial basic services are provided. Insights from open-ended questions suggested that certain aspects were lacking such as electricity, speed humps, security walls, clinics and schools. There is need to fully provide basic services that necessitates the improvement in safety and residential quality of life.
- This research recommends the involvement and participation of the beneficiaries in the programme, from the planning phase to implementation stage, in order to enhance user satisfaction and efficacy in meeting their needs.
- This study recommends that when implementing upgrading programmes, it is important to note that development is about the people, and the greater the satisfaction of their needs, the greater the social development brought into the community. This view needs to be incorporated from the formulation and through to the implementation of programmes, projects and policies.

- This study further recommends the need to generate achievable policy strategies and development targets concerning the upgrading of informal settlements, while incorporating and delivering on beneficiaries' key priorities.
- This study recommends further assessment on whether housing upgrading needs are complemented by preventive actions that prohibit further mushrooming of new informal settlements.
- This research further recommends the evaluation on whether upgrading programmes have the capacity to avoid the threat of negatively affecting the quality of life of the beneficiaries post upgrading programmes.
- Finally this research recommends the evaluation of the impact of housing upgrading programmes to ensure efficiency, effectiveness, relevancy and sustainability of the programmes.

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## **Appendix 1.1: Consent Form and Questionnaire**

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### **Consent Form and Questionnaire for assessing perceptions on a housing upgrade in Itsoseng informal Settlement, Johannesburg**

**University of the Witwatersrand  
Wits School of Governance, Johannesburg  
Gauteng Province**

#### **Informed Consent Form**

I hereby agree to participate in the research project entitled “Assessing beneficiaries’ perceptions on improving the residential quality of life on a housing intervention in Itsoseng Informal Settlement”. It has been explained well to me that the purpose of the study is to assess the perceptions of Itsoseng beneficiaries as far as the improvement in the residential quality of life is concerned after the housing upgrading intervention. The proposed use of the research, current and in future is to add to the body of knowledge and for any recommendations as seen by the University.

I understand that I am free to contact Mrs Pamela Nyikavaranda in the event that I experience any problem because of my participation in this research on 0728570181 or email her on pamnyik@gmail.com. I have been informed that there are no foreseeable risks save for the unexpected risks that may arise.

I thereby agree to participate as a research participant in the above research project. I agree that my participation in this research is voluntary and that I am free to withdraw from participation when I feel like. I have been informed that there are no gifts or payments awarded to research respondents for taking part in this research.

I have read and understood all that is written in this document

Participant’s signature..... Date.....

## Questionnaire for beneficiaries' perceptions on improvement in residential quality of life following a housing upgrade in Itsoseng informal Settlement, Johannesburg

*Please fill in, tick or circle as appropriate*

Date of the Research: \_\_\_\_\_/month: \_\_\_\_\_ year: \_\_\_\_\_ e.g. 04/05/2001

### Section 1: Demographic Information

1.1	Questionnaire Id :	
1.2	Gender :	Male <input type="checkbox"/> Female <input type="checkbox"/>
1.3	Are you employed?	Yes <input type="checkbox"/> No <input type="checkbox"/>
1.4	If employed, please state the employment status	Self-employed <input type="checkbox"/> Formally employed <input type="checkbox"/>
1.5	Education level	Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Diploma <input type="checkbox"/> Degree <input type="checkbox"/> Postgraduate <input type="checkbox"/> level                    level                    level                    level                    level
1.6	Marital Status:	Single <input type="checkbox"/> Married/Cohabiting <input type="checkbox"/> Separated/Divorced <input type="checkbox"/> Widowed <input type="checkbox"/>
1.7	Age (Years)	18-30 <input type="checkbox"/> 31-40 <input type="checkbox"/> 41-50 <input type="checkbox"/> 51+ <input type="checkbox"/>

### Section 2: Perceptions on the improvement in the house condition

2.1 To what extent do you rate the strength in quality of the upgraded house given to you?	Very poor <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/>  Good <input type="checkbox"/> Excellent <input type="checkbox"/>
2.1.2 State the reason why to your answer in 2.1	..... ..... ..... ..... .....
2.2 How do you rate the ventilation conditions in the upgraded house?	Very poor <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/>  Good <input type="checkbox"/> Excellent <input type="checkbox"/>
2.3 In your own opinion, how do you rate the satisfaction with the living space in the rooms of your upgraded house?	Very poor <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/>  Good <input type="checkbox"/> Excellent <input type="checkbox"/>

2.3.1 State the reason why to your answer in 2.3	..... ..... .....
--	-------------------------

**2.4 What will you prefer to have been included on your upgraded house that is not currently present, in order for you to perceive an improvement in residential quality of life?**

.....  
.....  
.....  
.....  
.....

