

Conflicting quality of life rationalities between spatial decision-makers and the South African poor

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ABSTRACT

With high levels of inequality, poverty and high crime rates, South Africa tends to rank relatively low on the quality of life indexes, i.e. South Africa forms part of the bottom 10 countries on the Happy Planet Index. In view of this, spatial decision-makers are often criticised to have failed in delivering meaningful improvements in settlements with an urgent need for an improved quality of life. Urban areas are, however, quite complex and the various role-players within this system have different and often conflicting, views and visions towards a “good and happy” human settlement. These conflicting rationalities are regarded as one of the key obstacles in overcoming the life quality challenges in South Africa. Considering these life quality challenges in South Africa and the substantial influence that the spatial organisation of urban areas has on life quality, it is argued that finding solutions to these life quality problems are, in part, the responsibility of the spatial planner. Subsequently, this thesis explored conflicting quality of life rationalities between spatial decision-makers and the South African poor. The research followed a grounded theory research approach to ground the analysis in data without preconceived ideas. Qualitative storyline and case study analyses followed a preliminary literature review to avoid repetition and to enhance sensitivity to nuances in the data. The storyline analysis considered the underlining quality of life rationality in South African directives guiding spatial decision-making, along with that in four Quality of Life Index reports. The case study analysis explored the quality of life rationality in 8 low-income settlements, namely Alabama, eMbalenhle, Freedom Park, Kanana, KwaDela, Lebohang Matlwangtlwang and Zamdela. Secondary data of semi-structured interviews regarding broad quality of life topics were utilised for this case study analysis. The data for both analyses were respectively reduced by a process of coding on ATLAS.ti, a computer-aided qualitative data analysis software. The coding set revealed the broad categories of the quality of life and the quality of life rationalities were reflected upon according to these categories. To consider conflicting quality of life rationalities, the findings of the two analyses were juxtaposed. The research concluded that the conflicting rationality between spatial decision-makers and the South African poor mainly stem from the diversity of the South African context. Subsequently, this research contributed a conceptual framework towards avoiding conflicting quality of life rationalities during strategic spatial planning and recommended spatial strategies to address life quality challenges and scope for future research.

Key terms: Conflicting rationalities, Quality of life, South Africa, Spatial decision-makers, Spatial planning, Urban poor

OPSOMMING

Met uiterse ongelykheid, armoede en hoë misdadisyfers, is Suid-Afrika relatief laag op die lewenskwaliteit-indeks rangordes. Suid-Afrika vorm, o.m., deel van die laagste 10 range vir lande op die *Happy Planet*-Indeks. Met in agneming hiervan word ruimtelike besluitnemers dikwels gekritiseer dat hul nie daarin slaag om betekenisvolle veranderinge te bewerkstellig in nedersettings met 'n dringende behoefte aan verbeterde lewenskwaliteit nie. Stede is egter redelik kompleks en die verskeie rolspelers binne hierdie stelsel het verskillende, en dikwels teenstrydige, sienings van en visies vir 'n "goeie en gelukkige" menslike nedersetting. Hierdie teenstrydige rasionaliteite word beskou as 'n belangrike struikelblok vir strategieë om lewenskwaliteit-uitdagings in Suid-Afrika te oorkom. Aangesien 'n stedelike area se ruimtelike organisering 'n wesenlike invloed op lewenskwaliteit het, word geargumenteer dat die taak om oplossings vir lewenskwaliteit-verwante probleme te vind, gedeeltelik op ruimtelike beplanners rus. Hierdie proefskrif het, vervolgens, teenstrydige lewenskwaliteit-rasionaliteite tussen ruimtelike besluitnemers en die Suid-Afrikaanse armes ondersoek. Die navorsing het 'n begronde teorie-benadering gevolg om die data analise sonder vooropgestelde idees te benader. 'n Voorlopige literatuuroorsig, om herhaling te vermy en om sensitiwiteit vir nuanses in die data te bevorder, is gevolg deur twee data analyses. 'n storielynanalise het die onderliggende lewenskwaliteit-rasionaliteit in Suid-Afrikaanse direkteie wat ruimtelike besluitneming rig, tesame met rasionaliteite in vier lewenskwaliteit-indeksverslae, in ag geneem. 'n Gevallestudie-analise het die lewenskwaliteit-rasionaliteit in agt lae-inkomste nedersettings ondersoek. Sekondêre data van semi-gestruktureerde onderhoude met betrekking tot breë lewenskwaliteit-onderwerpe is vir hierdie analise gebruik. Die data vir beide analyses is onderskeidelik gereduseer deur 'n proses van kodering op ATLAS.ti, 'n rekenaargesteunde kwalitatiewe-data-analise-sagteware. Die koderingstel het die breë kategorieë van lewenskwaliteit uitgelig en hiervolgens is gereflekteer oor die onderskeie lewenskwaliteit-rasionaliteite. Om teenstrydige lewenskwaliteit-rasionaliteite te oorweeg, is die bevindinge van die twee analyses uiteindelik naas mekaar gestel en is bevind dat die teenstrydige rasionaliteit tussen ruimtelike besluitnemers en die Suid-Afrikaanse armes hoofsaaklik spruit uit die diversiteit van die Suid-Afrikaanse konteks. Vervolgens is 'n konseptuele raamwerk bygedra om teenstrydige lewenskwaliteit-rasionaliteite tydens strategiese ruimtelike beplanning te vermy. Verder is aanbevelings gemaak vir ruimtelike strategieë om lewenskwaliteit-uitdagings aan te spreek en vir toekomstige navorsing.

Sleuteltermes: Ruimtelike beplanning, Teenstrydige rasionaliteite, Lewenskwaliteit, Ruimtelike besluitnemers, Stedelike armes, Suid-Afrika

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CHAPTER 1: INTRODUCTION

1.1 Introduction

During the offset of the study the rationality for organising and improving space were grappled with. Whilst exploring these questions, it was found that spatial decision-makers are often criticised to have failed in delivering meaningful improvements (Binns & Nel, 1999:391; Maganadisa *et al.*, 2021) in settlements with an urgent need for an improved quality of life. Considering the ample number of these settlements in South Africa and the main purpose of spatial planning being to create an equal and humane world (Steyn, 2015:39), it is argued that finding solutions to these life quality problems are, in part, the responsibility of the spatial planner.

The state of life quality in South Africa is illustrated by the aggregate inequality (StatsSA, 2019b:144); 40% of the population living below the lower bound poverty line in 2015 (StatsSA, 2021f) and 12.7% of households living in informal dwellings in 2019 (StatsSA, 2019a:31). South Africa, furthermore, forms part of the “bottom 10” countries of the Happy Planet Index (HPI & NEF, 2016) and are rated 109th amongst 153 countries in the UN World Happiness Report (Helliwell *et al.*, 2020). These low levels of life quality, especially amongst the South African poor, are attributed to an increasing income inequality, high crime rates and the HIV/AIDS pandemic (Mahadea, 2017:302). This is further amplified by South Africa’s historic development trends, where policy enforced spatial segregation, based on racial considerations (Musakwa *et al.*, 2017:91), between 1950 and 1994 (Lucas, 2018). This pushed those living with limited incomes, the urban poor¹ (Derwin & Greenberg, 1972:2), to the periphery of urban areas, far away from economic opportunities. The marginalisation has been further amplified since 1994 by rapid urbanisation (Van Noorloos & Kloosterboer, 2018:1224) and a subsequent growth in low-income settlements in and around the urban periphery (Mahajan, 2014:64).

To a large extent, the failure to deliver meaningful improvements are attributed to the “conflicting rationalities”² often present between spatial decision-makers and the urban poor (De Satgé & Watson, 2018:3). Many scholars (i.e. Fung, 2015:514-515; Nhemachena *et al.*, 2011; Watson,

¹ In South Africa the upper-bound poverty line is R1 335 per person per month, but most of the urban poor lives on much less than this (Businesstech, 2021b).

² Conflicting rationalities refer to the “frequent clashes between state visions and plans and the everyday lives of urban residents in southern contexts” (De Satgé & Watson, 2018:3).

2009; Watson, 2016), furthermore, argue that spatial planners tend to impose a Western viewpoint and do not sufficiently consider the “private lives and concerns of ordinary citizens” during this process of shaping the physical environment. To address these criticisms, Cornelius *et al.* (2017:422,424) propose that a unique philosophy be developed to encourage spatial planners to pursue innovative and context-appropriate approaches.

Considering the current urban state and the criticism of spatial planning practice, this research considers and compares the quality of life rationalities³ 1) guiding spatial decision-makers and 2) of the South African poor, to ultimately explore conflicting rationalities between South African spatial decision-makers and “ordinary citizens”.

1.2 Problem statement

From section 1.1 above it is apparent that the levels of life quality in South Africa is low and is further amplified by skewed patterns of development. Even though spatial decision-makers have endeavoured to mitigate these challenges, they have been criticised for not properly considering the local context and imposing certain viewpoints. This calls for consideration of different quality of life rationalities involved in the process of organising space.

1.3 Hypothesis

As discussed in section 1.1, many of the urban quality of life challenges are attributed to conflicts in rationalities between spatial decision-makers and the urban poor. Within that context the research hypothesis is:

There is a gap in spatial decision-making where conflicting quality of life rationalities occur between spatial decision-makers and the South African poor.

1.4 Research questions

In view of the problem statement and assuming the hypothesis is correct, the following research questions were formulated:

³ Quality of life rationalities refer to the rationale of what a quality life entails.

1. Where does the gap in spatial decision-making generating conflicting quality of life rationalities between spatial decision-makers and the South African poor, occur?
2. What spatial decision-making measures could bridge conflicting quality of life rationalities?

1.5 Research aims and objectives

In response to the problem statement this research aims 1) to explore conflicting quality of life rationalities between spatial decision-makers and the South African poor and 2) to provide strategic spatial planning recommendations to bridge conflicting quality of life rationalities, by following the subsequent research objectives:

1. To explore the quality of life rationality guiding spatial decision-makers.
2. To explore the quality of life rationality of the South African poor.
3. To juxtapose the quality of life rationalities of these role-players.

1.6 Delineations

1.6.1 Research field

This study is conducted within the field of spatial studies, focusing on the quality of life. Research within this field is concerned with the relation and interaction between spatial organisation, policy and life quality (Lau *et al.*, 2018:158; Sapena *et al.*, 2021).

1.6.2 Spatial decision-makers

In South Africa, according to sections 4 and 5 of the Spatial Planning and Land Use Management Act 16 of 2013, the national, provincial and local spheres of government 1) compile, approve and review directives guiding land uses, land development and spatial planning and 2) control, regulate and review the land uses and development. Spatial planners, furthermore, prepare 1) “any land development application for the amendment of or departure from any provision” aligned with the above-mentioned directives and 2) layout plans that establish structure, hierarchy and arrangement of land uses (SACPLAN, 2021).

Spatial decision-makers, therefore, include the national, provincial and local spheres of government and spatial planners. As mentioned above, these entities organise space and create and implement policy measures (Joscelyne, 2015:2). It is argued that section 7(e)(v) of the Spatial Planning and Land Use Management Act 16 of 2013 mandates the spatial decision-maker to

bridge conflicting rationalities between them and (amongst others) the South African poor by instructing spatial directives to “inform and empower members of the public”.

1.6.3 The South African poor

The low-income settlements where many of the South African poor reside are characterised by high crime rates, poverty and informality – both the physical housing structure and economic activity (refer to section 1.1 above). Bertaud (2018:271) explains that, to escape this poverty (and all the ills that come with it), these low-income households need “good access to the job markets”. They are, however, largely concentrated on the periphery of urban areas far from the economic hubs (De Satgé & Watson, 2018:47), a remnant of apartheid spatial development patterns where “black”, “coloured”, “Indian” and “white” people were spatially segregated and most of the economic activity occurred in the then “white” urban centres (Bertaud, 2018:271; Davis, 2006:51-52; De Satgé & Watson, 2018:2-3). Since 1994, large government funded housing projects on the periphery of urban areas, along with urbanisation have reinforced these historic development patterns. The South African urban poor are, subsequently, poorly located (De Satgé & Watson, 2018:68) with limited access to the economic opportunity offered by urban areas (Bertaud, 2018:271).

1.6.4 Research setting

In view of the historic development patterns of South Africa and the location of the urban poor (refer to section 1.6.3 above), this research is set in peri-urban landscapes.

In South Africa, as noted in section 1.6.3 above, these peri-urban landscapes often consist of low-income settlements where most of the residents have limited incomes. These low-income settlements are not limited to specific housing types and may include both formal and informal housing.

1.6.5 Spatial decision-making and the life quality of the urban poor

This research acknowledges that many of the challenges faced by the urban poor are dictated by broader economic, social and natural events which, for the most part, are heavily influenced by the socio-economic and socio-political environment.

Nonetheless, as spatial planners often assist in the formulation of sub-national policies, they have the potential to influence some of the directives that shape the broader economic, social and

natural events. More generally, they also have an indirect influence on the life quality of “ordinary citizens” through spatial organisation, for example, by affecting accessibility, mobility and the inclusivity of urban areas. Furthermore, article 25(1) of the Spatial Planning and Land Use Management Act 16 of 2013 requires that land use schemes promote (a) economic growth, (b) social inclusion, (c) effect land development and (d) minimal impact on public health, the environment and natural resources. Therefore, it is argued that, to bridge gap in spatial decision-making where conflicting quality of life rationalities between spatial decision-makers and the South African poor occur, is an important part of the spatial decision-maker’s role in organising space.

1.6.6 The individual experience of life quality

The construct of the quality of life is detailed in Chapter 3. It is, however, important to note that subjective well-being is not within the scope of this research. This refers to an individual’s “cognitive and affective evaluations” of their life, i.e. emotional reactions and “cognitive judgements of satisfaction and fulfilment” (Diener *et al.*, 2005:63). It is, however, argued that inferences can be made about individual experiences of objective life quality, i.e. external determinants for a quality life. These individual experiences shape an individual’s quality of life rationality and, therefore, it is argued that both the spatial decision-maker and the “ordinary citizen” have a quality of life rationality. Therefore, as noted in section 1.5 above, this research aims to explore these different quality of life rationalities in order to understand where the gap in spatial decision-making occur that generates conflicting quality of life rationalities between spatial decision-makers and the South African poor.

1.7 Philosophic position

This section explicates the philosophic position guiding the approach to and interpretation of this inquiry (Birks & Mills, 2015:4; MacCallum *et al.*, 2019; Rosenberg, 2016:3).

1.7.1 Ontological position⁴

This research is done from a subtle realism viewpoint - the belief 1) that “an independent, knowable reality exists independently of social scientists”, 2) that “cultural assumptions prevent

⁴ Beliefs of what may be known about reality (Ponterotto, 2005:130).

direct access to this world” and 3) that, knowledge is not certain because it is a human construction “based on assumptions and purposes” (Blaikie, 2010:94).

1.7.2 Epistemological position⁵

This research is done from an objectivism viewpoint. Research is thus believed to be the discovery of “the patterned reality that exists in the world”, rather than the creation of new knowledge and, therefore, the researcher only serves to *explain* reality (Daly, 2007:23).

1.7.3 Worldview⁶

This research is done from a constructivism viewpoint. The constructivist position is deemed appropriate, since this position “emphasizes multiple realities” and it is believed that both the researcher and research participants have different “positions and subjectivities” (Charmaz *et al.*, 2018:417).

1.8 Theoretical framing

This section explicates the author’s understanding of the context and empirical reality within which this research is conducted (MacCallum *et al.*, 2019:19,20; Næss & Saglie, 2000).

1.8.1 The urban

Urban areas are complex systems, affected by conflicts and interactions between diverse social, economic and environmental factors (Li *et al.*, 2009:134) and are, therefore, regarded differently, depending on the viewpoint.

In *economic terms*, urban areas provide agglomeration economies “related to the higher productivity that agents could achieve by being close to other producers or market agents” (Royuela *et al.*, 2010:552) and serve as “places where goods and services are compared, evaluated, purchased and used” (Pacione, 2009:22). In *environmental terms*, urban areas are a source of extensive pollution (Montgomery, 2013:3) and biodiversity loss, but also potential places for thriving ecosystems (Kuras *et al.*, 2020:2) providing solutions to many urban challenges

⁵ Beliefs concerning justifiable knowledge (Birks & Mills, 2015:52).

⁶ Beliefs of the procedure of science (Daly, 2007:28).

(D'Acci, 2014:532). In *social terms*, urban areas represent “a mixed blessing for their inhabitants” as a result of socio-spatial division and diversity (Pacione, 2003:1).

1.8.2 Lives and capabilities

Within the complex system of urban areas, ordinary citizens lead their lives – “a combination of various beings and doings” (Nussbaum & Sen, 1993:3). A person’s position in terms of this combination may be judged from two perspectives, namely 1) their actual achievement (functionings) and 2) their freedom, or opportunity, to achieve (capability) (Crocker & Robeyns, 2009:62; Sen, 1992:31). *Actual achievement* is reached by choices made from different sets of options, influenced by individual preferences and motivations (Dhongde & Pattanaik, 2009:19). The *freedom to achieve* is, however, influenced by the actions of others (Crocker & Robeyns, 2009:62).

1.8.3 The spatial decision-maker

The socio-spatial variations in human life quality, present within urban areas, are a fundamental concern for policy-makers and citizens alike (Bodur & Yüksel, 2017:54; Pacione, 2003:1). The technical approach to spatial organisation is guided by policy objectives, which are political by nature, since these are set by the governing authorities (Bertaud, 2018:358).

1.8.4 Conflicting rationalities

Deep conflicts exist, however, between the governing authorities, markets and “ordinary citizens” (De Satgé & Watson, 2018:3,25), holding different interests and following a different logic (Campbell, 1996:215-217; De Satgé & Watson, 2018:3,25) in their view of and vision towards, a “good and happy” human settlement.

1.8.5 The spatial planner

The spatial planner is, thus, caught in an ambiguous position (Healey, 2010:146). They need to meet policy objectives, consider and mitigate their potential impact (Bertaud, 2018:358; Campbell *et al.*, 2014:191; Wachs, 2013:472) and consider the socio-spatial variations from all the co-existing viewpoints within urban areas (Bertaud, 2018:16,17; Campbell *et al.*, 2014:188; Davidoff, 1965:4,5; Glasson & Marshall, 2007).

During this process of shaping physical space (Taylor, 1998:158), spatial planners are, ambitiously (Campbell *et al.*, 2014:188; De Satgé & Watson, 2018:36), believed to assist in promoting the freedom to achieve (capability).

1.8.6 Rationality and power

Adding to the ambiguity of the spatial planner's position, is rationality and power. In this regard Flyvbjerg (1998:319-321) points to the Kantian view that power offers the ability to define what counts as reality and rationality. It may, therefore, be argued that just as the researcher is prevented from direct access to the research object (refer to section 1.7.1 above), the spatial decision-maker may be limited by power to apply rationality. Further to this, according to Nietzschean insight, rationality may also be hindered by the spatial decision-maker's power to interpret (Flyvbjerg, 1998:320). It may, therefore, be asserted that the nature of the relations between rationality and power can affect planning outcomes (Adjei-Poku, 2017:56).

1.8.7 Place and context

In view of the variety of actors involved in the complex urban system, it is argued that effective and meaningful spatial organisation is not possible without considering the context – unique to each place (De Satgé & Watson, 2018:11). The history, institutions, macro-politics, policies and socio-economic conditions all shape “the richness and particularities of the place” (Beauregard, 2013:288,289).