**Section 3: Perceptions on improvement in basic services conditions**

3.1 How do you rate the improvement in sewage facilities following the upgrading?	Very poor <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent <input type="checkbox"/>
3.2 How do you rate the improvement in refuse collection following the upgrading?	Very poor <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent <input type="checkbox"/>
3.3 How do you rate access to clean water after the upgrading?	Very poor <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent <input type="checkbox"/>
3.4 How do you rate the drainage conditions after the upgrading?	Very poor <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent <input type="checkbox"/>
3.5 How do you rate the electricity supply after the upgrading?	Very poor <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent <input type="checkbox"/>

**3.6 Which other basic service condition do you wish to have been improved after the upgrading of your house?**

.....  
.....  
.....

**Section 4: Perceptions on safety**

4.1	The rate of crime occurrence has decreased following the upgrading.			
1. Strongly Disagree	2. Disagree	3. Agree	4. Strongly agree	5. Don't know
4.2	It is safe for the children to play in the surroundings after the upgrading.			
1. Strongly Disagree	2. Disagree	3. Agree	4. Strongly agree	5. Don't know
4.3	Rape occurrence has decreased since the upgrading.			

1. Strongly Disagree	2. Disagree	3. Agree	4. Strongly agree	5. Don't know
----------------------	-------------	----------	-------------------	---------------

**4.4 What do you suggest should be done to ensure safety in you upgraded community?**

.....

.....

.....

.....

.....

.....

**Section 5: Perceptions on the sense of belonging**

5.1	I am satisfied with the design of the upgraded house.			
1. Strongly Disagree	2. Disagree	3. Agree	4. Strongly agree	5. Don't know
5.2	I am happy with the living space in the rooms of my upgraded house.			
1. Strongly Disagree	2. Disagree	3. Agree	4. Strongly agree	5. Don't know
5.2.1	State the reason why to your answer in 5.2			
.....				
.....				
.....				
5.3	The upgraded house has improved my family feel to belong to this community.			
1. Strongly Disagree	2. Disagree	3. Agree	4. Strongly agree	5. Don't know

**Section 6: Perceptions on tenure security**

6.1	I am satisfied with the ownership conditions of the upgraded house.			
1. Strongly Disagree	2. Disagree	3. Agree	4. Strongly agree	5. Don't know
6.1.2	State the reason why to your answer in question 6.1			
.....				
.....				
.....				
6.2	I am able to improve the house that I got from the upgrading programme.			
1. Strongly Disagree	2. Disagree	3. Agree	4. Strongly agree	5. Don't know
6.3	In my own opinion, improving my upgraded house can increase the value of my upgraded property.			
1. Strongly Disagree	2. Disagree	3. Agree	4. Strongly agree	5. Don't know

**THANK YOU!**

---

## Appendix 2.1: Research Clearance Letters

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Research Office:  
Zibusiso Manzini-Moyo  
Tel: 011 717 3505  
Email: [Zibusiso.Manzini-Moyo@wits.ac.za](mailto:Zibusiso.Manzini-Moyo@wits.ac.za)

Research Director:  
Prof Pundy Pillay  
Tel: 011 717 3808  
Email: [pundy.pillay@wits.ac.za](mailto:pundy.pillay@wits.ac.za)

Wednesday, 13 December 2017

To whom it may concern

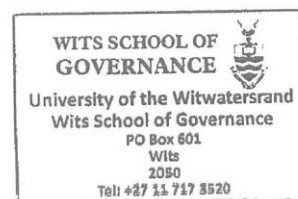
This serves to confirm that Mrs. Pamela Chiratidzo Nyikavaranda student number 910133 is registered for the Masters of Management at the Wits School of Governance. The title of her Research is: **Assessing beneficiaries' perceptions on a housing intervention in Itsoseng Informal Settlement, Johannesburg.**

It is recommended that she be given assistance in terms of information for research purposes towards her Masters Degree. The information will be used for research purposes only.