Experiences within the same urban area also differ “between rich and poor, privileged and deprived, skilled and unskilled, employed and unemployed, healthy and ill, old and young, male and female, resident and immigrant, included and excluded and inner city and outer city” (Pacione, 2003:1) and according to living preferences – some prefer the vibrant urban life while others may prefer the vast openness and freedom of life outside urban structures (Eloff, 2020; Green, 2014:450; Pacione, 2003:1).

This adds to the complexity of organising space and it is, therefore, important to understand the delicate balance between what may be shared across different contexts and what is specific to a place (De Satgé & Watson, 2018:24).

1.8.8 Urban South Africa

The effect of spatial changes is, unsurprisingly, regarded differently, depending on the viewpoint and context. Urban policy documents and academic publication for urban studies often open with “alarmist figures and predictions on city size and growth”, painting a crisis in urban Africa, “linked to rapid urbanisation, growing poverty and inequality, [...] weak governance”, fractured civil society and informality (De Satgé & Watson, 2018:2,36,46). Even though this rapid expansion of urban boundaries is often believed to cause congestion, poor environmental quality, criminality and housing deficiencies, it may also have positive effects on economic growth (Li *et al.*, 2009:134; Royuela *et al.*, 2010:552), since urbanisation provides agglomeration benefits that induces economies of scale and leads to higher economic efficiency (Li *et al.*, 2009:134; Royuela *et al.*, 2010:552).

The social and spatial realities accompanying this urbanisation, poverty, inequality and informality can, however, not be ignored. In South Africa, urban areas are rapidly growing beyond administrative boundaries, with the urban poor living on the periphery of urban areas in informal housing (De Satgé & Watson, 2018:47). Informal backyard rentals within urban areas also significantly increase the density of these urban areas and increase the pressure on basic service delivery (Lategan *et al.*, 2020:100; Todes *et al.*, 2010:338). The agglomeration benefits and subsequent economic growth, that attracted the poor in the first place, therefore, become hindered by the “increasing poverty levels, [and] environmental decay” (Greyling & Rossouw, 2017:1052).

1.9 Significance of the study

It was suggested in section 1.1 above that there is an increasing consensus that spatial decision-makers do not properly consider the local context and impose certain viewpoints on inhabitants (Watson, 2016). This debate is mostly theoretical by nature and little consensus has been reached on how to address this problem (Zakhour, 2020:350). Subsequently, this research endeavours to add to the discourse about bridging the rationality gap between spatial decision-makers and “ordinary citizens”.

1.10 Limitations

The main limitation for the study is that the case studies that were included in the empirical analysis are clustered within a specific geographical area. Cultural, ethnical and traditional

customs and thought processes differ and the quality of life rationality of some of the South African poor may not have been included due to the contextual setting of the study. It is, furthermore, recognised that life within South African low-income settlements is exceedingly complex, unpredictable and irregular (Charman *et al.*, 2020:8). It is, therefore, suggested that the study be replicated in other contexts where the South African poor reside and in different time-periods, to address these limitations.

1.11 Ethical approval

This research project was ethically approved by the North-West University's Faculty of Natural and Agricultural Sciences Ethics Committee (ethics number: NWU-01951-20-A9). Please refer to Addendum A1 for the ethics letter of approval.

1.12 Structure of the thesis

The structure of this thesis is presented in Table 1.1.

Table 1.1: Thesis structure

Chapter	Object
1	Contextualising the study
2	Explicating the research design of the study
3	Scoping the quality of life construct
4	<i>Objective 1:</i> To explore the quality of life rationality guiding spatial decision-makers
5	<i>Objective 2:</i> To explore the quality of life rationality of the South African poor
6	<i>Objective 3:</i> To juxtapose the quality of life rationalities of these role-players
7	Recommending a conceptual framework towards reducing conflicting quality of life rationalities
8	Reflecting on the research process, findings and contribution

1.13 Closing remarks

This chapter provided the context within which and wherefrom the current study is conducted. The research design that was followed to address the research problems and meet the research objectives is discussed in the following chapter.

CHAPTER 2: RESEARCH DESIGN

2.1 Introduction

In order to ensure quality and justified claims and interpretations from this research, a thorough research design was created (Farthing, 2016:2-3), visually presented in Figure 2.1 below and discussed in the ensuing sections.

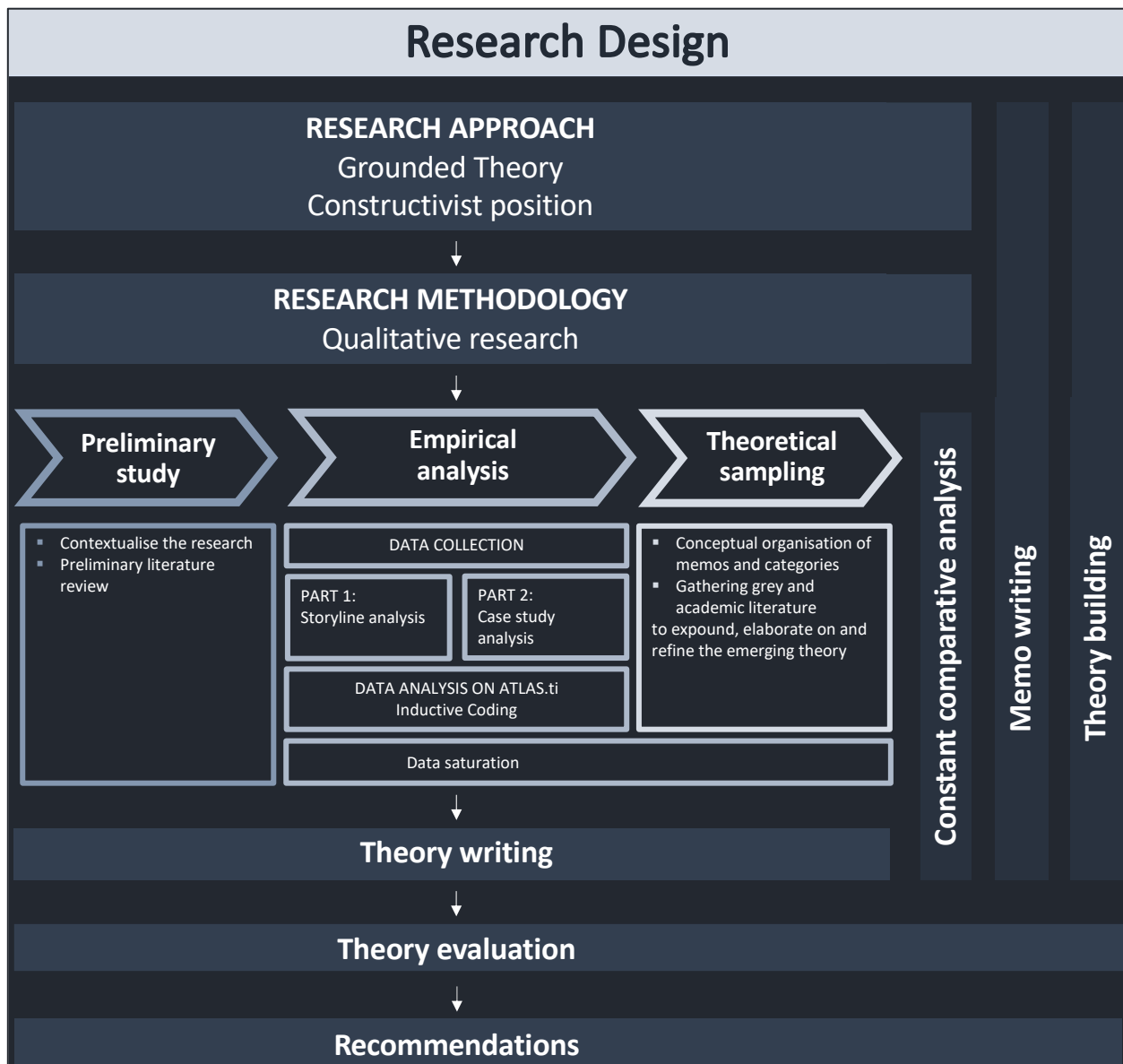


Figure 2.1: The research design

This research design was informed by the researcher's philosophic position (Birks & Mills, 2015:50) and theoretical framework (MacCallum *et al.*, 2019:19-20; Næss & Saglie, 2000), explicated in Chapter 1, sections 1.5 and 1.6 and is discussed in the following sections.

2.2 Research approach

The *grounded theory* research approach is deemed appropriate for gaining an understanding of quality of life rationalities as it is designed to acquire new knowledge (Birks & Mills, 2015:17) without preconceived ideas (Du Plessis, 2016:217). Allen and Davey (2018:222,225) argue that grounded theory suits the *spatial studies* research field well, since it allows for subjective experiences to be abstracted from the real world to form theoretical insights.

Unlike most research approaches, grounded theory is firstly grounded in data (Cohen *et al.*, 2011:598) with “iterative strategies of going back and forth between data and analysis” (Charmaz *et al.*, 2018:1). During this process of going “back and forth”, emerging categories are expounded, elaborated upon and refined by consulting grey and academic literature (Du Plessis, 2016:225,227). As is indicated in Figure 2.1 above, grounded theory research follows a qualitative research methodology (Charmaz, 2014:14; Cohen *et al.*, 2011:598; Du Plessis, 2016:218),

2.2.1 Memo writing and Theory building

There are two ongoing processes throughout the entire research process, namely: memo writing and theory building. Memo writing is widely acknowledged as an integral part of grounded theory research (Birks & Mills, 2015:11; Du Plessis, 2016:226) and is described as narrated records of the research process (Lempert, 2007:247), used to elaborate on processes and assumptions arising during the research process (Charmaz *et al.*, 2018:429). From this memo-writing, the theory (or eventual conclusion) is formulated (Cohen *et al.*, 2011:600) – a process referred to as theory building.

2.2.2 Constant comparative analysis

Since grounded theory commences with inductive data (Charmaz, 2014:1) to avoid “imposing existing theories or knowledge on the study processes and outcomes” (Birks & Mills, 2015:22), the empirical analysis is directly followed by the preliminary study. Concurrently with data analysis, theoretical sampling is done (Cohen *et al.*, 2011:601) in order to elaborate and refine the emerging theory (Birks & Mills, 2015:69,77-78; Charmaz, 2014:192; Charmaz *et al.*,

2018:424; Cohen *et al.*, 2011:599; Du Plessis, 2016:227). “The current conversation of the field” is thereby entered (Charmaz, 2014:309). Throughout this process, a constant comparative analysis is done to assure theoretical integration (Birks & Mills, 2015:12) and to fill any gaps identified during the research process (Du Plessis, 2016:225).

2.2.3 The literature review

In grounded theory research, the literature review has been regarded as completely unnecessary (Birks & Mills, 2015). Charmaz *et al.* (2018:419), however, argues that a preliminary literature review is important to avoid repetition, to stimulate analytical and critical questions and to enhance sensitivity to nuances in data. As is indicated in Figure 2.1 above, a preliminary literature review was, therefore, conducted for this research.

2.2.4 The empirical analysis

To explore conflicting rationalities between spatial decision-makers and the South African poor, the empirical analysis was divided into two parts. The first considering the quality of life rationalities guiding spatial decision-makers and, the second considering quality of life rationalities of the South African poor.

2.3 Methods for the literature review

A scoping literature review was used to provide an overview of the quality of life academic discourse (Xiao & Watson, 2019:99).

2.3.1 Literature collection methods

The literature for the scoping review was gathered systematically, using the Scopus database (Farthing, 2016:46). The database was searched using key words (Creswell & Creswell, 2018:28) that were identified from the content of Chapter 1 and was supplemented with words found during the analysis. The following key words were combined with the term “*quality of life*” during every search: *urban, cities, settlement, development, planning, physical environment, spatial planning, city planning, urban planning, community planning, sustainable planning, spatial development, economic development, urban development and informal settlements*. The search was sorted by relevance, filtered by *title, key words and abstract* and limited to *social sciences, engineering, arts and humanities, environmental sciences, multidisciplinary, economics, econometrics and finance, earth and planetary sciences, decision sciences and undefined*. The first 50 articles from each

key word search were collected. Access could not be gained to some texts but, when possible, the abstract was still used. A total number of 600 papers were subsequently collected.

2.3.2 Filtering of collected literature

The gathered literature was filtered to only include those studies related to the spatial dimension. It was, however, found that many spatial planning studies are done from the premise that the ultimate motive for spatial planning is to increase the quality of life, but only studies that included quality of life as part of their inquiry and not only as their theoretical underpinning, were included for analysis. Only papers written in English were included. When an English abstract was available to a paper written in another language, it was, nevertheless included. A total number of 205 papers were subsequently analysed.

2.3.3 Literature analysis and reduction

To summarise and report on the current quality of life discourse, a textual narrative synthesis was conducted (Xiao & Watson, 2019:95). The data was reduced by assigning codes to (labelling) related literature content and grouping these codes into categories (Cohen *et al.*, 2018:668). For this purpose, ATLAS.ti, a “computer-aided qualitative data analysis software” (Frieze, 2012:2) was used to increase the validity of research findings and to ensure transparency of the process (Claasen, 2018:13).

During this process, a list of indicators to measure life quality was identified. After the empirical analysis, this list was divided according to the identified categories (explained in section 2.3.2 above). Similar indicators were assigned one label (corresponding to those of the empirical analysis) and the fifteen most cited indicators are presented in Chapter 3, section 3.4. The full list of indicators along with the assigned labels are presented in Addendum B1.

2.3.4 Data presentation

The literature review results are narratively presented in Chapter 3 and, where necessary, theoretical sampling was used to elaborate on the findings from the textual narrative synthesis.

2.4 Methods for the empirical analysis, part 1

Embedded within the policy, legislation and frameworks that shape “the understanding of the people in power”, are the beliefs and worldviews of the writers thereof (Farthing, 2016:138;

MacCallum *et al.*, 2019:193). A thorough analysis of such texts may, therefore, assist in gaining an understanding of spatial decision-makers' quality of life rationality. To this end, MacCallum *et al.* (2019:194) recommend a storyline analysis, where the implicit arguments are examined, "to identify which storylines underwrite its recommendations".

2.4.1 Data collection

Two sets of texts were collected, namely 1) international Quality of Life Index reports and 2) South African directives. The first provided a point of departure for the different categories of life quality and its association with the quality of life. The second illustrated the quality of life rationalities that guides spatial decision-making in South Africa.

2.4.1.1 Data collection: international Quality of Life Index reports

These indexes were sourced through internet document collection. The term *quality of life* and synonyms for *quality of life*, as found during the literature review, was coupled with *index*, *framework* and *report* as keywords for the search. The indexes were then filtered to only include those that incorporate the spatial dimension. As the storyline analysis is a thorough and in-depth analysis, MacCallum *et al.* (2019:194) recommend that only a few texts be analysed. The identified indexes were subsequently further filtered to only include indexes developed by international organisations and not those that are country-based.

The final texts selected for analysis are 1) the Happy Planet Index (HPI & NEF, 2016; NEF, 2016), 2) the OECD Better Life Index (OECD, 2020), 3) the Global Liveability Index Overview (EIU, 2019) and 4) the World Happiness report (Helliwell *et al.*, 2020).

The Human Development Index (UNDP, 2020), Index of Economic Well-being (CSLS, 2011) and the Quality of Life Index (NUMBEO, 2021) were considered but not deemed an appropriate fit to spatial studies research, since it did not seem to explicitly and holistically focus on the spatial context.

2.4.1.2 Data collection: South African directives

These texts were first sourced through a backward citation search in randomly selected Spatial Development Frameworks (SDF)⁷ to find relevant directives. To ensure that all relevant texts have been considered, a spatial planner, who has been working in South Africa for 30 years, assisted in refining this list.

The final texts selected for analysis are 1) the *Constitution of the Republic of South Africa* (1996), 2) the Spatial Planning and Land Use Management Act 16 of 2013, 3) the National Environmental Management Act 107 of 1998, 4) the National Development Plan (NPC, 2012), 5) the Draft National Spatial Development Framework (DRDLR & DPME, 2019), 6) the Integrated Urban Development Framework (COGTA, 2016) and 7) the National Framework for Sustainable Development in South Africa (DEAT, 2008).

The Development Facilitation Act 67 of 1995 was studied for background information, since it was the impetus for the Spatial Planning and Land Use Management Act 16 of 2013 and the Local Government: Municipal Systems Act 32 of 2000. It was, however, not included in the analysis since it has been repealed. The Local Government: Municipal Systems Act 32 of 2000 was, furthermore, also studied to understand the process of the Integrated Development Plan (IDP)⁸, but not included in the analysis since it addresses municipal administration processes rather than spatial planning. Lastly, guidelines to inform the spatial planning legislation, i.e. the SDF guidelines (DRDLR, 2017) and the IDP Guide Pack (DDP Task Team, 2001?), were also not included but studied as background information since it describes the critical steps of strategic spatial planning⁹ in South Africa.

2.4.2 Data reduction

The data reduction commenced with a process of initial coding on ATLAS.ti, a “computer-aided qualitative data analysis software” (Friese, 2012:2), to further an understanding of the underlying quality of life rationalities and to help direct subsequent data reduction and analysis (Charmaz,

⁷ Article 26(e) of the Local Government: Municipal Systems Act 32 of 2000 lists the SDF as a core component of the Integrated Development Plan (IDP) and requires “the provision of basic guidelines for a land use management system for the municipality” to be included in the SDF.

⁸ In article 25 of the Local Government: Municipal Systems Act 32 of 2000 each municipal council is required to adopt an IDP that, according to article 35(a) “is the principal strategic planning instrument which guides and informs all planning and development and all decisions with regard to planning, management and development, in the municipality”.

⁹ Phase 1: Analysis – Phase 2: Strategies – Phase 3: Projects – Phase 4: Integration – Phase 5: Approval

2014:109). During this initial coding process, “important [...] groups of words” (Birks & Mills, 2015:10) that elucidate the implicit quality of life argument within the Quality of Life Index reports, were identified and highlighted. These quotations (highlighted text) were then categorised according to codes (labels) that indicated the implicit argument being explored (MacCallum *et al.*, 2019:195). Once an initial coding set was created, this process was repeated with the selected South African directives, expanding the initial coding set.

This coding set was then reviewed and refined to ensure that all similar arguments were similarly labelled. The codes were then further studied, compared and sorted (Charmaz, 2014:140) into “groups of related codes”, called categories (Birks & Mills, 2015:10). Patterns and similarities within these categories were also identified to group them into themes (Cohen *et al.*, 2018:671).

This process concluded with three themes, eight categories and 39 codes. The first theme relates to the quality of life aims of the analysed texts and the second two themes relate to indicators of life quality.

2.4.3 Data analysis

The data analysis was conducted in the Code Manager tool in ATLAS.ti. The Code Manager tool allows the researcher to view all the quotations related to selected codes and to comment on these codes. For the purposes of this research, the comment section in the Code Manager tool was used to reflect on the underlying quality of life rationality of the associated quotations for each code (MacCallum *et al.*, 2019:195).

A report of this analysis was exported from ATLAS.ti and is provided in Addendum B2.

2.4.4 Data presentation

The reflections on the underlying quality of life rationality guiding spatial decision-making in South Africa (refer to section 2.4.3 above) are presented in Chapter 4, according to the associated codes, categories and themes. The reflections about the first theme and its associated category, relating to the general quality of life rationality, are interwoven within the text throughout the chapter. The second two themes and their associated categories, codes and reflections are presented in Chapter 4, sections 4.3 and 4.4. To further elucidate the dominant storyline within the quotations associated with each code, word clouds were exported from ATLAS.ti and are presented alongside each code (MacCallum *et al.*, 2019:189). Theoretical sampling was, furthermore, employed to discuss the findings narratively.