Please do not hesitate to contact me - if you have any queries.

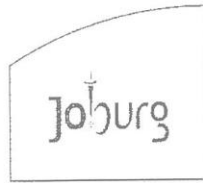
Yours sincerely

Prof Pundy Pillay  
Research Director  
Wits School of Governance



[www.wits.ac.za/wsg](http://www.wits.ac.za/wsg)

2 St David's Place, Johannesburg 2050, Parktown, South Africa  
[admissions.wsg@wits.co.za](mailto:admissions.wsg@wits.co.za) (Email 1), [shortcourses.wsg@wits.ac.za](mailto:shortcourses.wsg@wits.ac.za) (Email 2)  
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Housing Department  
Executive Director

City of Johannesburg Housing  
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Braamfontein  
2017

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Braamfontein  
2017

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Website: [www.joburg.org.za](http://www.joburg.org.za)

a world class african city

19 December 2017

Prof Pundy Pillay  
Research Director

cc: Mr Molapane Mothotoana  
Regional Head: Region C

**RE: PERMISSION AND SUPPORT TO CONDUCT RESEARCH FOR ACADEMIC PURPOSES,  
MS PAMELA CHIRATIDZO NYIKAVARANDA, STUDENT NUMBER, 910133**

Official permission hereby granted for the student to conduct research for academic purposes at the Itsoseng Informal Settlement, in Region C.

We trust that all necessary research ethics will be adhered to in conducting of the study. We will endeavor to provide whatever support required.

Hope this assists.

Kind Regards,

A handwritten signature in black ink, appearing to read "M. Metileni", written over a horizontal line.

Moses Metileni  
Executive Director: Housing

---

## Appendix 3.1: Declaration Form

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### Declaration Form

I am Pamela Nyikavaranda. I am a student at the University of Witwatersrand doing a Master of Management in Monitoring and Evaluation. As part of my coursework, I am doing a research here in Itsoseng Informal settlement with the intention to assess the housing intervention programme that done in your settlement. I am sponsoring this research from my personal savings.

My aim is to check whether Itsoseng informal settlement beneficiaries perceive that the housing upgrading programme has improved their residential quality of life or not. Knowing this will help in adding to the body of knowledge and give recommendations for further improvement in ensuring user improvement and satisfaction. The information collected will remain a property of Witwatersrand School of Governance. The information will only be used for this research in adding to the body of knowledge as well as the any recommendations deemed necessary by the University. No gifts or payments will be awarded to the research respondents for taking part in this research.

Signed..... Date.....



---


## Appendix 4.1: Completed Questionnaire Set

---

### Declaration Form

I am Pamela Nyikavaranda. I am a student at the University of Witwatersrand doing a Master of Management in Monitoring and Evaluation. As part of my coursework, I am doing a research here in Itsoseng Informal settlement with the intention to assess the housing intervention programme that has been done in your settlement. I am sponsoring this research from my personal savings.

My aim is to check whether Itsoseng informal settlement beneficiaries perceive that the housing upgrading programme has improved their residential quality of life or not. Knowing this will help in adding to the body of knowledge and give recommendations for further improvement in ensuring user improvement and satisfaction. The information collected will remain a property of Witwatersrand School of Governance. The information will only be used for this research in adding to the body of knowledge as well as the any recommendations deemed necessary by the University. No gifts or payments will be awarded to the research respondents for taking part in this research.

Signed.......... Date.....24.01.18.....

## Consent Form and Questionnaire for assessing perceptions on a housing upgrade in Itsoseng Informal Settlement, Johannesburg

University of the Witwatersrand  
Wits School of Governance, Johannesburg  
Gauteng Province

### Informed Consent Form

I hereby agree to participate in the research project entitled “Assessing beneficiaries’ perceptions on improving the residential quality of life on a housing intervention in Itsoseng Informal Settlement”. It has been explained well to me that the purpose of the study is to assess the perceptions of Itsoseng beneficiaries as far as the improvement in the residential quality of life is concerned after the housing upgrading intervention. The proposed use of the research, current and in future is to add to the body of knowledge and for any recommendations as seen by the University.

I understand that I am free to contact Mrs Pamela Nyikavaranda in the event that I experience any problem because of my participation in this research on 0728570181 or email her on pamnyik@gmail.com. I have been informed that there are no foreseeable risks save for the unexpected risks that may arise.