2.5 Methods for the empirical analysis, part 2

In any situation there are “contingent universals” that may be shared across different localities and contexts (De Satgé & Watson, 2018:24). A case study analysis may, therefore, provide an opportunity for an empirical contribution to theory development (Yin, 2018:38) and was subsequently applied to examine the quality of life rationality of the South African poor.

2.5.1 Data collection

Two sets of secondary data are used for this second part of the empirical analysis. Both these datasets were created from semi-structured interviews regarding broad quality of life topics and are, therefore, deemed a good fit for this study.

The first dataset is obtained from two ethically approved research projects, conducted by the North-West University’s Climatology Research Group in collaboration with the Nova Institute. These projects included baseline quality of life studies in four low-income settlements via semi-structured interviews in eMbalenhle (n=12), Lehohang (n=13), KwaDela (n=10) and Zamdela (n=24). Access to the communities were gained through local key informants, who also recruited fieldworkers living within these settlements. The fieldworkers were required to have at least completed grade 10 and be skilled in communication and in using mobile phones. They also received thorough theoretical and practical training by the Nova Institute area leaders. After completion of the training, randomly selected household clusters were approached to participate in semi-structured interviews aiming to gain an understanding of their quality of life experience. Participation in these interviews was completely voluntary and the data has been anonymised. For this study, the data was accessed through research reports: Nova Institute and NWU (2013) and Nova Institute and NWU (2017).

The second dataset was accessed through the NWU gatekeeping process (NWU ethics committee, 2016). Final year NWU Urban and Regional Planning students conducted semi-structured interviews in four low-income settlements, namely Alabama (n=5), Freedom Park (n=4), Kanana (n=10) and Matlwangtlwang (n=46), as part of their participatory planning training. Access was gained through local key informants. The students received thorough theoretical, ethical and practical training prior to entering the communities and conducted semi-structured interviews with randomly selected household clusters to gain a holistic understanding of their experience regarding their surrounding natural, physical, social and

economic environment. Participation in these interviews was completely voluntary and the data has been anonymised.

2.5.2 Data reduction

To gain an understanding of the quality of life rationality of the South African poor, the collected data was coded (Charmaz, 2014:109) on ATLAS.ti. Important groups of words (Birks & Mills, 2015:10) that elucidate the quality of life rationalities amongst the South African poor were identified and highlighted. These quotations (highlighted text) were then categorised according to the coding set (labels) developed for the first part of the empirical analysis (refer to section 2.5.2 above). When necessary, additional codes were added.

This process concluded with two themes, eight categories and 28 codes.

2.5.3 Data analysis

The data analysis was conducted in the Code Manager tool in ATLAS.ti. The Code Manager tool allows the researcher to view all the quotations related to certain codes and to comment on these codes. For the purposes of this research, the comment section in the ATLAS.ti Code Manager tool was used to reflect on the underlying quality of life rationality of the associated quotations for each code (MacCallum *et al.*, 2019:195).

A report of this analysis was exported from ATLAS.ti and is provided in Addendum B3.

2.5.4 Data presentation

The reflections on the underlying quality of life rationality (refer to section 2.5.3 above) are presented in Tables 5.1 – 5.7, Chapter 5, according to the associated codes, categories and themes. To further elucidate the underlying quality of life rationalities within the quotations associated with each code, word clouds were exported from ATLAS.ti for each code and are presented in the tables alongside the various codes (MacCallum *et al.*, 2019:189).

2.6 Theory and Evaluation

Once a theory regarding conflicting quality of life rationalities between spatial-decision makers and the South African poor was developed from the conclusions of this research, practical and research recommendations were formulated. The theory and recommendations were presented

to a spatial planner, who has been working in South Africa for 30 years, to ensure its alignment with reality. During this meeting, the theory and recommendations were refined and aligned with the strategic spatial planning processes of South Africa. The revised theory and recommendations are presented in Chapters 6 and 7. The validity and value of the generated theory and recommendations were evaluated according to Charmaz's (2014:337,338) criteria for evaluating grounded theory research, namely considering its credibility, originality, resonance and usefulness. From this evaluation the research contribution was established and is presented in Chapter 8.

2.7 Closing remarks

The results of the research process explained in this chapter are presented in the following chapters, starting with the literature review.

CHAPTER 3: AN ETHEREALLY BEAUTIFUL AND GOOD PLACE: THE QUALITY OF LIFE DISCOURSE

3.1 Introduction

The notion of an “ethereally beautiful and good” place (Murgaš & Klobučník, 2016:554) where a happy life may be procured (Shekhar *et al.*, 2019:66) has occupied humanity since antiquity (Nanor *et al.*, 2018:835). The modern quality of life movement emerged in the 1960s from a growing dissatisfaction with the unilateral nature of the Gross Domestic Product (GDP)¹⁰ as a measurement instrument for a country’s economic performance (Beukes & Van Der Colff, 1997:229; Epley & Menon, 2008:282). The GDP was adopted as a measurement and guide for improvement of well-being and economic development (Fahy & Cinnéide, 2008:366-367; Martín & Mendoza, 2013:335) at the 1944 Bretton Woods Conference to address the socio-economic upheaval following the two world wars and the Great Depression (Costanza *et al.*, 2014:91-92). It was argued that international trade would create jobs which would allow for adequate food, housing and medical care (Costanza *et al.*, 2014:92). Between the 1950s and early 1970s it was, however, noticed that the life quality of “ordinary citizens” seem to remain stagnant, despite high economic growth rates within countries at large (Todaro & Smith, 2015:17). People’s happiness, therefore, does not seem to depend only on economic provisions and their ability to consume more (Weimann *et al.*, 2015:4).

The contemporary quality of life discourse has “been profoundly influenced by Amartya Sen and Martha Nussbaum”, arguing that a high quality of life is achieved by increasing the “freedoms to realize human functionings” (refer to Chapter 1, section 1.8.2) (Peach & Petach, 2016:32) and the study of life quality has since emerged as a separate research field (Pukeliene & Starkauskiene, 2011:147). Scholars from numerous disciplines, including sociology, environmental sciences (Burlacu, 2018:99), economics (Feng *et al.*, 2018:2021), spatial planning (Shekhar *et al.*, 2019:66) and political sciences (Li & Weng, 2007:250) have engaged in this discourse (Teshfaghzi *et al.*, 2010:74) considering human values, along with the availability and distribution of material factors, as influencers on the quality of life (Nussbaum & Sen, 1993:1).

¹⁰ The GDP measures the economic performance by adding up the “total final output of goods and services produced by the country’s economy, within the country’s territory” (Todaro & Smith, 2020:43; Weimann *et al.*, 2015:4).

3.2 Contextualising the quality of life

*Quality of life*¹¹ is a highly subjective (Bukharova *et al.*, 2019:3), multifaceted and ill-defined construct (Kazemzadeh-Zow *et al.*, 2018:6096; Murgaš & Heřmanová, 2013:36), and is viewed from either an exogenous or endogenous dimension. The exogenous dimension describes the objective quality of life, i.e. living standards, the fulfilment of basic needs or the GDP; and the endogenous dimension, the subjective or perceived quality of life, i.e. life satisfaction, happiness or well-being (Aspinall *et al.*, 2011:182; Filipe Amado *et al.*, 2019:2075; Haslauer *et al.*, 2015:912; Tiran, 2016:59; Westaway, 2006:176).

Some scholars (i.e. Khalil, 2012:78; Møller, 2001:220,234; Tiran, 2016:54) argue that these two dimensions are inseparable and should be combined, since the endogenous dimension provides valuable context for the exogenous dimension (Chancellor *et al.*, 2011:498). From this holistic viewpoint, *quality of life* may be described as 1) “the interaction between social, economic, environmental and infrastructure conditions that influence human life” (Kazemzadeh-Zow *et al.*, 2018:6096) and 2) the individual feelings of contentment or satisfaction with this life (Andereck *et al.*, 2007:484; Cohen, 1993:11).

3.3 The spatial impression on the quality of life

Quality of life research in the field of spatial studies seems to be expanding (Epley & Menon, 2008:284; Shekhar *et al.*, 2019:70; Tiran, 2016:59), especially in developing countries (Bodur & Yüksel, 2017:56). These studies argue that the physical environment shape the way people are able to live their lives (their capability) which ultimately determines their life quality (their functionings) (Habibi & Zebardast, 2018:427; Murgaš & Klobučník, 2016:183). Numerous scholars (i.e. Bardhan *et al.*, 2015:56; Moroke *et al.*, 2020:107; Omar, 2006:84) assert that the aim of spatial planning is “to organise the complexities of human settlement around” enhancing life quality (Rosenberg, 1965:3). To this end, quality of life research in the spatial studies field often explore themes of urban renewal (Forouhar & Hasankhani, 2018:232), public policy, urban markets (Cazacova *et al.*, 2010:1016; Węziak-Białowolska, 2016:87), sustainable development (Fadda & Jirón, 1999:264; Shekhar *et al.*, 2019:72), public participation (Khalil, 2012:77) and transportation planning (Wann-Ming, 2019:276).

¹¹ *Quality of life* is sometimes interchangeably referred to as *happiness*, *life satisfaction* (Shekhar *et al.*, 2019:67) and *well-being* (Murgaš & Klobučník, 2018:184).

3.4 Measuring the quality of life

Despite this growing interest, little consensus has been reached on defining and measuring the quality of life (Fahy & Cinnéide, 2008:371; Pukeliene & Starkauskiene, 2011:147). Such a consensus may, however, be difficult to reach, since the relative importance of different facets of life quality change over time (Wann-Ming, 2019:276) and differs between population groups (Møller, 2001:236-237). Quality of life may, nevertheless, be measured from different philosophical traditions, including, 1) hedonism, that equates well-being and pleasure (Tiberius, 2014:7110-7112) and 2) the Socratic philosophers, believing that a good life consists of a mixture of different conditions and components (Michalos, 2014a:226; Michalos, 2014b:4830).

Two prominent Hedonistic quality of life measurements have been identified in the literature review. The first known scientific measurement for life quality was presented by Jeremy Bentham in 1789, now commonly referred to as the Felicific calculus (Nanor *et al.*, 2018:836). He proposed that happiness be measured as units of pleasure or pain (Mitchell, 1918:165), providing “an objective framework with which the comparative value of different courses of action can be measured” (Oxford Reference, 2021). The Felicific calculus is, however, impractical and Bentham himself has “recognised that neither the individual nor the legislator could strictly follow the process he described” (Crimmins, 2021). Dolan and Kudrna (2016) more recently advocated for evaluations about the purpose of and pleasure in, experiences of happiness to be used to inform public policy. These hedonistic ideas, however, seem to omit some important things about life quality, independent of individual experiences (Tiberius, 2014:7110-7112).

Sen’s multidimensional capability approach (refer to Chapter 1, section 1.8.2) provides a more comprehensive evaluative framework, considering various components of a good life, namely resources, functionings and capabilities (Binder & Coad, 2014) and thereby links up with the Socratic notions of a good life. Although Sen has refrained from providing a precise list of capabilities for quality of life measurement (Robeyns, 2005:192,195), the capability approach has *inspired* various measurements, such as: Alkire (2008); Blaauw and Pretorius (2013); Robeyns (2005:192); and Verkerk *et al.* (2001). A more precise and objective measurement for life quality in the Socratic tradition may be found in social indicators, currently the most commonly used measurement (Papageorgiou, 1976:178; Stanca, 2018:66).

The idea of objective social indicators arose in public debate in the 1960s as a more holistic alternative to the GDP for measuring life quality (Eras *et al.*, 2014:196). The use of objective social science research methods (Tobin, 1995:545), especially statistics, was pioneered by William

Ogburn in his methodology for the 1933 United States *Recent Social Trends* report (Bulmer, 1982:109,111-112) and was further developed in the methodology for NASA's¹² 1966 *Social Indicators* volume edited by Raymond Bauer (Land, 2014b:2875; Land *et al.*, 2012; Wong, 2014:1790). The need for social indicators to guide policy for addressing social concerns and assessing social conditions was, furthermore, emphasised in the 1969 United States *Toward a social report*, principally authored by Mancur Olson (Land, 2014b:2875). Following the pioneering work of Ogburn, Bauer and Olson, the use of social indicators was internationally adopted, most notably by the OECD¹³ and United Nations, who developed social accounting and reporting schemes (Wong, 2014:1790).

Many scholars (e.g. Born *et al.*, 2019:800; Eras *et al.*, 2014:196) are still advocating for its role in directing policies (Møller, 2001:217; Nakanishi *et al.*, 2013:2), since it measures, simplifies and communicates challenges and values of the local context (Beukes & Van Der Colff, 1997:229; Darkey & Visagie, 2013:303; Nakanishi, 2015:2,4). The precise socio-economic and environmental interrelations (refer to Chapter 1, section 1.8.1) are, however, difficult to untangle and many social indicator models use comprehensive indicator frameworks (Wong, 2014:1790). For this, components of human well-being and concern are firstly determined and, secondly, observable and measurable attributes of these components are established (Johnston & Carley, 1981:238). Since the 2000s, these social indicators are presented in the form of summary indexes (Land, 2014b:2878) for which weighted averages are attributed to each indicator and domain of well-being (Land, 2014a:1152-1153). A list of the fifteen social indicators found in the texts analysed for the literature review (refer to Chapter 2, section 2.3.3) is presented in Figure 3.1 below.



Figure 3.1: Social indicators

¹² The United States National Aeronautics and Space Administration

¹³ The Organisation for Economic Co-operation and Development

Social indicators have, however, been criticised to not sufficiently incorporate the complex, qualitative information needed (Fahy & Cinnéide, 2006:695) by 1) often *not* considering cultural differences that may influence the importance attached to the different indicators (Fahy & Cinnéide, 2008:371) and 2) not reflecting local citizens' priorities, since the indicators are often solely developed by authorities and other decision-makers (Nakanishi, 2015:73).

3.5 Closing remarks

The quest to define, measure and achieve a quality life has been ongoing since antiquity, but consensus on these matters has never been reached. The notion of a quality life is, nevertheless, widely acknowledged as the primary goal of policy and consequently forms a large part of the academic and public discourse. It is argued that life consists of various components that influence the quality thereof; an analysis of the quality of life rationalities underlying the South African directives guiding spatial decision-makers is presented in the following chapter.

CHAPTER 4: THE QUALITY OF LIFE RATIONALITY GUIDING SPATIAL DECISION-MAKERS

4.1 Introduction

To determine the underlying quality of life rationalities that shape spatial decision-making in South Africa, a storyline analysis was conducted. As is explained in Chapter 2, section 2.4, international Quality of Life Index reports were firstly analysed to provide a point of departure for the different categories of life quality and how it impacts the quality of life, informing an analysis of the South African directives that guide spatial decision-making. These quality of life codes, abstracted from the analysed texts, aligns with those found in literature and presented in Figure 3.1, Chapter 3.

The analysed texts describe *quality of life* as living a good life, as context driven and as measuring *how* good this life is going. It is also argued that to form a true picture of the quality of life, both endogenous and exogenous quality of life must be considered and that these good lives must last over time for both people and the planet. In view of the *Constitution of the Republic of South Africa's* (1996) declaration that “the quality of life of all citizens” needs to be improved, it is argued that creating or maintaining a quality life for all citizens forms the foundation of all South African directives. Furthermore, this notion is echoed by most of the Quality of Life Index reports that were included in this analysis, aiming to provide guidance for securing this quality life to all.

During the analysis, it was apparent that the quality of life is deemed dependent on *resources* and the *context* surrounding these resources. Upon sampling theory, it was discovered that Nussbaum and Sen (1993:1) underwrite this notion. They critique the traditional view that the mere *presence* of resources secures a quality life and argues that the *distribution* of these resources affects how people experience and “are able to conduct their lives” (Nussbaum & Sen, 1993:1).

4.2 Methodology recapitulation

Chapter 2, section 2.4 details the methods followed for the analysis presented in this chapter. A recapitulation of these methods is, nevertheless, presented in Figure 4.1 below.

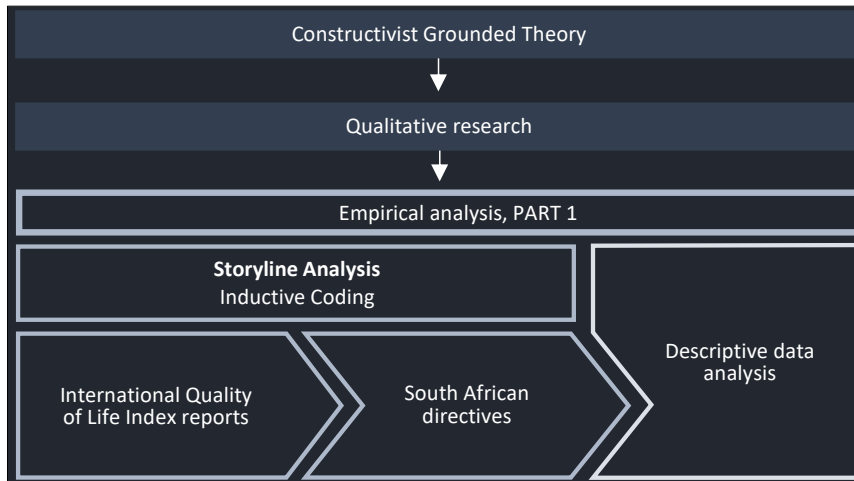


Figure 4.1: Methodology for the storyline analysis

During the storyline analysis, social indicators were abstracted in the form of codes, describing the underlying understanding of the main features of society (Land, 2014a:2879) in the Quality of Life Index reports and the South African directives. The codes were divided into seven categories and two themes. The results of the storyline analysis are, subsequently, presented in the following sections according to these two themes and their respective categories and codes.

4.3 Resources

Quality of life, especially future well-being, is deemed dependent on *resources*, as noted in section 4.1 above. These resources are divided into four categories, namely: economic capital, human capital, social capital and natural capital. The *Constitution of the Republic of South Africa* (1996) specifically states that such resources must be promoted and cultivated and to this end the Spatial Planning and Land Use Management Act 16 of 2013 bid that land development optimise “the use of existing resources and infrastructure”.

4.3.1 Economic capital

Economic capital supports and facilitates the material aspects that enables a society’s desired living standards (OECD, 2020:71,201). Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 4.1. A word cloud, created in ATLAS.ti from the quotations associated with each code, is presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 4.1: Codes relating to Economic capital

Theme: Resources Category: Economic capital	
Code	Reflection on its relation to quality of life
Infrastructure <i>Word cloud:</i> 	From both the national and international perspective, it is believed that integrated urban infrastructure development supports the following to benefit the quality of life: 1) Equity and inclusivity through access to basic social services 2) Economic growth through electricity, water, transportation and telecommunications infrastructure 3) Environmental benefits, by protecting natural resources 4) Providing shelter, i.e. housing 5) Job, Income & Wealth creation 6) Social network promotion, through electricity, water, transportation and telecommunications infrastructure 7) Urban resilience <i>Related to word cloud: Access; Capital; Economic; Housing; Infrastructure; Integrated; Public; Services; Social; Well</i>
	In the South African directives, supported by the Better Life Index, specific emphasis is placed on 1) a compact urban form and 2) sanitary facilities (specifically toilets) <i>Related to word cloud: Housing; Infrastructure; Urban; Well</i>
	The Quality of Life Index reports seem to believe that home internet infrastructure provides better access to job opportunities and supports social connections. <i>Related to word cloud: Economic; Infrastructure</i>
Mobility <i>Word cloud:</i> 	The South African directives note that sustainable and integrated transportation infrastructure supports the following to benefit the quality of life: 1) Improved access to and connectivity with economic opportunities, education institutions, health facilities and places to spend leisure time 2) Reduced travel time and cost, resulting in higher productivity, education and employment levels 3) Compact urban forms 4) Reduced emissions, benefiting health and the natural environment 5) More efficient use of resources <i>Related to word cloud: Access; Economic; Education; Infrastructure; Integrated; Public; Transport; Urban</i>
	Alternative transportation modes to the private car are viewed (in the South African directives) to induce a higher quality of life, i.e. walking, cycling and public transportation. <i>Related to word cloud: Integrated; Transport</i>
	The Quality of Life Index reports have not explicitly discussed mobility.