I thereby agree to participate as a research participant in the above research project. I agree that my participation in this research is voluntary and that I am free to withdraw from participation when I feel like. I have been informed that there are no gifts or payments awarded to research respondents for taking part in this research.

I have read and understood all that is written in this document

Participant’s signature.......... Date. 24 - 01 - 18.....

## Questionnaire for beneficiaries' perceptions on improvement in residential quality of life following a housing upgrade in Itsoseng informal Settlement, Johannesburg

Please fill in, tick or circle as appropriate

Date of the Research: 24 /month: 01 year: 2016 e.g. 04/05/2001

### Section 1: Demographic Information

1.1	Questionnaire Id :	<u>1</u>
1.2	Gender :	Male <input type="checkbox"/> Female <input checked="" type="checkbox"/>
1.3	Are you employed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1.4	If employed, please state the employment status	Self-employed <input type="checkbox"/> Formally employed <input type="checkbox"/>
1.5	Education level	Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Diploma <input checked="" type="checkbox"/> Degree <input type="checkbox"/> Postgraduate level <input type="checkbox"/>
1.6	Marital Status:	Single <input checked="" type="checkbox"/> Married/Cohabiting <input type="checkbox"/> Separated/Divorced <input type="checkbox"/> Widowed <input type="checkbox"/>
1.7	Age (years)	18-30 <input type="checkbox"/> 31-40 <input type="checkbox"/> 41-50 <input checked="" type="checkbox"/> 51+ <input type="checkbox"/>

### Section 2: Perceptions on the improvement in the house condition

2.1 To what extent do you rate the strength in quality of the upgraded house given to you?	Very poor <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input checked="" type="checkbox"/> Excellent <input type="checkbox"/>
2.1.2 State the reason why to your answer in 2.1	<u>The house is not shaking.</u>
2.2 How do you rate the ventilation conditions in the upgraded house?	Very poor <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input checked="" type="checkbox"/> Excellent <input type="checkbox"/>
2.3 In your own opinion, how do you rate the satisfaction with the living space in the rooms of your upgraded house?	Very poor <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent <input checked="" type="checkbox"/>
2.3.1 State the reason why to your answer in 2.3	<u>because everyone in a house has a room</u>

2.4 What will you prefer to have been included on your upgraded house that is not currently present, in order for you to perceive an improvement in residential quality of life?

.....an electricity.....  
 .....  
 .....

**Section 3: Perceptions on improvement in basic services conditions**

3.1 How do you rate the improvement in sewage facilities following the upgrading?	Very poor <input type="checkbox"/>	Poor <input type="checkbox"/>	Fair <input checked="" type="checkbox"/>
	Good <input type="checkbox"/>	Excellent <input type="checkbox"/>	
3.2 How do you rate the improvement in refuse collection following the upgrading?	Very poor <input type="checkbox"/>	Poor <input checked="" type="checkbox"/>	Fair <input type="checkbox"/>
	Good <input type="checkbox"/>	Excellent <input type="checkbox"/>	
3.3 How do you rate access to clean water after the upgrading?	Very poor <input type="checkbox"/>	Poor <input type="checkbox"/>	Fair <input type="checkbox"/>
	Good <input type="checkbox"/>	Excellent <input checked="" type="checkbox"/>	
3.4 How do you rate the drainage conditions after the upgrading?	Very poor <input type="checkbox"/>	Poor <input type="checkbox"/>	Fair <input type="checkbox"/>
	Good <input checked="" type="checkbox"/>	Excellent <input type="checkbox"/>	
3.5 How do you rate the electricity supply after the upgrading?	Very poor <input checked="" type="checkbox"/>	Poor <input type="checkbox"/>	Fair <input type="checkbox"/>
	Good <input type="checkbox"/>	Excellent <input type="checkbox"/>	

3.6 Which other basic service condition do you wish to have been improved after the upgrading of your house?

.....toilet sometime they broke.....  
 .....

**Section 4: Perceptions on safety**

4.1	The rate of crime occurrence has decreased following the upgrading.			
1. Strongly Disagree	2. Disagree <input checked="" type="checkbox"/>	3. Agree	4. Strongly agree	5. Don't know
4.2	It is safe for the children to play in the surroundings after the upgrading.			
1. Strongly Disagree <input checked="" type="checkbox"/>	2. Disagree	3. Agree	4. Strongly agree	5. Don't know
4.3	Rape occurrence has decreased since the upgrading.			
1. Strongly Disagree	2. Disagree	3. Agree	4. Strongly agree	5. Don't know <input checked="" type="checkbox"/>

4.4 What do you suggest should be done to ensure safety in you upgraded community?

.....-people who are driving car in our community  
 - They must decrease speed because they are  
 .....children who are playing in a street.....