Theme: Resources Category: Economic capital	
Code	Reflection on its relation to quality of life
Economic growth <i>Word cloud:</i> 	In the South African directives, it is said that economic growth is prioritised as the central objective of government policy. <i>Related to word cloud: Economic; Economy</i> It is believed, according to the South African directives, that economic interventions may positively influence people's livelihoods. <i>Related to word cloud: Economic; Economy; People</i> From the South African directives, supported by the Better Life Index, it seem to be believed that inclusive economic development supports the following to benefit the quality of life: 1) Number and profitability of enterprises 2) Increased employment 3) The development of new skills and resourcefulness 4) The development of social networks, where people share their resources to create a better life for all 5) Participation in productive work, promoting people's self-respect 6) Improved skills, promoting work and livelihood opportunities <i>Related to word cloud: Economic; Economy; Opportunities; People; Skills; Social</i>
Financial assets <i>Word cloud:</i> 	The Quality of Life Index reports criticises using GDP as the standard measure of economic growth, since it result in deteriorating social conditions and climate change. It is, furthermore, noted that it does not effectuate a quality life on its own, since it does not include the following "things that really matter to people" (HPI & NEF, 2016:2): 1) Inequalities in material conditions 2) Social networks 3) Health 4) Leisure time 5) Planetary limits <i>Related to word cloud: Conditions; Economic; Life; Social; Time; Urban; Well</i> Sustainable finances are critical in achieving integrated transport. <i>Related to word cloud: Access; Economic</i> The South African directives also highly emphasise the value of property in striving to overcome impediments to a quality life. It is argued that owning land may provide opportunities for economic growth, agriculture and a space for social and cultural activities. <i>Related to word cloud: Economic; Land; Life; Opportunities; Social; Well</i>
Income <i>Word cloud:</i> 	Income is believed, from both a national and international perspective, to provide advantages to life quality since it defines people's living standards and determine their consumption possibilities. <i>Related to word cloud: Consumption; Income; Social</i>

Theme: Resources Category: Economic capital	
Code	Reflection on its relation to quality of life
Wealth Word cloud: 	Wealth “provides a buffer” that may “smooth consumption and enable longer-term investments” (OECD, 2020:71). <i>Related to word cloud: Economic; Consumption; Provides; Wealth</i> The South African directives have not explicitly discussed wealth.
Work Word cloud: 	Work refers to paid and unpaid productive activity. It is believed, from both perspectives, that hard work will create economic growth <i>Related to word cloud: Create; Jobs; Opportunities; Work</i>

As noted in Chapter 1, sections 1.1 and 1.6.7, South Africa suffers from aggregate inequality and, as such, a large number of South African households do not have access to **infrastructure**, i.e. electricity, water and sanitation (Palmer *et al.*, 2016; SACN, 2016:121; StatsSA, 2019a). Although the South African government “made a determined commitment to infrastructure provision since 1994” (Palmer *et al.*, 2016), public spending on infrastructure development is at a historic low (NPC, 2012:44; StatsSA, 2020b). Their priority has, however, shifted from housing provision to bulk infrastructure provision for the urban poor (Thukwana, 2020). The specific interest in sanitary facilities, indicated in Table 4.1 above, may result from the worldwide sanitary crises and its accompanying personal safety, health and environmental challenges and its influence on human dignity – all affecting life quality (Londong, 2019a; Londong, 2019b). In South Africa, 2.4% of the population lived without proper sanitation facilities in 2019 (StatsSA, 2019a:44). Further than providing for basic human needs (water and sanitation) as listed in Table 4.1, infrastructure also affects land values and the potential for economic activity (Cheung & Leung, 2008:223; Wong, 2001:25), since it “plays a key role in proper organisation of people’s lives and business activities” (Cieslak *et al.*, 2018:246). Internet access is an example of this, and although it does not prominently feature within the South African directives (refer to Table 4.1), the South African government is working on policy and regulations to create digital inclusion to stimulate economic growth (DoC & DCDT, 2021).

Notwithstanding the emphasis on sustainable and integrated transportation in the South African directives (refer to Table 4.1), transport systems (**mobility**) in South Africa are not properly connected. This is due to the historic development patterns that produced high levels of

segregation (refer to Chapter 1, section 1.1) and there is, furthermore, currently a lack in diversified transportation mode options (Ngubane, 2018?). In 2020, most people (43.5%) used private transport to reach their workplaces, while 35% used public transport and 20.3% walked (StatsSA, 2021a). Of those using public transport, 80.2% used taxis, 16.6% busses and 3.2% trains (StatsSA, 2021a). The available public transport modes are, however, unsafe, costly and unreliable (Ngubane, 2018?).

South Africa has been experiencing low **economic growth** for several years that are now amplified by the effects of the covid-19 pandemic (World Bank, 2021) and the 2021 South African riots (Cele & Wilson, 2021). South Africa consequently suffers from high job losses, unemployment (**work**) and poverty (**income** and **wealth**) (Cele & Wilson, 2021; World Bank, 2021) that, as noted in Table 4.1, affects life quality negatively. Economic growth is believed to be further hampered by operational (infrastructure) and financial difficulties at the South African energy utility, ESKOM¹⁴ (World Bank, 2021). Further to this, as per Table 4.1, property is viewed an important **financial asset** for increasing economic growth and, subsequently, life quality. Land ownership is currently a highly conspicuous matter in South Africa. Land ownership patterns are racially skewed, resulting from historical development patterns and legislation (Cohen, 2021). This is being addressed by a process of land reform (South African Government, 2021?), but an amendment to the constitution has been proposed to address this issue more quickly by allowing land expropriation without compensation (Business Insider SA, 2021). The uncertainty of this matter has, however, occasioned investors to pull out, affecting economic growth negatively (Cohen, 2021).

Table 4.2 indicates (x) which of these codes were allocated to which texts during the storyline analysis.

¹⁴ The South African Electricity Supply Commission

Table 4.2: Economic capital code allocation in the analysed texts

		Code allocation						
		Infrastructure	Mobility	Economic growth	Financial assets	Income	Wealth	Work
Quality of Life Index reports	Better Life Index	x		x	x	x	x	x
	Global Liveability Index Overview	x						
	Happy Planet Index				x			
	World Happiness Report					x		x
South African directives	Constitution of the Republic of South Africa					x		
	Spatial Planning and Land Use Management Act	x		x				
	National Environmental Management Act				x			
	National Development Plan	x		x	x	x		x
	Integrated Urban Development Framework	x	x	x	x			x
	National Spatial Development Framework	x	x	x	x			
	National Framework for Sustainable Development		x	x				

From Table 4.2 it is apparent that only the Better Life Index from the Quality of Life Index reports holistically consider economic capital. This is attributed to the focus and purpose of the indexes. The Better Life Index measures overall well-being in terms of economic, human, social and natural capital (OECD, 2020:18) and would, naturally, take a holistic approach to economic capital. The Global Liveability Index Overview measures how liveable a place is, specifically in terms of infrastructure, stability, healthcare, culture and environment and education (EIU, 2019:5), of which only infrastructure falls under economic capital. The Happy Planet Index critiques governments' "stubborn prioritisation of economic growth" and believe that economic growth is incompatible with the planetary limits (HPI & NEF, 2016:2), arguably from there the near neglect of economic capital as part of "measuring happiness". The World Happiness Report regards economic growth as something that arises from a "happy city" (Helliwell et al., 2020:2) and would, therefore, focus on other parts of life quality to procure economic growth.

The South African directives focus mostly on infrastructure, mobility, economic growth and financial assets. In terms of the current state of economic capital in South Africa, these are arguably important economic capital facets to focus on for an improved life quality.

4.3.2 Human capital

Human capital refers to people's individual potential, i.e. knowledge, competencies, education, skills and their health. Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 4.3. A word cloud, created in ATLAS.ti from the quotations associated with each code, is presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicates its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 4.3: Codes relating to Human capital

Theme: Resources Category: Human capital	
Code	Reflection on its relation to quality of life
Potential <i>Word cloud:</i> 	The Better Life Index explains that skills, education, knowledge and good health provides an individual with the potential to increase their quality of life, e.g. by finding a job. The South African National Development Plan places specific emphasis on the importance that people's full potential be embraced. <i>Related to word cloud: Everyone; Future; Health; Human; Individuals; Skills; Well; Work</i>
Choice <i>Word cloud:</i> 	It is believed that the following benefits life quality: 1) Having "a sense of freedom to make key life decisions" (Helliwell et al., 2020:4) 2) Being satisfied with one's ability to make life choices 3) Being able to "freely choose your trade, occupation or profession" (The Constitution of the Republic of South Africa (1996)) <i>Related to word cloud: Freedom; Life; Sense; Social</i>
	The World Happiness Report notes that freedom of choice significantly reduces the effect that negative circumstances have on people's quality of life. <i>Related to word cloud: Environment; Freedom</i>

Theme: Resources Category: Human capital	
Code	Reflection on its relation to quality of life
Education Word cloud: 	“Science and digital skills are increasingly becoming a basic requirement for inclusion in economic activities” (OECD, 2020:127) and, according to the World Happiness report (Helliwell et al., 2020:70), there is “a gap in well-being between tertiary and non-tertiary educated people”. Education is therefore believed to significantly affect people’s quality of life. <i>Related to word cloud: Economic; Education; People; Skills; Well; Work</i> Furthermore, it is noted that not only education but also the <i>quality</i> of education is affecting people’s quality of life. <i>Related to word cloud: Education; Well; Quality</i> The South African National Development Plan notes that educational opportunities assist in creating gender equality. <i>Related to word cloud: Social; People</i>
Knowledge Word cloud: 	Knowledge pertains what people know and it contributes towards life and job-specific skills, affecting people’s quality of life. This is mentioned in both the Better Life Index and the South African National Development Plan. <i>Related to word cloud: Contribute; Knowledge; Informed; Job; People; Skills; Trade; Well</i>
Skills Word cloud: 	The Better Life Index argues that literacy, numeracy and other job-specific skills improve the employability of a person and thereby significantly influence their life quality. <i>Related to word cloud: Economic; Education; Jobs; Skills</i> It is also believed that social and emotional skills also meaningfully influence people’s quality of life by affecting their experience of their social environment. <i>Related to word cloud: Skills; Social</i> The South African National Framework for Sustainable Development notes that skills provide the “capacity for building and maintaining sustainable infrastructure” (DEAT, 2008:37). <i>Related to word cloud: Create; Building</i>
Health Word cloud: 	It is believed that a long life contributes to quality life, unencumbered by the following: 1) Physical illness 2) Mental illness 3) Inability “to participate in activities that people value” (OECD, 2020:103) <i>Related to word cloud: Health; Mental; People; Social; Well</i> Access to medical care is also deemed important, especially by the South African directives. <i>Related to word cloud: Services</i>

The human capital codes, **potential** and **choice**, listed in Table 4.3, aligns with Sen’s capability approach (refer to Chapter 1, section 1.8.2) – *potential* relating to the opportunity to achieve (capability) and *choice* to the available choice sets to realise human functionings (Štreimikienė &

Barakauskaitė-Jakubauskienė, 2012:589). Even though citizens enjoy relatively high levels of choice in South Africa, the explicit consideration thereof in the South African directives (refer to Table 4.3) is deemed necessary, as choice was historically limited and in the past few years, have been threatened by xenophobic violence, large-scale corruption, gender-based violence (Freedom House, 2020) and the 2021 South African riots. The more abstract notions of potential and choice are realised by the more practical notions of education, knowledge, skills and health, listed as human capital codes in Table 4.3 above (Štreimikienė & Barakauskaitė-Jakubauskienė, 2012:589).

The South African **education** system is “characterised by crumbling infrastructure, overcrowded classrooms and relatively poor educational outcomes” (Amnesty international, 2020) and South Africans, furthermore, have very low **skill** levels (Businesstech, 2019). This contributes to the high unemployment rate and the low economic growth rate (Businesstech, 2019), all affecting the life quality of “ordinary citizens” in South Africa (as explained in Table 4.1 above). Todaro and Smith (2015:18) explain that not only the distribution of resources, but also people’s ability to use those resources, affects life quality. It may, therefore, be argued that education, knowledge and skills influence the life choices available to people (Gaertner, 1993:63), as may also be inferred from Table 4.3 above. Basic education is, therefore, deemed a catalyst for social change (Alkire, 2009:204) and may lessen people’s vulnerability (Cheung & Leung, 2010:462), since it induces self-esteem and empowers people to recognise options (Korsgaard, 1993), to take public action (Sen, 2002) and to navigate the economic world, e.g. by understanding their legal rights and obtaining a loan (Alkire, 2009:204). Literacy, furthermore, enables an enjoyment of reading and deepens one’s **knowledge** or understanding of a subject (Alkire, 2009:204).

As a result of the covid-19 pandemic, **health** is currently a global concern. South Africa has, however, been suffering (for a number of years) from poor health and a lacking health care system with limited and fragmented access to health facilities (Maphumulo & Bhengu, 2019). As per Table 4.3, this has a definitive effect on life quality. Pacione (2009:315) notes that although there are various factors affecting health that is beyond control (i.e. age and genetic make-up), the socio-economic, physical and natural environment may also affect people’s health, i.e. by the adequacy of their housing, wealth and air quality.

Table 4.4 indicates (x) which of these codes were allocated within which texts during the storyline analysis.

Table 4.4: Human capital code allocation in the analysed texts

		Code allocation					
		Potential	Choice	Education	Knowledge	Skills	Health
Quality of Life Index reports	Better Life Index	x		x	x	x	x
	Global Liveability Index Overview			x			x
	Happy Planet Index		x				x
	World Happiness Report		x	x			x
South African directives	Constitution of the Republic of South Africa		x	x			x
	Spatial Planning and Land Use Management Act						
	National Environmental Management Act						
	National Development Plan	x	x	x	x	x	x
	Integrated Urban Development Framework			x		x	x
	National Spatial Development Framework		x	x			x
	National Framework for Sustainable Development					x	

The focus and purpose of the Quality of Life Index reports seem to determine their approach towards human capital as part of their quality of life measurements. The Better Life Index illustrates a holistic approach to human capital and incorporates all the human capital codes, except for choice. The Global Liveability Index Overview measures the liveability of a place regarding specific considerations of which only health and education falls under human capital (EIU, 2019:5). The Happy Planet Index focuses on choice and health. It is argued that this may be because potential, education, knowledge and skills contribute to economic capital and, as mentioned in section 4.3.1 above, the index seems to reject economic capital as part of procuring a happy life. The World Happiness Report identified certain determinants of well-being that is believed to correlate with the sustainable development goals, for example skills (sustainable development goal) enable people to earn an income (well-being determinant) (Helliwell et al., 2020:125) and, therefore, the sustainable development goals were not included.

The South African directives seem to focus on choice, education, skills and health. It is argued that these are appropriate focus areas for an improved life quality, considering the current state of human capital in South Africa as discussed above.

4.3.3 Social capital

Social capital refers to “the social norms, shared values and institutional arrangements that foster co-operation among population groups” (OECD, 2020:234). These attributes are extended to future generations and subsequently affect future well-being. The South African National Development Plan (NPC, 2012:11), therefore, emphasises the importance of social capital to South African quality of life. Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 4.5. A word cloud, created in ATLAS.ti from the quotations associated with each code, are presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 4.5: Codes relating to Social capital

Theme: Resources Category: Social capital	
Code	Reflection on relation to quality of life
Safety <i>Word cloud:</i> 	From both an international and national perspective, it is believed that freedom from harm, unencumbered by the following, is an important part of a quality life: 1) Crime against property, e.g. theft 2) Cybercrime, e.g. privacy breaches or online fraud 3) Financial crime, e.g. corruption or money-laundering 4) Non-conventional crime, e.g. hate crime or emotional abuse 5) Fear of violence, e.g. assault or domestic violence 6) Conflict 7) Terrorism 8) Traffic accidents 9) Natural disasters <i>Related to word cloud: Corruption; Crime(s); Freedom; Safe; Without</i>
Public participation <i>Word cloud:</i> 	Public participation is mentioned in both the international and national texts and refers to people's ability to shape their society. This includes: 1) the availability of opportunities (i.e. grassroots activism, citizen-led neighbourhood vision and planning processes and voting) 2) the necessary resources (i.e. skills and ability) to engage, 3) whether people utilise these available opportunities and resources 4) whether this engagement affects change. Public participation is believed to enable people to better their own quality of life and is especially advocated for in the South African directives that were analysed. <i>Related to word cloud: Activities; Citizens; Change; Civic; Communities; Economic; Enable; Need; Opportunities; Social; Society</i>

Theme: Resources Category: Social capital	
Code	Reflection on relation to quality of life
Population groups <i>Word cloud:</i> 	Social and natural environments differ within and between “communities, nations and cultures” (Helliwell <i>et al.</i>, 2020:32); people’s experience thereof also differs. <i>Related to word cloud:</i> Country; Different; Environments; Groups; People; Population; Quality; Well Both the Better Life Index and the South African National Development Plan note that well-being differs between population groups, e.g. gender and age groups or education levels, especially resulting from inequalities present between these groups. <i>Related to word cloud:</i> Country; Education; Different; Groups; Inequalities; Men; Population; Women; Young
Social interactions <i>Word cloud:</i> 	It is believed, from both a national and international perspective, that the following contributes to life quality: 1) The “frequency and amount of time individuals spend with household members, their family, friends, colleagues and other known persons” (OECD, 2020:181) 2) Satisfaction with social interactions 3) Perceived loneliness <i>Related to word cloud:</i> Activities; Connections; Family; Friends; Interactions; People; Quantity; Quality; Social; Spend; Time
Social network <i>Word cloud:</i> 	It is believed that a large social network reduces the effect of negative circumstances on people’s quality of life and is especially advocated for in the South African directives. <i>Related to word cloud:</i> Community; Connections; Environment; Feel; Happiness; Inequality; Life; People; Social; Support; Well The South African National Development Plan notes that this network may be expanded by the ability to speak different languages and a general knowledge of the history of various population groups. <i>Related to word cloud:</i> Community; Connections; Happiness; Life; People; Social From both the international and national perspective, being able to rely on family and friends during hardship significantly affects people’s quality of life. <i>Related to word cloud:</i> Community; Connections; Feel; Happiness; Life; People; Social; Support; Well
Social trust <i>Word cloud:</i> 	From both a national and international perspective, trust, unity, coherence, functionality and pride exceedingly affect people’s quality of life. <i>Related to word cloud:</i> Feel; People; Quality; Social; Trust It is, furthermore, believed that a perception amongst “young people that the odds are stacked against them” (NPC, 2012:24) significantly influences people’s quality of life. <i>Related to word cloud:</i> Feel; Trust

As noted in Table 4.5 above, **safety** and a *fear* for safety are both believed to greatly impact people’s life quality (Shekhar *et al.*, 2019:70). In South Africa, safety is a large concern, with high rates of theft and violent crime, including rape and murder (Gov.UK, 2021; USRG, 2018?). The different life quality experiences of different **population groups** (refer to Table 4.5 above) provide

support for the importance of context-specific spatial decision-making. It is argued that cultures form within population groups, generational groups, social institutions and groups of certain beliefs and forms of contact (Andereck *et al.*, 2007:486; Epley & Menon, 2008:281; Ghasemzadeh & Toofan, 2014:19), influencing people's "evaluation of what is 'good'" (Montgomery, 2013:92). Even though not much explicit attention has been provided in the analysed texts to population groups, Rossouw and Naudé (2008:435) describe South Africa as being rich in diverse cultural meaning and socio-political perspectives.