.....  
 .....  
**Section 5: Perceptions on the sense of belonging**

5.1	I am satisfied with the design of the upgraded house.				
1. Strongly Disagree	2. Disagree	3. Agree ✓	4. Strongly agree	5. Don't know	
5.2	I am happy with the living space in the rooms of my upgraded house.				
1. Strongly Disagree	2. Disagree	3. Agree ✓	4. Strongly agree	5. Don't know	
5.2.1	State the reason why to your answer in 5.2				
<p>.....          because... I got... my... on... space... even my...          Siblings...          .....</p>					
5.3	The upgraded house has improved my family feel to belong to this community.				
1. Strongly Disagree	2. Disagree	3. Agree ✓	4. Strongly agree	5. Don't know	

**Section 6: Perceptions on tenure security**

6.1	I am satisfied with the ownership conditions of the upgraded house.				
1. Strongly Disagree	2. Disagree	3. Agree ✓	4. Strongly agree	5. Don't know	
6.1.2	State the reason why to your answer in question 6.1				
<p>.....          because... I can do... everything... I want          like... renovating... it...          .....</p>					
6.2	I am able to improve the house that I got from the upgrading programme.				
1. Strongly Disagree ✓	2. Disagree	3. Agree	4. Strongly agree	5. Don't know	
6.3	In my own opinion, improving my upgraded house can increase the value of my upgraded property.				
1. Strongly Disagree	2. Disagree ✓	3. Agree	4. Strongly agree	5. Don't know	

THANK YOU!

## Appendix 5.1: T Test

Gender		N	Mean	Std. Deviation	Std. Error Mean
HOUSE CONDITIONS	Female	35	3.54	0.85	0.14
	Male	11	3.21	1.05	0.32
BASIS SERVICES	Female	35	3.54	0.62	0.11
	Male	11	3.34	0.63	0.19
SAFETY	Female	34	<b>2.56</b>	<b>0.85</b>	0.15
	Male	11	<b>2.89</b>	<b>0.72</b>	0.22
BELONGING	Female	35	3.16	0.57	0.10
	Male	11	3.09	0.36	0.11
TENURE SECURITY	Female	35	3.01	0.71	0.12
	Male	11	3.10	0.52	0.16
RESIDENTIAL QUALITY OF LIFE	Female	35	<b>3.36</b>	<b>0.46</b>	0.08
	Male	11	<b>3.27</b>	<b>0.45</b>	0.14

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
HOUSE CONDITIONS	Equal variances assumed	0.401	0.53	1.079	44	0.29	0.33	0.31	-0.29	0.96
	Equal variances not assumed			0.964	14.344	0.35	0.33	0.35	-0.41	1.07
BASIS SERVICES	Equal variances assumed	0.125	0.73	0.929	44	0.36	0.20	0.22	-0.23	0.64
	Equal variances not assumed			0.921	16.559	0.37	0.20	0.22	-0.26	0.66
SAFETY	Equal variances assumed	0.785	0.38	<b>-1.162</b>	43	<b>0.25</b>	-0.33	0.29	-0.91	0.24
	Equal variances not assumed			-1.267	19.831	0.22	-0.33	0.26	-0.88	0.22
BELONGING	Equal variances assumed	4.328	0.04	0.362	44	0.72	0.07	0.18	-0.30	0.43
	Equal variances not assumed			0.459	27.356	0.65	0.07	0.14	-0.23	0.36
TENURE SECURITY	Equal variances assumed	1.660	0.20	-0.381	44	0.70	-0.09	0.23	-0.56	0.38
	Equal variances not assumed			-0.449	23.015	0.66	-0.09	0.20	-0.50	0.32
RESIDENTIAL QUALITY OF LIFE	Equal variances assumed	0.046	0.83	<b>0.553</b>	44	<b>0.58</b>	0.09	0.16	-0.23	0.41
	Equal variances not assumed			0.557	16.971	0.58	0.09	0.16	-0.24	0.42

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## Appendix 6.1: Demographics Information

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### 1.0 Demographic Information

#### 1.1 Gender

A total of 46 respondents took part in the study and about three quarters (76%) of them were female and 24% were male.