Public participation, as noted in Table 4.5, empowers ordinary citizens to become agents of social change (Alkire, 2009:196-197) and may be described as a "democratisation of resource-allocation strategies" (Pacione, 2009:412). The principle of public participation has become widely incorporated in public policy (Pacione, 2009:411-412), which is also the case in South Africa – the Spatial Planning and Land Use Management Act 16 of 2013 requires in article 12(o) that "the outcomes of substantial public engagement" must be considered when preparing an SDF, and in article 28(2), that "a public participation process must be undertaken" when "a municipality intends to amend its land use scheme". The implementation of public participation processes is, however, criticised as mere tokenism (De Satgé & Watson, 2018:189-190; Pacione, 2009:412), but in accordance with the principle of conflicting rationalities (refer to Chapter 1, section 1.8.4) and in advocating for public participation, Jacobs (1961:82) argues that spatial planners cannot truly know what a community need.

The South African **social landscape** is characterised by inequality and division (Mmotlane *et al.*, 2010:5; South African Government, 2020; Swanepoel, 2020), but, according to De Satgé and Watson (2018:47), large social networks and support systems are, nevertheless, present. As noted in Table 4.5 above, these are important assets for a quality life, as a strong social capital increases people's ability to withstand hardship (Aspinall *et al.*, 2011:180). Nussbaum and Sen (1993:1) note, however, that people's well-being not only pertains to the existence of these social relations but also to the freedoms they have in conducting them and how these relations (i.e. societal structures) "foster or impede other aspects of human activity". The covid-19 precaution measurements of social distancing and restricted movement has, therefore, strained social conditions, affecting mental health conditions (Molebatsi *et al.*, 2021).

Table 4.6 indicates (x) which of these codes were allocated within which texts during the storyline analysis.

Table 4.6: Social capital code allocation in the analysed texts

		Code allocation					
		Population groups	Public participation	Safety	Social interaction	Social network	Social trust
Quality of Life Index reports	Better Life Index	x	x	x	x	x	x
	Global Liveability Index Overview			x		x	
	Happy Planet Index						
	World Happiness Report	x	x	x	x	x	x
South African directives	Constitution of the Republic of South Africa			x		x	
	Spatial Planning and Land Use Management Act					x	
	National Environmental Management Act						
	National Development Plan	x	x	x	x	x	x
	Integrated Urban Development Framework		x	x			
	National Spatial Development Framework			x		x	
	National Framework for Sustainable Development						x

From Table 4.6 it is apparent that the Better Life Index and the World Happiness Report take a holistic approach to social capital as part of life quality measurements. The Better Life Index generally approaches life quality in a holistic manner and would, therefore, do the same with human capital, and the World Happiness Report's approach may be attributed to their special focus on the social, urban and natural environment (Helliwell et al., 2020:4). The Happy Planet Index seems to not focus explicitly on social capital in their measuring of happiness but notes in their 2016 Methods Paper (NEF, 2016:5) that they are ultimately measuring social welfare. It may, therefore, be argued that their focus is on, what is believed to be, the underlying factors producing social capital and, subsequently, their discussions of the Happy Planet Index itself and the results of the different countries do consider social capital (HPI, 2016; HPI & NEF, 2016). The Global Liveability Index quantifies "challenges that might be presented to an individual's lifestyle" in different locations (EIU, 2019:5) and does not focus heavily on social capital.

The South African directives mostly focus on safety and social networks. These are arguably important considerations in view of the high crime rates and social division in South Africa.

Furthermore, the social focus may be ascribed to the sub-Saharan African principal of ubuntu – where individual choices are guided (Metz, 2014:6764) by a “commitment to the good of the community in which their identities were formed” and a need to experience life “as bound up in that of their community” (Nkondo, 2007:91).

In Chapter 3, section 3.4, it was noted that cultural interests are often not incorporated in quality of life measurements (Fahy & Cinnéide, 2008:371). From Table 4.6, it is apparent that it is also the case in this instance. The Quality of Life Index reports only mentions it (without elaborating), and in the South African directives, it is used in terms of an approach to matters of interest and for arts and culture.

4.3.4 Natural capital

Natural capital refers to natural assets (i.e. biodiversity and other ecosystem services) that affect life quality (OECD, 2020:217,205). Climate change and environmental quality are, furthermore, viewed as significant threats to natural capital and subsequently to future well-being. Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 4.7. A word cloud, created in ATLAS.ti from the quotations associated with each code, is presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicates its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 4.7: Codes relating to Natural capital

Theme: Resources Category: Natural capital	
Code	Reflection on relation to quality of life
Natural environment <i>Word cloud:</i> 	All but one of the analysed texts emphasise the importance of the natural environment. It is suggested that people benefit from environmental services and assets and, therefore, the natural environment affects both endogenous and exogenous quality of life, e.g. in the following respects: 1) Providing sufficient food and water 2) Affecting people's emotional well-being <i>Related to word cloud: Ecosystem; Environment; Natural; Resources; Services</i>
	Some people value the beauty of the natural environment and access thereto is, thus, extremely important to them. To these people this desire may also influence their choice of place of residence. <i>Related to word cloud: Ecosystem; Environment; Natural; Services</i>

Theme: Resources Category: Natural capital	
Code	Reflection on relation to quality of life
Climate change <i>Word cloud:</i> 	Temperatures are rapidly rising, threatening the current levels of life quality and this of concern from both a national and international perspective. Furthermore, the poor and vulnerable are, furthermore, especially exposed to climate-related extreme events. <i>Related to word cloud: Climate; Change; Disasters</i>
	Climate change is believed to hinder agricultural productivity causing the following, that affects quality of life: 1) Water and food scarcity 2) Economic decline <i>Related to word cloud: Economic; Change; Climate; Disasters</i>
Environmental quality <i>Word cloud:</i> 	The environmental quality is believed, from both perspectives, to not be limited to geographic context; it affects the entire planet's life quality. A low environmental quality is believed to decrease: 1) health levels, i.e. by toxic levels of air, water and soil quality 2) the aesthetic enjoyment of the natural environment 3) the availability of ecosystem services <i>Related to word cloud: Air; Environment(al); Natural; Pollution; Quality; Water</i>

As noted in Table 4.7 above, the **quality** of the **natural environment** has a profound influence on overall life quality (Kladivo & Halás, 2012:51) as it 1) affects the climate, water, soil and air quality (natural capital) (Papageorgiou, 1976:178-179), 2) provides valuable cultural, amenity and aesthetic services (human and social capital) and 3) serves as an economic pull factor (economic capital) (Collados & Duane, 1999:442; Kladivo & Halás, 2012:51). South Africa boasts “rich biodiversity[,] exceptional ecosystems and habitats” and “abundant non-renewable energy and mineral resources” (OECD, 2013:3). This provides a large tourist attraction (South African Government, 2021) and enables “energy- and carbon-intensive economies” (OECD, 2013:3). However, it is argued that the current, one-sided focus on economic capital is straining the natural capital, causing an increasing ecological footprint (Collados & Duane, 1999:443; Mudombi, 2018). As indicated in Table 4.7 above, natural capital is, furthermore, globally strained by **climate change**, “contributing to many observed changes in weather and climate extremes”, e.g. hot extremes, heavy precipitation and agricultural and ecological drought (IPCC, 2021:12), posing “threats to food security, water resources, infrastructure, health, biodiversity and ecosystem services” (Cilliers & Cilliers, 2016:23).

Table 4.8 indicates (x) which of these codes were allocated within which texts during the storyline analysis.

Table 4.8: Natural capital code allocation in the analysed texts

		Code allocation		
		Natural environment	Climate change	Environmental quality
Quality of Life Index reports	Better Life Index	x	x	x
	Global Liveability Index Overview	x	x	
	Happy Planet Index			x
	World Happiness Report	x	x	x
South African directives	Constitution of the Republic of South Africa	x		x
	Spatial Planning and Land Use Management Act	x		
	National Environmental Management Act	x		x
	National Development Plan	x		x
	Integrated Urban Development Framework	x	x	
	National Spatial Development Framework	x	x	x
	National Framework for Sustainable Development	x	x	x

The Better Life Index and World Happiness Report take a holistic approach to natural capital as part of life quality measurements. The Better Life Index follows its generally holistic approach and the World Happiness Report focus specifically on the natural, social and urban environment (Helliwell et al., 2020:4). The Happy Planet Index focuses specifically on the ecological footprint (HPI & NEF, 2016:1) and therefore, only incorporates environmental quality from the natural capital as part of their life quality measurements. The Global Liveability Index Overview does not mention the “natural” as part of their liveability measurements.

The protection and effective management of the valuable resources are a priority of the South African government (Mudombi, 2018), as may be inferred from Table 4.8 above and a balance may be found to utilise the economic opportunity and protecting the natural environment to ultimately ensure “the quality of life of all citizens”.

4.4 Context

From the analysis, it is apparent that it is believed that not only the resources but also the *context* surrounding the resources influence people's life quality. The context may be considered according to three categories: physical space, institutional context and individual experience.

4.4.1 Physical space

The Better Life Index (OECD, 2020:22) explains that the physical space shapes "people's economic conditions and can have wide-ranging consequences for other aspects of life", i.e. education and health. It is argued that the physical environment shapes the way people are able to live their lives (Haslauer *et al.*, 2015:912; Hayek *et al.*, 2015:47,48), therefore, influencing their capability. The South African directives, subsequently, places a large emphasis on spatial transformation. Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 4.9. A word cloud, created in ATLAS.ti from the quotations associated with each code, is presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text associated with each code (ATLAS.ti, 2021:129).

Table 4.9: Codes relating to the Physical space

Theme: Context Category: Physical space	
Code	Reflection on relation to quality of life
Spatial organisation <i>Word cloud:</i> 	It is believed that geographic location determines the access people have to different services, opportunities and choices and thereby affects life quality, i.e. access to 1) a variety of transportation modes, 2) social services, 3) recreation spaces, 4) cultural gatherings, 5) health facilities, 6) economic activities and 7) work and education opportunities. Access to these is deemed exceedingly important as the South African directives aim to "ensure equal access for all to the services, amenities and opportunities that [...] urban and rural settlements offer" (DRDLR & DPME, 2019:31). <i>Related to word cloud: Access; Cities; Economic; Growth; Inclusive; Land; Services; Social; Towns; Urban</i>
	Both the international and national perspective emphasises the importance of rural-urban linkages for the well-being of rural residents, since it is argued that people in rural settlements need access to the amenities that urban areas offer. <i>Related to word cloud: Access; Inclusive</i>
	The geographic location of a property may also hold the potential for creating future well-being through possible social and economic gains from future development and greater inclusion for an individual in economic and social activities. <i>Related to word cloud: Cities; Economic; Growth; Inclusive; Land; Social; Towns; Urban</i>

Theme: Context Category: Physical space	
Code	Reflection on relation to quality of life
Spatial organisation <i>continued</i> Word cloud: 	It is argued that the size of a human settlement affects life quality, i.e. larger cities tend to suffer more from terrorism and other issues regarding safety but are also associated with more employment opportunities and other economic and social amenities. <i>Related to word cloud: Cities; Economic; Social; Urban</i> It is argued from both perspectives that urbanisation poses a threat to life quality, since it: 1) creates a lack in housing availability and the affordability thereof 2) creates large informal settlements with poor living conditions 3) reduces the availability of green and open spaces, thereby hindering social interaction and reducing ecosystem services 4) places strain on existing infrastructure <i>Related to word cloud: Access; Cities; Economic; Growth; Inclusive; Land; Services; Social; Sustainable; Towns; Urban</i>
Historic development patterns Word cloud: 	The South African directives highly emphasise the effect of the historic South African urban development policies on current South African life quality. It is argued that certain settlements are economically underdeveloped and residents of these settlements suffer from social and economic exclusion. <i>Related to word cloud: Access; Address; Apartheid; Areas; Continues; Development; Inclusion; Poverty; Society; Spatial; Spheres; Transformation</i> The Quality of Life Index reports have not explicitly discussed historical development.
Housing Word cloud: 	The Quality of Life Index reports emphasise the importance of personal space for a quality life. A “space that I can call my own [...which...] I share [...and...] cherish with others” is also mentioned as part of the South African National Development Plan’s vision statement (NPC, 2012:14) and it may be inferred that a “shared private space” is also viewed of some importance in South Africa. <i>Related to word cloud: Privacy; Space</i> Housing is deemed a basic right by the <i>Constitution of the Republic of South Africa</i> (1996), as well as an important aspect of a quality life (NPC, 2012:38), since it provides “shelter, safety, privacy and personal space” (OECD, 2020:80). <i>Related to word cloud: Access; Housing; Privacy; Right; Space</i> The Better Life Index argues that housing costs influence individuals’ spending ability, which subsequently affects their life quality. Especially those with a low income. <i>Related to word cloud: Income; Housing</i>

Further to urban areas providing agglomeration economies (refer to Chapter 1, section 1.8.1), the available transportation modes and people’s location within urban areas (**spatial organisation**) influence their access to the quality of life resources discussed in section 4.3 above, i.e. social connections, medical services and work or education opportunities (Lee & Sener, 2016:149; Shekhar *et al.*, 2019:69; Talmage & Frederick, 2019:366). Furthermore, larger cities provide a

wider variety of “cultural, recreational, educational and employment opportunities” (Clark *et al.*, 1988:701) and, therefore, as noted in Table 4.9, spatial organisation affects life quality. Considering the classic notions of the utility theory that people’s choices are based on maximising their satisfaction (Dhongde & Pattanaik, 2009:16-17; Mohr & Fourie, 2008:184; Pindyck & Rubinfeld, 2015), the life quality benefits and the subsequent increased capability (provided by the agglomeration of resources within urban areas) it may be assumed that people prefer urban living. As explained in Chapter 1, sections 1.6.1 and 1.6.6, however, urban areas provide a mixed blessing to its inhabitants as larger cities also tend to be more socially distant with higher living costs and levels of crime and pollution (Clark *et al.*, 1988:701), prompting some to prefer rural living. This is also evident in Greyling and Rossouw’s (2017:1070) finding that the overall quality of life in South Africa was almost the lowest in the economic hubs Johannesburg and Pretoria.

In South Africa, many choose to live, raise their children and retire in rural areas that represent “a sense of security, identity and history” (Todes *et al.*, 2010:341). Circulatory migration between rural and urban areas is, however, prevalent as a survival strategy for many rural households (De Satgé & Watson, 2018:47). This results from little economic opportunity in the rural areas of South Africa, especially in the former homeland areas, and many household members, especially the women, temporarily migrate to urban areas where they have existing social networks, in search of work to supplement the financial support provided by the government (Todes *et al.*, 2010:341). As noted in Table 4.9 above, rural-urban linkages are, therefore, vitally important to provide access for rural-based households to the resources available in urban areas, especially the economic capital. A further catalyst for rural-urban migration is the market and policy-related stresses experienced by the agricultural sector in South Africa, limiting the job availability in this sector (Todes *et al.*, 2010:341).

Migration from rural to urban areas does not always follow economic growth, as the availability of **housing** in remotely located towns prompts people who are unable to directly migrate to mega cities to move there, even without any prospects of economic opportunity (Todes *et al.*, 2010:335). South African cities with robust economies also experience high population growth (urbanisation) (Nel, 2014:6232), straining existing resources (refer to Chapter 1, section 1.8.8) and resulting in South Africa’s “chronic housing shortages” (Salenson *et al.*, 2021).

Although an effort is being made to address this housing shortage, government subsidised housing is generally placed on the urban periphery (Donaldson, 2014:5224), reinforcing the **historic development patterns** (refer to Chapter 1, section 1.8.8) and encumbering access to resources, i.e. to work and leisure facilities (Bodur & Yüksel, 2017:56; Clark *et al.*, 1988:701;

Hayek *et al.*, 2015:48). Furthermore, approximately half of the population currently live in overcrowded (“up to eight people living in a one-bedroom house”) and densely populated housing (further densified by backyard rentals), rendering the prescribed covid-19 precaution measurement of social distancing and social isolation impossible (De Groot & Lemanski, 2021:255,259,264-265). The covid-19 pandemic has, therefore, highlighted the urgency of housing that provides “shelter, safety, privacy and personal space” (refer to Table 4.9 above) for the South African poor.

Table 4.10 indicates (x) which of these codes were allocated to which texts during the storyline analysis.

Table 4.10: Physical space code allocation in the analysed texts

		Code allocation		
		Spatial organisation	Housing	Historic development patterns
Quality of Life Index reports	Better Life Index	x	x	
	Global Liveability Index Overview	x		
	Happy Planet Index			
	World Happiness Report	x	x	
South African directives	Constitution of the Republic of South Africa		x	
	Spatial Planning and Land Use Management Act	x	x	x
	National Environmental Management Act			
	National Development Plan	x	x	x
	Integrated Urban Development Framework	x	x	x
	National Spatial Development Framework	x	x	
	National Framework for Sustainable Development	x		

The World Happiness Report and Better Life Index take relatively holistic approaches to considering physical space as part of life quality measurements, as is apparent in Table 4.10 above. The first focus specifically on the urban, natural and social environment (Helliwell *et al.*, 2020:4) and the second endeavours to generally consider the quality of life holistically. The Global Liveability Index quantifies “challenges that might be presented to an individual’s lifestyle” in different locations (EIU, 2019:5) and it may, therefore, be argued that physical space having an

effect on life quality is a premise and would not be heavily included in the measurements. The Happy Planet Index does not consider the physical space as part of their quality of life measurements.

Since the South African directives, included in the analysis, are those relevant to spatial planning in South Africa (refer to Chapter 2, section 2.4.1.2), they seem to have a holistic focus on the physical space quality of life codes. Considering the current state of the South African human settlements, it is argued that such a holistic approach is exceedingly important to adhere to the *Constitution of the Republic of South Africa's* (1996) mandate to improve “the quality of life of all citizens”.