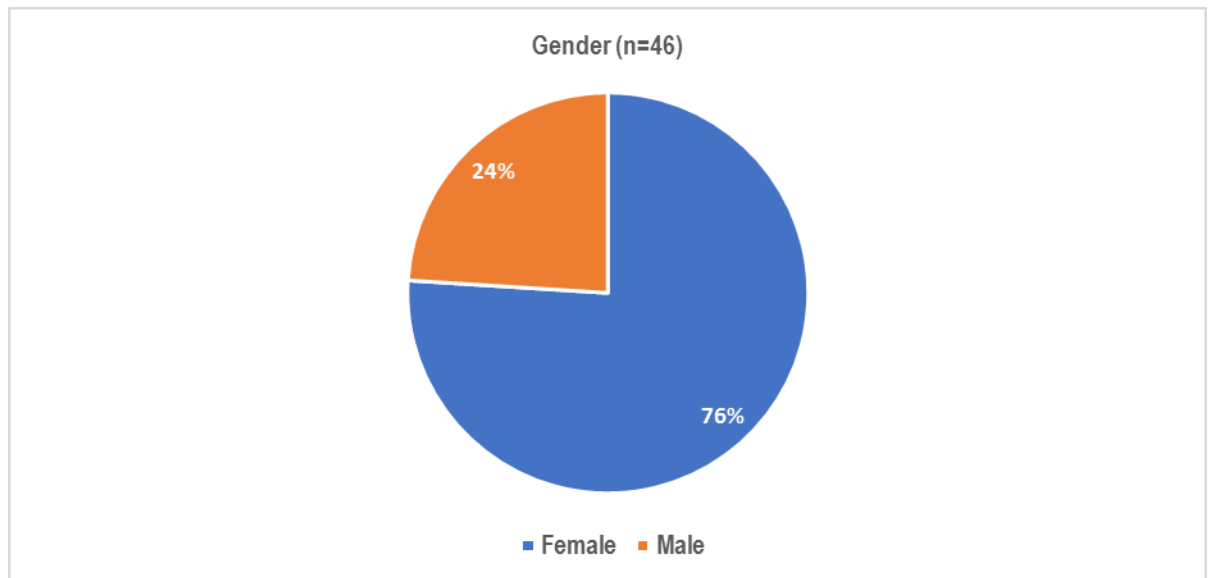


Figure 1: Gender

#### 1.2 Age

A total of 17% of the study participants were aged 18-30 years, 37% were aged 31-40, 24% were in the 41-50 years category and the remainder (22%) were 50 years or older.