4.4.2 Institutional context

The institutional context influences the level to which a country or society is united and thereby also affects the well-being of this country or society (OECD, 2020:47). Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 4.11. A word cloud, created in ATLAS.ti from the quotations associated with each code, are presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 4.11: Codes relating to the Institutional context

Theme: Context Category: Institutional context	
Code	Reflection on relation to quality of life
Governance <i>Word cloud:</i> 	Governments are believed to “enhance the capacity of the state and its citizens to work together to achieve spatial and social integration” (COGTA, 2016:8) which is, in turn, believed to enhance overall life quality. <i>Related to word cloud: Development; Governance; Land; Quality; Social; Spatial; Urban</i>
	Spatial planning is believed to affect life quality through the coordination of “role-players that shape and control land use, the urban form and the delivery of infrastructure and services” (COGTA, 2016:43). <i>Related to word cloud: Development; Governance; Land; Quality; Social; Spatial; Urban</i>
	It is believed, from both perspectives, that efficient land governance and management provide social, economic, material and locational conditions that induce a proper life quality. <i>Related to word cloud: Development; Governance; Land; Quality; Social; Spatial; Urban</i>

Theme: Context Category: Institutional context	
Code	Reflection on relation to quality of life
Institutional trust <i>Word cloud:</i> 	It is believed, from both perspectives, that people's trust in their government and public institutions, i.e. the police force, influences their overall well-being and alleviate the effect of negative circumstances. <i>Related to word cloud: Government; Individual; Institution; Law; People; Public; Rule</i>
Stability <i>Word cloud:</i> 	The Global Liveability Index Overview notes that stability, i.e. the absence of terrorism, peace in neighbouring countries and low crime rates, effect the overall well-being within a country or region. The South African National Development Plan, furthermore, notes that corruption undermines good local governance. <i>Related to word cloud: Crime; Stability; Terrorism</i>

As noted in Table 4.11 above, the **governance** of urban areas provides the conditions for living (Bayulken & Huisingh, 2015:256; Wann-Ming, 2019:276), shaping and controlling the land uses and infrastructure delivery within, and physical layout of, urban areas (refer to Chapter 1, section 1.6.2). Bertaud (2018:349-354), however criticises the “master plan” approach to spatial planning and states that the spatial decision-makers should enable and facilitate, rather than create or shape. Government decisions play an important role in the life quality of ordinary citizens (Burlacu, 2018:100) as it significantly affects their available sets of options and subsequent capability (refer to Chapter 1, section 1.8.2) (Cohen, 1993:13). It may be argued that this strengthens the argument for thorough public participation to ensure the inclusion of ordinary citizens' voices in the planning process (refer to section 4.3.3 above).

Broader quality of life considerations is now a major concern in the public and governance agenda (Lau *et al.*, 2018:158) and is generally considered the central objective of urban and development directives (Blečić *et al.*, 2013; Nanor *et al.*, 2018:835; Paprzyca, 2019; Santos & Martins, 2007:411), even though the strong focus on the GDP (refer to Chapter 3, section 3.1) has remained (Nakanishi *et al.*, 2013). This is also evident in the *Constitution of the Republic of South Africa's* (1996) declaration that “the quality of life of all citizens” needs to be improved.

The significant influence that government decisions have on life quality strengthens the argument for thorough public participation to give some influence (and capability) back to the local citizens. The level of trust in government (**institutional trust**) may, however, influence the willingness of people to accept their actions and decisions (Wills-Herrera, 2014:1188) and, subsequently, their willingness to collaborate in participatory and advocacy planning efforts (refer to section 4.3.3

above). In South Africa, institutional trust is quite low (Wasserman & Madrid-Morales, 2021) and StatsSA (2020a:18) reports trust in the three spheres of South African government during 2019/2020 as, 48.9% in local government, 58.2% in provincial government and 58.5% in national government. A municipal representative (2019) confirmed that these low levels of trust encumbered public participation, since the local citizens are unwilling to provide them with open and honest opinions in terms of development needs and opportunities.

It is, furthermore, argued that people in power often use the quality of life notion as a political tool (Murgaš, 2014; Murgaš & Heřmanová, 2013:126) to advocate for the “rightness” of, and to gain support for, an action (Bayulken & Huisingh, 2015; Fahy & Cinnéide, 2008:368; Myers, 1988:347; Szafranek, 2016:98). In cases where **instability**, i.e. state-corporate crime, is prevalent, such actions may contribute “to massive and widespread harms that materially benefit few” (Klein, 2014:6325), disrupting the fair distribution of resources (refer to section 4.1 above) and discouraging foreign investment (Zheng, 2014:4882).

Table 4.12 indicates (x) which of these codes were allocated to which texts during the storyline analysis.

Table 4.12: Institutional context code allocation in the analysed texts

		Code allocation		
		Governance	Institutional trust	Stability
Quality of Life Index reports	Better Life Index		x	
	Global Liveability Index Overview			x
	Happy Planet Index			
	World Happiness Report	x	x	
South African directives	Constitution of the Republic of South Africa			
	Spatial Planning and Land Use Management Act	x		
	National Environmental Management Act			
	National Development Plan	x	x	x
	Integrated Urban Development Framework	x		
	National Spatial Development Framework	x		
	National Framework for Sustainable Development	x		

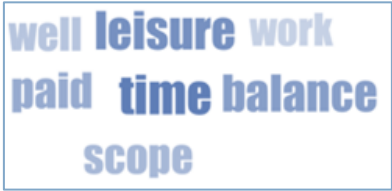
Table 4.12 above demonstrates that the institutional context was not heavily focused on as something influencing life quality in the analysed texts. The main goal of most of the Quality of Life Index reports and the South African directives is to provide guidance to decision-makers on how future well-being for all citizens may be secured. Therefore, it may be argued that the institutional context having an influence on life quality, is part of their premise, hence the focus on governance and, to a lesser extent, institutional trust. In terms of stability, the South African National Development Plan spends a chapter on “fighting corruption” (NPC, 2012:445-455).

4.4.3 Individual experience

People’s individual experience influences their ability to withstand, and persevere through, hardship (NPC, 2012:12) and it is, therefore, believed to greatly influence their quality of life. Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 4.13. A word cloud, created in ATLAS.ti from the quotations associated with each code, are presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 4.13: Codes relating to the Individual experience

Theme: Context Category: Individual experience	
Code	Reflection on relation to quality of life
Job quality Word cloud: 	The Better Life Index notes that people’s work experience affects their life quality. This includes: 1) the gender wage gap 2) remuneration 3) job availability 4) risk of job loss 5) physical safety 6) the feeling of contentment within their job 7) whether the job matches their skills 8) people’s learning opportunities 9) working time arrangements 10) people’s relationships with their co-workers. <i>Related to word cloud: Availability; Conditions; Job; Male; Material; Opportunities; People’s; Quality; Wages; Workers; Working</i>
	The <i>Constitution of the Republic of South Africa</i> (1996) grants “the right to fair practices” to every citizen. <i>Related to word cloud: Job; Conditions</i>

Theme: Context Category: Individual experience	
Code	Reflection on relation to quality of life
Experience <i>Word cloud:</i> 	There is an Aristotelian presumption that “sustained positive emotions are important supports for a good life” (Helliwell <i>et al.</i>, 2020:15). These emotions are believed to be influenced by mental health, “how people experience their lives” (Helliwell <i>et al.</i>, 2020:4) and external family circumstances. Experience is mentioned by most of the Quality of Life Index reports and by the South African National Development Plan. <i>Related to word cloud: Affect; Emotions; Experience; Happiness; Life; Positive; Well</i>
Work-life balance <i>Word cloud:</i> 	People’s work-life balance affects their life quality, according to the Better Life Index and the South African National Spatial Development Plan. This includes: 1) the balance between “family commitments, leisure time and work” (OECD, 2020:28) 2) the time it takes to commute between the above aspects of life 3) the quantity of time devoted to each of the above aspects 4) people’s satisfaction with how their time is spent <i>Related to word cloud: Balance; Leisure; Time; Well; Work</i>

In Table 4.13, it is explained that people’s sense of belonging within their community and their personal satisfaction (**experience**) with their living environment, health, income and employment has a profound effect on how they perceive their life quality (Goldberg *et al.*, 2012:129; Habibi & Zebardast, 2018; Shin & Jung, 2019). Nussbaum and Sen (1993:1) note that the experience of employment (i.e. **job quality** and **work-life balance**) may be based on the nature of the work, the relationship between employer and employee and on the “measure of dignity and control” the individual possesses. These experiences of life quality differ, however, from person to person and people living in the same area and are similarly employed may rate their experience of their life quality differently (Lee & Sener, 2016:146; Westaway, 2006:176). These experiences affect people’s self-esteem, that in turn enhances their confidence to participate in social and political matters (Todaro & Smith, 2015:23).

Table 4.14 indicates (x) which of these codes were allocated to which texts during the storyline analysis.

Table 4.14: Individual experience code allocation in the analysed texts

		Code allocation		
		Job quality	Subjective well-being	Work-life balance
Quality of Life Index reports	Better Life Index	x	x	x
	Global Liveability Index Overview			
	Happy Planet Index		x	
	World Happiness Report		x	
South African directives	Constitution of the Republic of South Africa	x		
	Spatial Planning and Land Use Management Act			
	National Environmental Management Act			
	National Development Plan		x	x
	Integrated Urban Development Framework			
	National Spatial Development Framework			
	National Framework for Sustainable Development			

The individual experience seems to be a neglected factor of life quality within the analysed texts. It is, however, acknowledged from both perspectives to have an influence on life quality.

4.5 Closing remarks

The Better Life Index and World Happiness Report both seem to view a quality life as something created by the entirety of the exogenous environment and the endogenous experience. This correlates with the notion found in literature that the endogenous experience provides valuable context for findings with regards to the exogenous quality of life and should, therefore, both be considered (refer to Chapter 3, section 3.2). The Global Liveability Index Overview and the Happy Planet Index seems to take a narrower view on the subject. The Global Liveability Index Overview seems to focus more on the threats to a quality life and the Happy Planet Index views on the individual experience of life quality, health and choice, all dependant on the quality of the natural environment. Quality life is an exceedingly multifaceted and subjective construct (refer to Chapter 3, section 3.2), as is evident in this difference in approach by the Quality of Life Index reports.

In terms of economic capital, the South African directives seem to view the largest drivers of quality of life as infrastructure, mobility, economic growth and financial assets, especially land ownership. The Spatial Planning and Land Use Management Act 16 of 2013 echoes the emphasis on infrastructure and economic growth. Choice, education, skills, health, safety and social network are, however, often referred to at least once in more than three of the directives. The natural environment, along with its quality and climate change seem to be viewed as exceedingly important to people's overall well-being. In terms of physical space, the historic development, housing, human settlements and urbanisation seem to be viewed as the main drivers influencing life quality. Lastly, governance seem to be believed to largely affect life quality while not much attention is given to the individual experience.

The South African quality of life is, notwithstanding these policy and legislative measurements, widely considered to be exceedingly low (refer to Chapter 1, sections 1.1). This is often attributed to conflicting rationalities present between spatial decision-makers and the urban poor (refer to Chapter 1, section 1.8.4). To explore these conflicting rationalities, a study of the quality of life rationality of the South African poor is presented in the following chapter.

CHAPTER 5: THE QUALITY OF LIFE RATIONALITY OF THE SOUTH AFRICAN POOR

5.1 Introduction

To determine the quality of life rationalities of the South African poor, a case study analysis was conducted (refer to Chapter 2, section 2.5). During this analysis, it was apparent that many of the quality of life resources, abstracted during the first part of the empirical analysis as economic capital, human capital, social capital and natural capital (refer to Chapter 4, section 4.3), are not present within these low-income communities and residents seem to focus mostly on surviving. Below is a quote from one of the interviewees about an inability to improve or develop available resources.

"We barely survive as is."

5.2 Methodology recapitulation

Chapter 2, section 2.5 details the methods followed for the analysis presented in this chapter. A recapitulation of these methods is, nevertheless, presented in Figure 5.1 below.

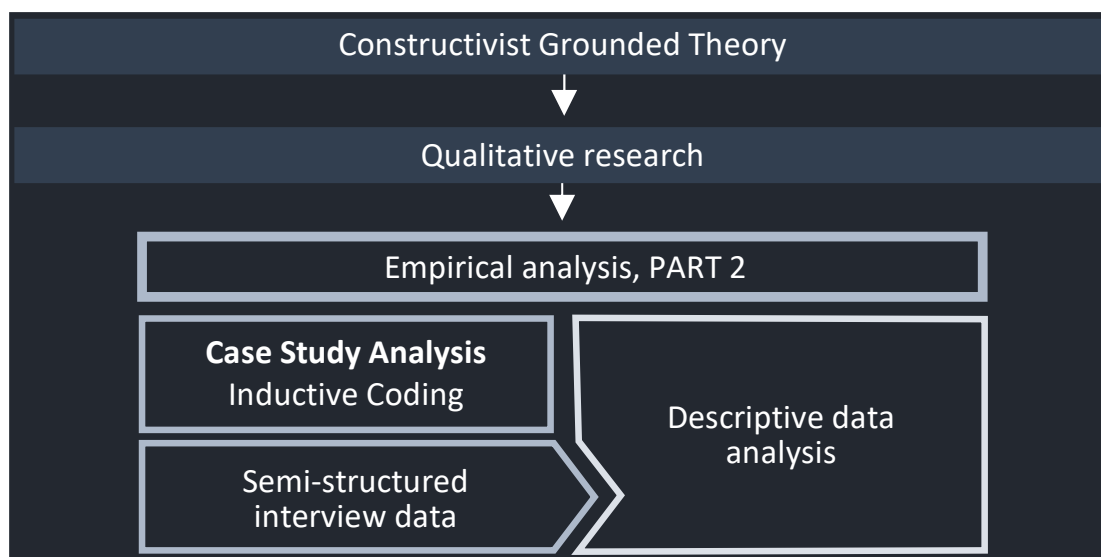


Figure 5.1: Methodology for the case study analysis

During the case study analysis social indicators were abstracted from semi-structured interview results in the form of codes, describing the underlying experience of the main features of society in South African low-income settlements. The codes were divided into the seven categories and

two themes, created during the first part of the analysis. The results of the case study analysis are, subsequently, presented in the following sections according to these two themes, namely resources and context, and their respective categories and codes.

5.3 Contextualising the case studies

In any situation there are “contingent universals” that may be shared across different localities and contexts (De Satgé & Watson, 2018:24). A case study analysis was conducted to examine the quality of life rationality of the South African poor and may provide an opportunity for an empirical contribution to developing a theory of life quality (Yin, 2018:38). The analysed cases include Alabama, Kanana, Freedom Park, Zamdela, Lebohang, eMbalenhle, KwaDela and Matlwangtlwang and is visually presented in Figure 5.2 below.

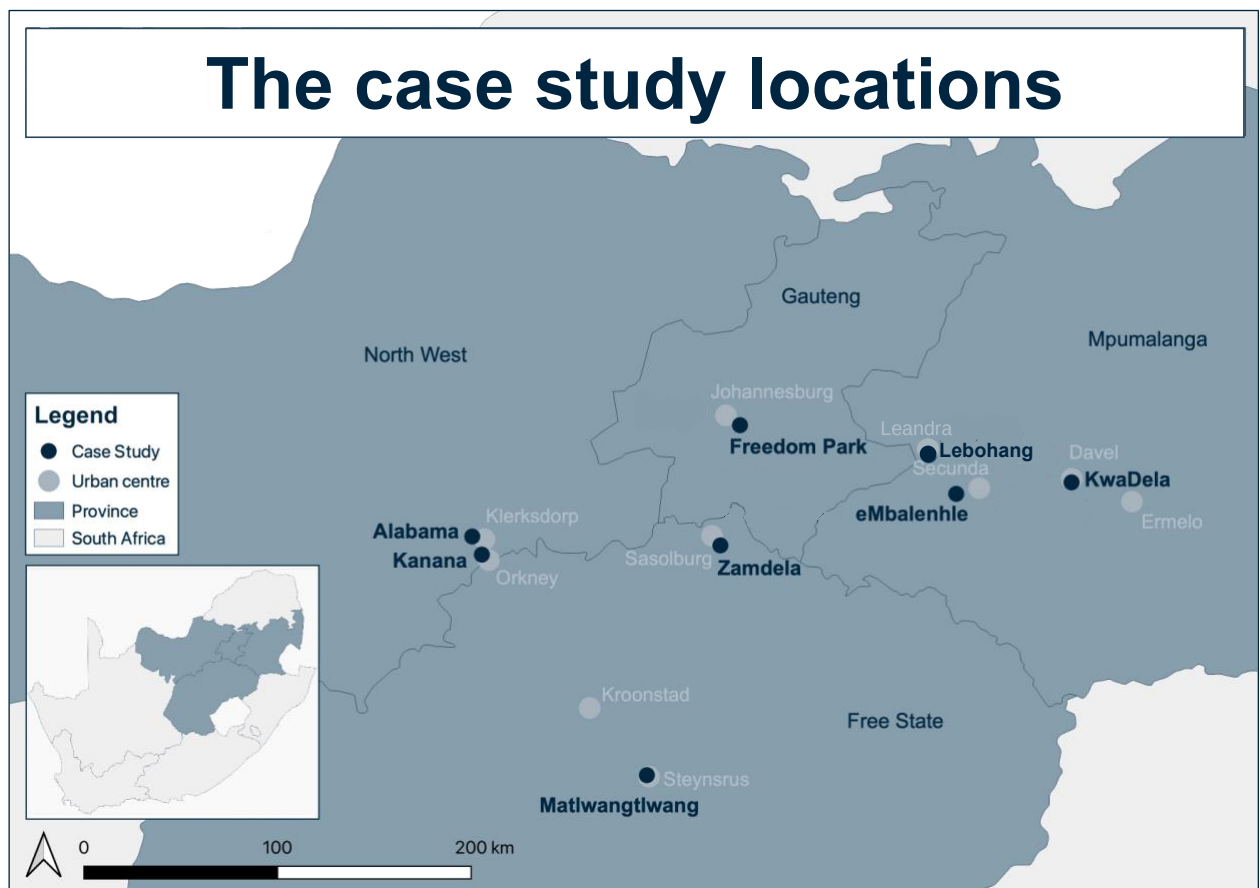


Figure 5.2: The case study locations

The case studies, presented in Figure 5.2 above, are all low-income settlements on the periphery of an urban centre with a mixture of informal and RDP¹⁵ housing. The urban centres, presented in Figure 5.2, range, according to the CSIR¹⁶ *South African Functional Town Typology* (Van Huyssteen *et al.*, 2018), from a city region (Johannesburg) to a large regional centre (Klerksdorp), service towns (Kroonstad, Sasolburg, Ermelo and Secunda) and small towns (Orkney, Steynsrus and Davel). The socio-economic opportunities provided by these urban centres, subsequently, differ substantially.

The results of the case study analysis are presented and discussed in the following sections.

5.4 Resources

In the first part of the empirical analysis, it was found that life quality is deemed dependent on *resources* and it was noted that the South African legislation mandates the development of resources (refer to Chapter 4, section 4.3). Many of the analysed cases, however, have limited to no access to resources.

5.4.1 Economic capital

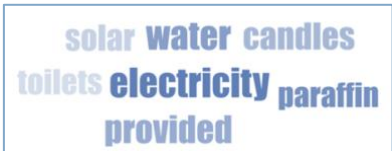
As per Chapter 4, section 4.3.1, economic capital supports and facilitates the material aspects that enables a society's desired living standards (OECD, 2020:71,201). Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 5.1. A word cloud, created in ATLAS.ti from the quotations associated with each code, are presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

¹⁵ RDP (Reconstruction and Development Programme) was a South African government funded housing programme. The programme has since been replaced, but South African government funded housing are still colloquially referred to as RDP housing.

¹⁶ South African Council for Scientific and Industrial Research

Table 5.1: Codes relating to Economic capital

Theme: Resources Category: Economic capital	
Code	Reflection on its relation to quality of life
Infrastructure <i>Word cloud:</i> 	There seem to be a general dissatisfaction with the lack in or inadequacy of the infrastructure, provided by the municipality. The level of dissatisfaction seems, however, to differ, with Matlwangtlwang residents being visibly dissatisfied and those in eMbalenhle only mildly so. An interviewee in Kanana stated that their settlement had recently been upgraded and they have adequate infrastructure. <i>Related to word cloud:</i> Access; Gravel; Infrastructure; Leaking; Right; Roads; Service(s); Toilets
	No comments captured about infrastructure from interviewees in Alabama, Freedom Park, KwaDela, Lebohang or Zamdela
Infrastructure: water <i>Word cloud:</i> 	Regular access to clean water seems very important to the interviewees. <i>Related to word cloud:</i> Communal; Tap; Water
	The RDP houses have indoor taps. <i>Related to word cloud:</i> Tap; Water
	Residents of the informal settlements must fetch water as part of their daily routine, but this does not seem to bother the interviewees. In Alabama there is a pipe running through the informal settlement where residents install their own taps. In Freedom Park, Kanana and Matlwangtlwang, the municipality installed a communal tap. <i>Related to word cloud:</i> Communal; Water
	Most of the interviewees note that the water supply is unreliable. In Alabama, Lebohang, Freedom Park, Kanana, Matlwangtlwang and Zamdela the water supply is often interrupted. In Kanana, they fetch water at the river, and in Matlwangtlwang the municipality supply water at the library when the people don't have access via the piped system. The other interviewees did not mention alternative water sources. <i>Related to word cloud:</i> Water
	In Lebohang the interviewee stated that the water is fresh and healthy. Interviewees in Kanana and Zamdela, however, complain that the water is often dirty and in eMbalenhle an interviewee explained that the water causes illness when not boiled. The water in eMbalenhle, furthermore, have a bleach smell and the colour is often white. <i>Related to word cloud:</i> Water
	No comments about water quality, access and/or supply was captured from interviewees in eMbalenhle, KwaDela and Lebohang.
Infrastructure: sanitation <i>Word cloud:</i> 	Built houses (mostly RDP): In Alabama, Freedom Park and Kanana, the residents staying in RDP houses seem satisfied with their "proper" indoor toilets. In eMbalenhle, however, people are very dissatisfied. At the time of the interviews the sewage had been leaking into the streets for at least a week and interviewees complained 1) about the health implications, that 2) they cannot sit outside when their house is too hot and 3) the children cannot play outside because of the stench. Some interviewees blame the municipality, while others blame children who open the sewage holes or throw things in that block it. <i>Related to word cloud:</i> Sanitation; Sewage; Toilet(s)

Theme: Resources Category: Economic capital	
Code	Reflection on its relation to quality of life
Infrastructure: sanitation <i>continued</i> Word cloud: 	Informal settlements: Most of the informal settlement residents are dissatisfied with the lack of formal sanitation provision from the municipality, while an interviewee in the Matlwangtlwang informal settlement stated that the community believe toilets to be unhealthy for children and to contain chemicals harmful to women. In the informal settlement of Freedom Park, the municipality provided temporary communal toilets during the covid-19 pandemic. The interviewees stated, however, that these are significantly inferior to those in the RDP houses and that it is very unsanitary. They, furthermore, use the bucket system (with buckets being collected twice a week). In the informal settlements of Alabama, Kanana and a few people in Matlwangtlwang use pit toilets. Some in Matlwangtlwang use their neighbours' pit toilets or indoor flush toilets in the formal area, but most people use a nearby quarry. <i>Related to word cloud: Access; Sanitation; Sewage; Toilet(s)</i>
	No comments about sanitation captured from interviewees in KwaDela, Lebohang and Zamdela
Infrastructure: electricity Word cloud: 	Interviewees from eMbalenhle, Freedom Park and Kanana have electricity, but complained about frequent power interruptions. <i>Related to word cloud: Electricity; Provided</i>
	Many interviewees do not have direct access to electricity in their homes, but seem content to use alternative sources, e.g. solar panels to charge their phones; batteries for radio and TV; gas, paraffin, coal, wood, or cow manure for cooking; solar panels, candles (indoors), fire (outdoors) for light. Some interviewees stated that they access electricity at work or by visiting friends and family and others tap electricity illegally. <i>Related to word cloud: Electricity; Candles; Paraffin</i>
	No comments captured about access to electricity and other energy sources from interviewees in KwaDela, or Zamdela.
Infrastructure: roads Word cloud: 	Some interviewees in eMbalenhle, Kanana and Matlwangtlwang commented on the bad state of the roads. <i>Related to word cloud: Gravel; Roads; Transport</i>
	No comments captured about road infrastructure from interviewees in Alabama, Freedom Park, KwaDela, Lebohang or Zamdela
Mobility Word cloud: 	The interviewees seem quite content with their mobility. Most of them walk, as this is the cheapest option and when it is too far to walk, they usually travel by taxi. It seems that they prefer walking as, according to an interviewee in Alabama, most of their income is spent on taxi fares. The Matlwangtlwang interviewees do not have ready access to taxis and use bicycles and motorcycles, or hitchhike and one interviewee's employer picks him up. <i>Related to word cloud: Taxi(s); Transport; Travel; Walk(ing)</i>
	No comments about transportation captured from interviewees in KwaDela, Lebohang and Zamdela

Theme: Resources Category: Economic capital	
Code	Reflection on its relation to quality of life
Economic activity <i>Word cloud:</i> 	Economic activity seems limited in all the case studies. Most interviewees mentioned spaza shops, taverns and shebeens¹⁷. In Matlwangtlwang there is a café and in Kanana and Freedom Park there are shopping centres. An interviewee in eMbalenhle complained, however, that there are no shops in their vicinity. <i>Related to word cloud:</i> Shop(s); Shop(s); Shopping; Tavern No comments captured about economic activity from interviewees in Lebohang or Zamdela.
Financial assets <i>Word cloud:</i> 	Most of the people live illegally and do not own land; an interviewee in Matlwangtlwang expressed a desire for land tenure. In the formalised area they do, however, own the property or rent it according to the interviewees. <i>Related to word cloud:</i> House; Land; Live; Owner; Property; Rent Other financial assets include goats in Lebohang and pigs in Matlwangtlwang. <i>Related to word cloud:</i> Animals; Goats; Owner; Property No comments captured about financial assets from interviewees in eMbalenhle, Freedom Park, KwaDela, or Zamdela.
Income <i>Word cloud:</i> 	Income seems to be a great concern to all the interviewees. Most live by government grants and others have listed a pay out after being retrenched, taken loans from loan sharks and low wages from (often temporary) jobs. <i>Related to word cloud:</i> Grants; Income; Jobs; Money
Work <i>Word cloud:</i> 	The lack of job opportunities seems to be the most pressing concern for the interviewees from all the case studies, and a sense of hopelessness may be perceived. Most people seem to be unemployed, while some have temporary low wage jobs on farms or in nearby urban centres and others farm informally with chickens, goats, or pigs. Within a household it seems that, oftentimes, only one member or none is employed. There also seems to be a particular concern for the youth sitting idly and not having any form of employment. <i>Related to word cloud:</i> Employment; Job(s); Opportunities; Working This reflection captures comments about work from interviewees in all the case studies.

From Table 5.1 above it is apparent that the inequality in South Africa (refer Chapter 1, sections 1.1 and 1.8.8) is also present within and between the low-income settlements and that the provided water, sanitation, road and electricity **infrastructure** differ from place to place. “Regular access to clean **water**” (refer to Table 5.1 above) is listed as a basic human right in the

¹⁷ “Taverns and shebeens are businesses that sell liquor and provide drinking venues, whereas the former are legally licensed, the latter are not” (Charman *et al.*, 2020:194).

Constitution of the Republic of South Africa (1996) and access to **electricity** affects people's capability (refer to Chapter 1, section 1.8.2), i.e. socio-economic development via access to education and income creation (Gibbons *et al.*, 2011:13; Scholtz & Gulati, 2016). This basic human need for water, the socio-economic implications of electricity access and road infrastructure and the health, safety and environmental implications of **sanitation** (refer to Chapter 4, section 4.3.1) may shed some light on the grievances about infrastructure delivery mentioned in Table 5.1 above. In the Govan Mbeki Local Municipality's SDF, it is pointed out that electricity infrastructure maintenance in eMbalenhle is exceedingly poor and that Lebohang has "low levels of infrastructure and social services" (Govan Mbeki Local Municipality, 2014:48,342); some residents in the Matlwangtlwang informal settlement have been waiting for two decades to receive proper infrastructure (Motse, 2018); from the interviews it is evident that the residents of the Freedom Park informal settlement have also been waiting for infrastructure provision for years; and as is evident from Table 5.1 above, the residents of Kanana seem generally content with infrastructure in their settlement – the last protest against service delivery in Kanana, to the author's knowledge, was in 2014 (News24, 2014; SAPA, 2014). In many of the other cases residents are becoming impatient and coinciding with the dissatisfaction apparent in Table 5.1 above, violent protests against the lack of, or disruption in, infrastructure service delivery erupted in Alabama (2019 and 2021), Matlwangtlwang (2018 and 2019), Freedom Park (2018) and eMbalenhle (2018, 2020 and 2021) (African News Agency, 2018; Klerksdorp Record, 2021; Lindeque, 2018; Mathebula, 2018; Mkhwanazi, 2020; Motse, 2018; Nel-Buitendag, 2021; Nkuyane, 2019; Pijoos, 2019; Van Huyssteen, 2020). No reports of recent protests in Zamdela, Lebohang and KwaDela were found.

As noted in Table 5.1 above, the interviewees seemed content with their transportation mode options, even though interviewees mentioned that large portions of their income are spent on mobility. Furthermore, many challenges to **mobility** in South Africa may be highlighted. Further to the South African transportation systems not being spatially integrated and the lack in diversified transportation options (refer to Chapter 4, section 4.3.1), the taxis that serves as the major transport mode for the South African poor (refer to Table 5.1 above), often drive recklessly to meet daily targets in an oversupplied market (Charman *et al.*, 2020:158), compromising commuter safety. Access to convenient, effective and reliable transportation (mobility) (including proper **road** infrastructure) is, however, argued to increase capability (refer to Chapter 1, section 1.8.2) to ordinary citizens. Bertaud (2018:143-145) explains that mobility 1) increases choice by increasing access to different jobs and social amenities, 2) increases creativity and productivity within urban areas by facilitating random encounters between people of "different

cultures and fields of knowledge”, 3) enables a balanced personal life by reducing commuting time and 4) reduces high transportation overhead costs.

As is indicated in Table 5.1 above, **income** and the lack in job opportunities (**work**) seem to be of great concern to all the interviewees. Access to job opportunities may be further hindered by the low mobility, hindering access to the formalised economic activity (as discussed above) present within the urban centres. Most people living in these case study areas fall below the upper-bound poverty line, earning below R 1 335 per person per month (Businesstech, 2021b) – approximately 55.3% residents in Kanana (StatsSA, 2021b), 59.2% in Matlwangtlwang (StatsSA, 2021e), 47.8% in Zamdela (StatsSA, 2021g), 52% in Lebohang (StatsSA, 2021d) and 50.9% in KwaDela (StatsSA, 2021c). Income statistics for Alabama, eMbalenhle and Freedom Park was unavailable. Considering these low incomes and the work scarcity (refer to Chapter 4, section 4.3.1), the low levels of informal **economic activity** in South Africa (refer to Table 5.1 above) are, according to Charman *et al.* (2020:3), quite unusual when compared to similar international cases. In extensive case study research they found various micro-enterprises present within the low-income settlements of South Africa and have noted that there is “enormous potential to generate wealth and create new opportunities”, but that it is often smothered by large formal economic activity and regulations (Charman *et al.*, 2020:7,8,55-64). A further hinderance to this may be the lack in ownership (**financial assets**), since entrepreneurs often do not have the resources, development rights, or space (as is needed in the cases of pig and goat farming, mentioned in Table 5.1) to grow their micro-enterprise and create income (Charman *et al.*, 2020:80).

5.4.2 Human capital

Human capital, as explained in Chapter 4, section 4.3.2, refers to people's individual potential, i.e. knowledge, competencies, education, skills and their health. Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 5.2. A word cloud, created in ATLAS.ti from the quotations associated with each code, are presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 5.2: Codes relating to Human capital

Theme: Resources Category: Human capital	
Code	Reflection on its relation to quality of life
Choice <i>Word cloud:</i> 	There seems to be a sense amongst the interviewees of being trapped in their circumstances. Many explain that when you are not working, you do not have money and therefore do not have choices. <i>Related to word cloud: Decisions; Nothing; Working</i> No comments captured about choices from interviewees in Alabama, Freedom Park, Kanana, or Matlwangtlwang.
Education <i>Word cloud:</i> 	Most of the interviewees are not well educated, although a few indicated that they could read and write. There seems to be a general belief that if only they were better educated, life would be better. A few indicated that financial need and circumstances at home necessitated them to leave school early. <i>Related to word cloud: Education; Life; School(s)</i> Most of the interviewees talk, however, of children going to school and crèches. <i>Related to word cloud: Children; Education; School(s)</i> Freedom Park, Kanana and some areas in Matlwangtlwang have ready access to schools, especially primary schools, while interviewees from Alabama and some from Matlwangtlwang expressed a need for nearby schools as the children must travel too far. <i>Related to word cloud: Primary; School(s)</i> The interviewees from Matlwangtlwang often mention the library but it is unclear if they take out some books. <i>Related to word cloud: Community</i> No comments captured about education from interviewees in Zamdela.
Health <i>Word cloud:</i> 	Many of the interviewees complained of health problems, i.e. eye problems, high blood pressure and difficulty in walking. <i>Related to word cloud: Body; Fat; Walk</i> In eMbalenhle an interviewee complained about the sewage leakage causing health problems and in Kanana and Zamdela, interviewees noted that the dirty water causes health problems. <i>Related to word cloud: Sewage</i> Some interviewees mentioned going to traditional African healers, but also noted that it is quite expensive. <i>Related to word cloud: Medical; Medicine</i> Interviewees from Freedom Park and some from Matlwangtlwang noted that they do not have easy access to medical facilities, while others in Matlwangtlwang and interviewees from Alabama mentioned that they have access to mobile clinics on a weekly basis. Kanana has a clinic. When other medical services are required, they must visit hospitals in the urban centres. <i>Related to word cloud: Clinic; Medical; Medicine</i> No comments captured about health from interviewees in Zamdela.

From Table 5.2 above it seems that many of the South African poor feel that they do not have **choices**. It may be argued that this decreases “freedoms to realize human functionings” (refer to Chapter 3, section 3.1) and thereby also hinders the levels of *actual achievement* (refer to Chapter 1, section 1.8.2). This choice set may be limited by the low levels of **education** and **health** challenges mentioned in Table 5.2 above. Education and health both generate capability (refer to Chapter 1, section 1.8.2), since it enables people to recognise options, utilise resources and navigate the economic world (refer to Chapter 4, section 4.3.2). External challenges, especially access to resources also seem to affect their life quality and the importance of a fair distribution of resources, to ensure a quality life, is reiterated (refer to Chapter 4, section 4.3.1).

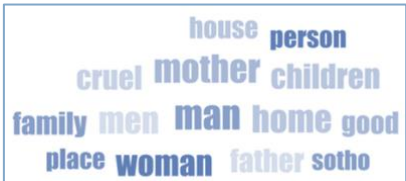
The reflections in Table 5.2, furthermore, highlights the interconnectivity of the quality of life resources, i.e. by noting that sanitation challenges negatively influence people’s health conditions.

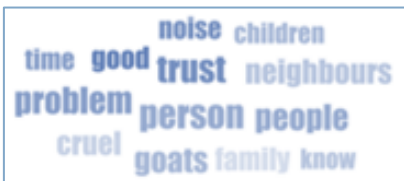
5.4.3 Social capital

As explained in Chapter 4, section 4.3.3, social capital refers to “the social norms, shared values and institutional arrangements that foster co-operation among population groups” (OECD, 2020:234). Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 5.3. A word cloud, created in ATLAS.ti from the quotations associated with each code, are presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 5.3: Codes relating to Social capital

Theme: Resources Category: Social capital	
Code	Reflection on relation to quality of life
Safety <i>Word cloud:</i> 	Crime seems a commonplace occurrence in eMbalenhle, Lebohang, Matlwangtlwang, Alabama, Freedom Park and Kanana, with instances of murder, violence, robbery and rape mentioned by the interviewees. In Matlwangtlwang, Alabama, Freedom Park and Kanana interviewees blamed it on the lack of police presence; in Lebohang an interviewee blamed it on unemployment. An interviewee from Alabama suggested streetlights for safety at night. <i>Related to word cloud:</i> Crime; Police; Safety; Security; Unsafe No comments captured about safety from interviewees in Zamdela.

Theme: Resources Category: Social capital	
Code	Reflection on relation to quality of life
Public participation <i>Word cloud:</i> 	In Matlwangtlwang, Alabama and Kanana, interviewees mentioned (it seems regular) community meetings with municipal representatives. It seems, however, that not all attend these meetings and an interviewee in Alabama said that the community is not very involved in the decision-making process. <i>Related to word cloud: Attend; Community; Matter; Meetings; Representatives; Spoken</i>
	No comments captured about public participation from interviewees in Freedom Park, KwaDela, Lebohang, or Zamdela.
Population groups <i>Word cloud:</i> 	Interviewees in Alabama noted that there are people from diverse cultures living in the settlement, but that the people from similar cultures usually stick together. <i>Related to word cloud: Person; Sotho</i>
	One interviewee in eMbalenhle mentioned status differentiations between those more and less privileged. <i>Related to word cloud: Family</i>
	There also seems to be a disparity between the gender groups. Men described themselves as respected for being a man and women described men as cruel, not being willing to do house chores and to drink excessively. Women described themselves as carrying a lot of burdens, showing the "men the right way", taking care of the children, cleaning the house and making it beautiful. <i>Related to word cloud: Cruel; Father; Man; Men; Mother; Woman</i>
	No comments captured about population groups from interviewees in Freedom Park, or Zamdela.
Social interactions <i>Word cloud:</i> 	Interviewees mentioned the following places where social interactions occur: 1. In the streets, in Alabama, Freedom Park and Matlwangtlwang. 2. In houses, in eMbalenhle, KwaDela, Matlwangtlwang, Alabama and Freedom Park 3. In taverns, in eMbalenhle, Matlwangtlwang, Alabama and Kanana 4. At sportgrounds, in KwaDela, Matlwangtlwang, Alabama and Kanana 5. At church, in Lebohang, eMbalenhle, Alabama and Kanana 6. At the community tap, in Matlwangtlwang 7. At the library, in Matlwangtlwang 8. At a café, in Matlwangtlwang 9. Under trees, in Kanana <i>Related to word cloud: Area; Church; Community; Family; Field; Friends; Members; People; Soccer; Social</i>
	No comments captured about social interactions from interviewees in Zamdela.
Social networks <i>Word cloud:</i> 	The social networks seem to vary. Some interviewees find support in family members and neighbours that look after their children and help in times of need, i.e. when without food. Other interviewees, contrarily, indicated that it is every man for himself. <i>Related to word cloud: Another; Children; Community; Family; Good; Mother; Neighbours; Problem</i>
	No comments captured about social network from interviewees in Zamdela.

Theme: Resources Category: Social capital	
Code	Reflection on relation to quality of life
Social trust <i>Word cloud:</i> 	The social trust seems low. A few interviewees respectively indicated that they trust only their child, their grandmother, the ladies at the church or no one. An interviewee also said that it's "asking for trouble" to complain about the noise from the tavern and others mentioned neighbours gossiping, arguing with neighbours and family members looking down on the less fortunate members. It was also noted that there is an alcohol problem amongst the youth and men. <i>Related to word cloud: Children; Family; Know; Neighbours; Noise; People; Person; Trust</i>
	No comments captured about social trust from interviewees in Freedom Park, Kanana, Matlwangtlwang, or Zamdela.