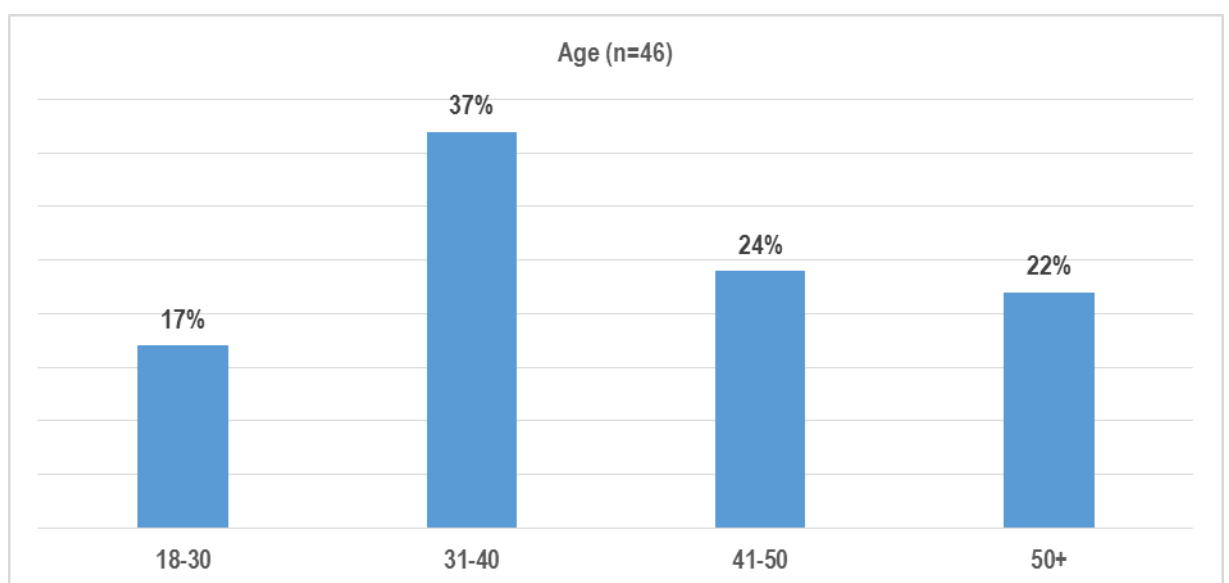


Figure 2: Age

### 1.3 Marital status

About three quarters (74%) of the respondents were single, 24% were married and 2% widowed.

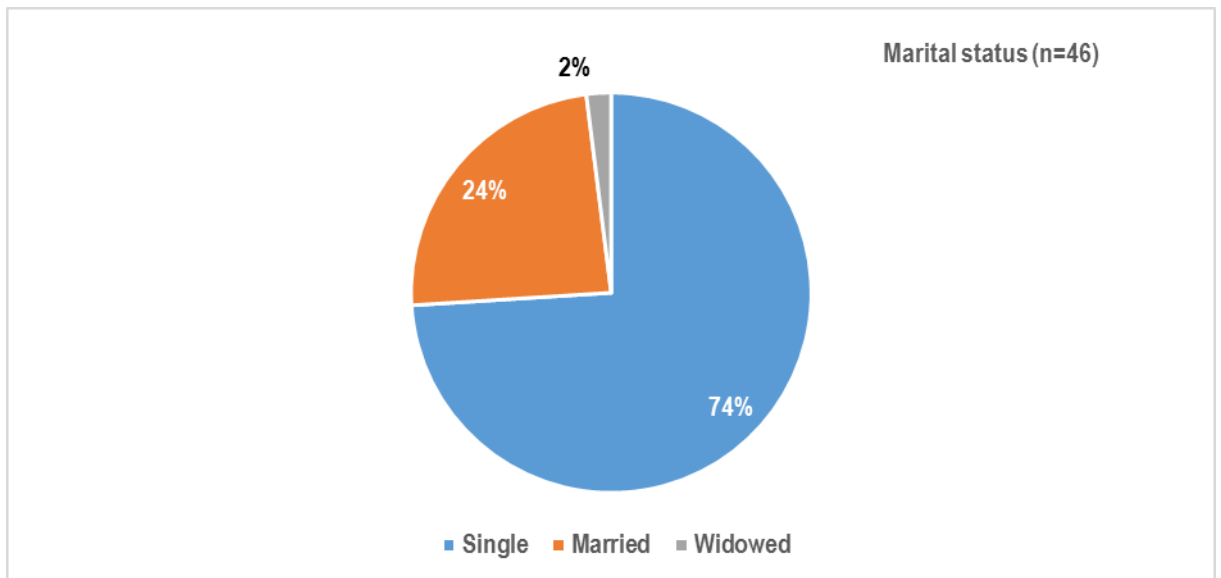


Figure 3: Marital status

### 1.4 Education

About two thirds (65%) of the respondents had secondary school as their highest level of education and 20% had only gone as far as primary school. The percentage that had attained tertiary level education was 15%.

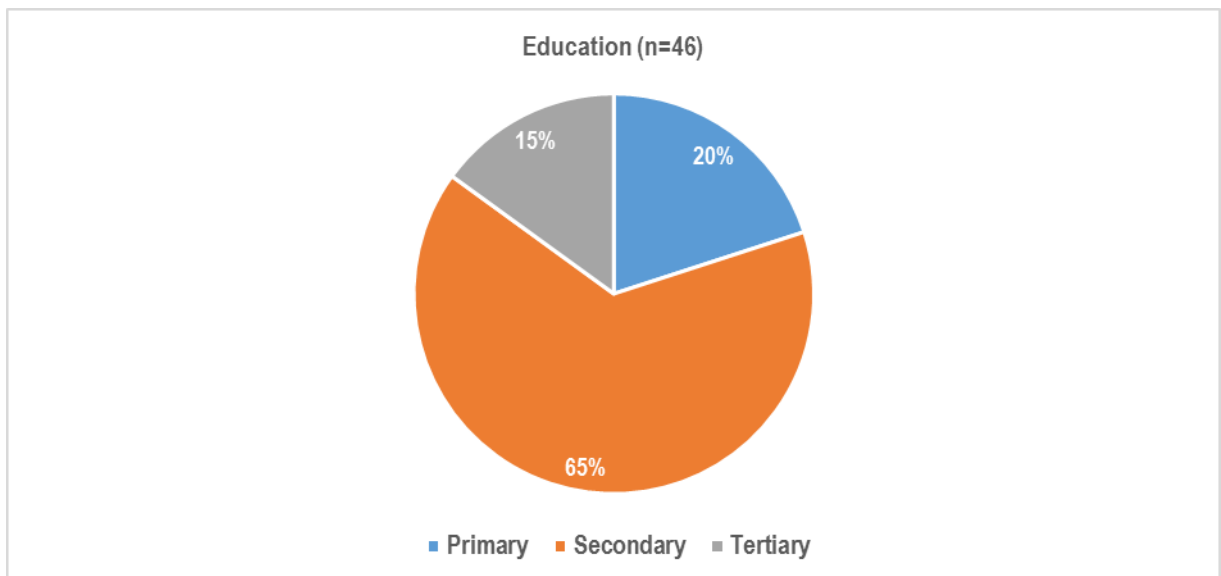


Figure 4: Education

### 1.5 Employment status

The majority (83%) of the respondents were unemployed, while 11% were formally employed and the remainder (6%) self-employed.



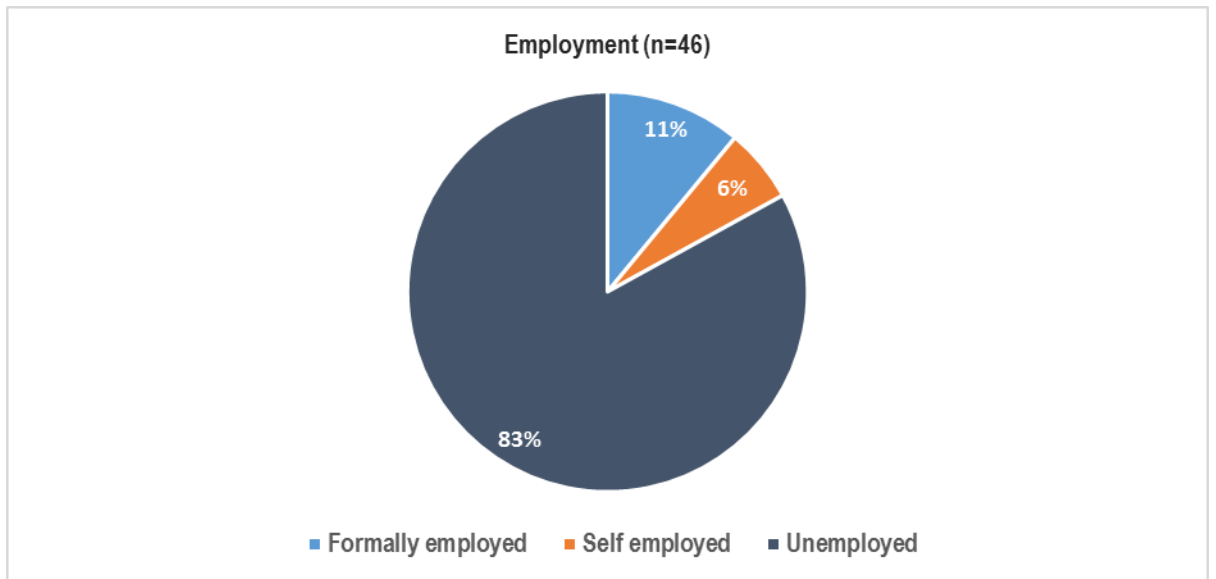


Figure 5: Employment status

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## Appendix 7.1: Research Reliability

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Itsoseng Informal Settlement Data Output			
Scale reliability			
Scale	Number of items	Cronbach's Alpha	Average Inter-Item Correlation
Residential Quality of Life (Combined)	17	0.878	0.478
House conditions	3	0.771	0.705
Basic services	5	0.606	0.397
Security	3	0.675	0.558
Belonging	3	0.549	0.597
Tenure security	3	0.600	0.514