From the reflection in Table 5.3 above, it is apparent that the low levels of human and economic capital within these settlements have a major impact on **safety**. The vulnerability resulting from the lack in proper sanitation facilities may, i.e. contribute to the safety challenges, strengthening the argument for quality of life resources being interconnected. These safety challenges are further encumbering life quality by restricting mobility, i.e. at night-time and negatively influencing people's individual experience of well-being. The reflection on **public participation** in Table 5.3 above, supports the notion of public participation being "mere tokenism" (refer Chapter 4, section 4.3.3) and suggests a disconnect between spatial decision-makers and community members. It may be argued that this disconnect is also evident from the violent riots and discontent towards municipalities, mentioned in section 5.4.1 above. The **population groups** reflection in Table 5.3 supports Rossouw and Naudé's (2008:435) observation that South Africa is diverse in cultural meaning and socio-political perspectives (refer to Chapter 4, section 4.3.3). From the reflection it seems that women feel especially burdened with home and family responsibilities, putting them at a disadvantage to conduct business activities and to create an income (Charman *et al.*, 2020:70). Further to this, the "excessive drinking" culture (refer to Table 5.3 above) present within these communities has "evoked societal concerns towards drunkenness [...] and the hyper-masculinity of male drinkers" (Charman *et al.*, 2020:197). These societal concerns with alcoholism and violence in South Africa has been highlighted internationally during the covid-19 pandemic lockdowns (OECD, 2021). **Social interaction** seems to occur in different settings all over the settlements. Contrary to De Satgé and Watson's (2018:47) observation of large **social networks** and the principle of *ubuntu* (refer to Chapter 4, section 4.3.3), however, it seems that small social networks exist, but that **social trust** is low and people generally have to fend for themselves.

5.4.4 Natural capital

Natural capital, as noted in Chapter 4, section 4.3.4, refers to *natural assets* (i.e. biodiversity and other ecosystem services) that affect life quality (OECD, 2020:217,205). Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 5.4. A word cloud, created in ATLAS.ti from the quotations associated with each code, is presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 5.4: Codes relating to Natural capital

Theme: Resources Category: Natural capital	
Code	Reflection on relation to quality of life
Natural environment <i>Word cloud:</i> 	Most of the interviewees indicated a lack of vegetation, causing a dusty environment. This may affect residents' experience of their physical environment. An interviewee in Lebohang mentioned a tree and garden near their house which makes them very happy as they like beautifying their surroundings. <i>Related to word cloud: Green; Natural; Trees</i>
	Interviewees in Alabama and Kanana mentioned a river close to the settlements and interviewees in Alabama and Matlwangtlwang mentioned soccer fields. <i>Related to word cloud: Area; Green; Natural; People; Space; Water</i>
	Interviewees in eMbalenhle and KwaDela do not like the weather since it fluctuates between being too hot and too cold. <i>Related to word cloud: Cold; Weather</i>
	No comments captured about the natural environment from interviewees in Zamdela.
Natural environment: Food <i>Word cloud:</i> 	Some of the interviewees have enough food, but many can't afford enough for the whole month and go hungry. One interviewee mentioned unemployed family members come to them for help in this matter, further straining an already limited income. <i>Related to word cloud: Eat; Food</i>
	An interviewee in eMbalenhle complained that vegetables will not grow in the soil, but there are vegetable gardens in KwaDela, Lebohang, Kanana and Matlwangtlwang. In Matlwangtlwang they must cover the soil with manure for plants to grow. <i>Related to word cloud: Garden(s); Plant; Vegetable(s)</i>
	No comments captured about food from interviewees in Alabama, or Freedom Park.

Theme: Resources Category: Natural capital	
Code	Reflection on relation to quality of life
Natural environment: Natural hazards <i>Word cloud:</i> 	The interviewees listed the following natural hazards: 1. Fires in Alabama and Kanana. 2. Severe winds in Kanana and Matlwangtlwang. 3. Risk of drowning in the river, especially for children, in Kanana. 4. There is a quarry in Matlwangtlwang wherein children have fallen and gotten hurt. 5. Flooding in Matlwangtlwang. <i>Related to word cloud: Flooding; Hazards; Kids; Problem; Quarry; Rainy; Safety</i>
Environmental quality <i>Word cloud:</i> 	The interviewees complained of the following: 1. Garbage pollution in Alabama, KwaDela, Kanana and Matlwangtlwang. 2. Air pollution in eMbalenhle, KwaDela, Lebohang and Zamdela. 3. Water pollution in Kanana and Matlwangtlwang. 4. Storm water drainage issues and erosion in Matlwangtlwang. <i>Related to word cloud: Air; Bad; Breathe; Clean; Dirty; Good; Pollution; Rubbish; Sewage; Water</i>
	This reflection captures comments about environmental quality from interviewees in all the case studies.

There do not seem to be many natural capital features (**natural environment**) in these case study areas, but the existing vegetation, soccer fields and rivers provide valuable human and social capital. The lack in vegetation, however, affects their individual experience of i.e. by “causing a dusty environment” (refer to Table 5.4 above). Some of the interviewees also mentioned that they and/or their social network cannot afford enough **food** during the month. Charman *et al.* (2020:55) observed that poor households limit the number consumable goods within their homes to “proactively manage consumption demand from extended family members”. Food affordability is a general challenge in South Africa and most people cannot afford a nutritional food basket (Businesstech, 2018; Businesstech, 2021a; Van Wyk & Dlamini, 2018). Many of the South African poor, therefore, not only do not have enough to eat, but the meals they do eat lack the nutritional value needed for an active and healthy life, further hampering their capability (refer to Chapter 1, section 1.8.2).

The **natural hazards** listed in Table 5.4 above seem to be a common occurrence in South African low-income settlements. Fires frequently destroy thousands of dwellings, but Walls *et al.* (2017:997) explain that the informality, lacking infrastructure and social difficulties (i.e. alcoholism and crime), render fire safety engineering solutions difficult to apply. Furthermore, the lacking infrastructure, the quality of dwellings and the location of these settlements’ attributes to the frequent occurrence of flooding (Dalu *et al.*, 2018:481-482). In a quick google search recent

childhood drowning incidents was repeatedly reported, i.e. Dayimani (2021); Mahlokwane (2021); Washinyira (2021). Joanknecht *et al.* (2015:128-129) attribute this largely to a lack in parent education. The severe winds may be attributed to the lack in vegetation and increase the “dustiness” in these settlements, causing erosion that may, in turn, decrease the possibility of growing vegetation. This and the pollution mentioned in Table 5.4 above, affects the **environmental quality** within these settlements.

5.5 Context

In Chapter 4, section 4.1, it was noted that not only the resources but also the *context* surrounding the resources influence people’s life quality. The context may be considered according to three categories: physical space, institutional context and individual experience.

5.5.1 Physical space

In Chapter 4, section 4.4.1, it is argued that the physical environment shapes the way people are able to live their lives (Habibi & Zebardast, 2018:427; Murgaš & Klobučník, 2016:183) and, therefore, influences their capability. Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 5.5 above. A word cloud, created in ATLAS.ti from the quotations associated with each code, are presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 5.5: Codes relating to the Physical space

Theme: Context Category: Physical space	
Code	Reflection on relation to quality of life
Spatial organisation <i>Word cloud:</i> 	Interviewees from eMbalenhle noted that when you live near a tavern, there is constant noise, especially at night. They do not seem very satisfied about it. <i>Related to word cloud: Noise</i> One of the Matlwangtlwang informal settlements are illegally situated next to a main road, they have limited access to shops and education and health facilities. Some of the interviewees stated that they have an RDP house but choose to live in the shack. The community tap, tavern, soccer field and library seem important social gathering points within the settlement. <i>Related to word cloud: Access, Community, Houses, Land, RDP, Services, Shop(s)</i> In Alabama spaza shops seem accessible. <i>Related to word cloud: Access, Shop(s)</i>

Theme: Context Category: Physical space	
Code	Reflection on relation to quality of life
Spatial organisation <i>continued</i> Word cloud: 	Interviewees from Freedom Park mentioned that they socialise in the street and have ready access to shops. <i>Related to word cloud: Community, People, Shop(s)</i> In Kanana shacks pop up overnight and the soccer field was mentioned as a social gathering point. <i>Related to word cloud: Community, Houses</i> No comments captured about spatial organisation from interviewees in Lebohang, or Zamdela.
Housing Word cloud: 	It seems that they are more concerned with employment than where and how they live. <i>Related to word cloud: Live</i> The household sizes are between 3 and 9 people, but mostly 3 to 5 people. <i>Related to word cloud: Children, House(s), Housing, People</i> Interviewees from Freedom Park, Alabama and Matlwangtlwang indicated that they live in those settlement since that is what they can afford. Interviewees from Matlwangtlwang explained that they used to work on farms but were retrenched and relocated to be closer to services and job opportunities. <i>Related to word cloud: Live, House(s), Housing, People</i> Most of the settlements have both shacks and RDP houses. Interviewees complained that the shacks 1) are dusty, 2) leak when it rains, 3) shake or the roof lifts when the wind is blowing and 4) are not insulated and the temperature changes with the weather. Interviewees living in RDP houses complained that parts of the wall break, the house shakes when the wind blows and the roof leaks when it rains. <i>Related to word cloud: House(s), Housing, RDP, Shack(s), Structures, Water, Wind</i> This reflection captures comments about housing from interviewees in all the case studies.

The interviewees seem generally content with the **spatial organisation** of their settlements and “seem more concerned with employment than where and how they live” (refer to Table 5.5 above). It does, however, seem that they do not live there solely by choice but for financial reasons and they have complained about the quality of their **housing** (both RDP houses and shacks) and the noise around the taverns. Little formalised social gathering points have been identified (refer to section 5.4.3 above), but the interviewees seem content with the informal gathering points. Most interviewees, furthermore, seem to have access (albeit limited) to education and health facilities. It may, nevertheless, be argued that the spatial organisation is not conducive to a quality life. As mentioned in sections 5.3 and 5.4.1 above, these settlements are all located on the periphery of urban centres, far away from economic opportunities, with low mobility and often limited economic activity. Furthermore, rivers in the cases of Alabama and Kanana (refer to section 5.4.4 above)

and a quarry and the M1 road reserve in the case of Matlwangtlwang (Moghaka Local Municipality, 2018:135) pose life threatening hazards that may further reduce life quality.

5.5.2 Institutional context

As noted in Chapter 4, section 4.4.2, the institutional context influences the level to which a country or society is united and thereby also affects the well-being of this country or society (OECD, 2020:47). Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 5.6. A word cloud, created in ATLAS.ti from the quotations associated with each code, is presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 5.6: Codes relating to the Institutional context

Theme: Context Category: Institutional context	
Code	Reflection on relation to quality of life
Institutional trust <i>Word cloud:</i> 	Institutional trust seems very low. Interviewees complain about: 1) a lack in municipal service delivery, e.g. waste removal 2) a lack in infrastructure provision, e.g. sanitation amenities 3) a lack in infrastructure maintenance, e.g. sewage leakage 4) the municipality not following through on promises, e.g. building a taxi rank and soccer field at the school 5) the councillors and municipality not addressing their complaints, 6) the municipality not creating job opportunities <i>Related to word cloud: Municipality, Garbage, Rubbish, Sewage</i>
	This reflection captures comments about institutional trust from interviewees in all the case studies.

From Table 5.6 and the violent protests mentioned in section 5.4.1 above, it is evident that **institutional trust** is exceedingly low. As discussed in Chapter 4, section 4.4.2, these low levels of institutional trust may hinder collaboration efforts between the municipality and the community. An interesting expectation raised in Table 5.6 above, is the responsibility of the municipality to provide job opportunities. In South Africa municipalities attempt to meet this expectation through local economic development initiatives, aiming “to maximise the economic potential [...] through increased local economic growth, employment creation and development initiatives” (DCGTA, 2021). These development initiatives are, however, hindered by often being overambitious, without clearly defined role-players and not aligned with existing economic activity (SACN, 2019:28-34).

5.5.3 Individual experience

As explained in Chapter 4, section 4.4.3, people's individual experience influences their ability to withstand and persevere through hardship (NPC, 2012:12), thereby influencing their quality of life. Reflections on the underlying quality of life rationality relating to the codes in this category are presented in Table 5.7. A word cloud, created in ATLAS.ti from the quotations associated with each code, are presented alongside each code to further elucidate the rationality underlying the text. The size of the words in the word clouds indicate its frequency within the quotations from the text, associated with each code (ATLAS.ti, 2021:129).

Table 5.7: Codes relating to the Individual experience

Theme: Context Category: Individual experience	
Code	Reflection on relation to quality of life
Experience <i>Word cloud:</i> 	As mentioned in Table 5.1, most of the interviewees are very concerned with unemployment. Two interviewees noted that the South African poor are only trying to survive and do not bother with much else. <i>Related to word cloud: Problem</i>
Work-life balance <i>Word cloud:</i> 	No comments captured about experience from interviewees in Freedom Park, Kanana, KwaDela, Lebohang, Matlwangtlwang, or Zamdela.
	Since most of the interviewees do not have jobs, they explained that they do not have much to do during the day. After helping the children to school and/or doing house chores, they sit; sleep; watch television; visit some friends; and visit taverns, especially the men. <i>Related to word cloud: Bath; Bed; Clean(ing); Eat; Rest School; Sit; Sleep; TV; Wake; Wash(ing)</i>
	An interviewee in KwaDela explained that lack in "interesting things to do" induces crimes and unwanted pregnancies. <i>Related to word cloud: Bed; Sit; TV</i>
	An interviewee in Freedom Park mentioned going to parks in other parts of the city. <i>Related to word cloud: Sit</i>
	No comments captured about work-life balance from interviewees in Zamdela.

The interviewees' experience of well-being does not seem very high – it seems that they experience 1) low levels of health, 2) their living environment of low physical and environmental quality and, also, 3) they struggle to find employment. In section 5.4.2 above, it was observed that they feel limited in terms of choice sets and from Table 5.7's reflection on **work-life balance** it seems if they lack in purpose.

5.6 Concluding remarks

The interviewees seem to focus almost solely on the exogenous quality of life. The little reference to the endogenous quality of life does, however, demonstrate low levels of experienced well-being. Most interviewees seem to believe that more (or in many cases any) income would provide a means to escape these circumstances. Income creation would seemingly be possible or more probable if there were job opportunities and/or if they had higher levels of education. Further to this, the interviewees seem exceedingly discontent with the level of infrastructure service delivery and expects these services from the municipality.

Conflicting rationalities between spatial decision-makers and the South African poor are explored in the following chapter, by juxtaposing the findings of Chapters 4 and 5.

CHAPTER 6: CONFLICTING QUALITY OF LIFE RATIONALITIES BETWEEN SPATIAL DECISION-MAKERS AND THE SOUTH AFRICAN POOR

6.1 Introduction

Considering the high rates of poverty, inequality and informality in South Africa (refer to Chapter 1, section 1.1), it is concurred with literature (i.e. Greyling & Tregenna, 2017; Maganadisa *et al.*, 2021; and Richards *et al.*, 2007) that life quality in South Africa is a major challenge to all the role-players present within urban areas, as is also argued in Chapter 1, section 1.6. This argument is further strengthened by the “widespread occurrence” of service delivery protests in South Africa (StatsSA, 2018). The *Constitution of the Republic of South Africa* (1996) bids that “the quality of life of all citizens” be improved, but thus far it has been to little avail in practice (Binns & Nel, 1999:391; Maganadisa *et al.*, 2021). In Chapter 1, section 1.6, it is argued that urban areas are quite complex and that the various role-players within this system have different and often conflicting, views and visions towards “good and happy” human settlements. These conflicting rationalities are regarded as one of the key obstacles in overcoming the life quality challenges in South Africa (De Satgé & Watson, 2018:3). Considering the current life quality challenges in South Africa and the substantial influence that the spatial organisation of urban areas has on life quality, it is argued that finding solutions to these life quality problems are, in part, the responsibility of the spatial planner. Subsequently, this thesis considered quality of life rationalities guiding spatial decision-makers (research objective 1) and those of the South African poor (research objective 2).

In order to draw conclusions from this research about the conflicting quality of life rationalities, a juxtaposition (research objective 3) of the findings from the two analyses is firstly presented, according to the quality of life categories abstracted during the analyses. The chapter concludes with a discussion of the conflicting quality of life rationalities between spatial decision-makers and the South African poor. Further to these conclusions, recommendations are presented for spatial decision-making to affect change within each of the different quality of life categories. These recommendations set the stage for further and more specific strategic spatial planning recommendations, presented in the following chapter.

6.2 A juxtaposition of the analysed quality of life rationalities

As directed by research objective 3, the respective quality of life rationalities of spatial decision-makers and the South African poor are juxtaposed. During the analyses presented in Chapters 4 and 5, two quality of life themes were identified, namely *resources* and *context*. *Resources* are believed to provide “ordinary citizens” with the *capability to achieve* (refer to Sen (1992:31)), influenced by the *context* surrounding the resources. The juxtaposing is conducted according to these themes and their accompanying codes and categories.

6.2.1 Economic capital: juxtaposing quality of life rationalities

Figure 6.1 provides a recapitulation of the codes identified during the analyses for economic capital that supports and facilitates the material aspects that enables a society’s desired life quality (refer to OECD (2020:71,201)).

Theme: Resources			
Category: Economic capital			
work	infrastructure	income	
economic growth	financial assets		
mobility	economic activity	wealth	
water	electricity	roads	sanitation

Figure 6.1: Recapitulation of economic capital code list

The most pressing quality of life concern for the South African poor seems to be employment (**work**) while the South African directives focus more on **economic growth**. These directives, however, seem to view economic growth as an inducement for work opportunities and it may be inferred that the South African directive’s larger focus on economic growth, coupled with **financial assets**, is believed to stimulate **income** generation and produce work opportunities for the South African poor.

Notwithstanding the current low economic growth rates in South Africa, the opportunities that are created through economic growth is situated in the urban centres, allowing limited access for the South African poor on the urban peripheries. Access to employment and income generation opportunities is further hindered by the lack of **mobility** for the South African poor. Even though the interviewees seemed content with their transportation options, they have mentioned that a large portion of their (already limited) income is spent on transportation. In terms of transportation,

the South African directives focus on alternative transportation modes rather than transport affordability. The alternative transportation modes may, however, also be believed to improve transport affordability.

It has, furthermore, been noted that rigid formal regulation hinders the development of the (already limited) informal economy in these settlements and thereby maintains **economic activity** in the urban centres. An example of such a regulation is land use permissions. The people living in these settlements often do not have title deeds and, therefore, formalisation of the business, or rezoning and expansions on the site, are not permitted (Charman *et al.*, 2020:80). Some are living illegally, others are renting the sites and many are living in RDP houses but have not yet received their title deeds.

Infrastructure delivery is also emphasised as an important influence on life quality, both in the South African directives and by the South African poor. In practice, however, the South African spatial decision-makers are struggling to deliver this infrastructure to the South African poor, as may be inferred from the infrastructure complaints in the interviews and the frequent violent protests against service delivery.

Recommendations to spatially address economic capital challenges

Even though spatial planning is seemingly not strictly linked to **economic growth, financial assets, income, wealth and work**, it is argued that spatial organisation has a large impact on economic markets. Even though spatial planners seldom directly work with urban economists, it is recommended that they work in close collaboration (refer to Bertaud (2018:2,354-355)), since urban economists understand markets and may assist in affecting the necessary change to allow the South African poor access to employment opportunities, thereby improving their quality of life.

It may, furthermore, be argued that the Spatial Planning and Land Use Management Act 16 of 2013's aim to "redress the imbalances of the past and to ensure that there is equity in the application of spatial development planning", may encourage a fairer distribution of **(infrastructure)** resources (refer to Nussbaum and Sen (1993:1)). Integrated and holistic infrastructure provision may allow "all citizens" within a given community to benefit from the infrastructure and transportation systems. It is, thus, recommended that spatial planners may assist in this distribution through their layout plans and during strategic spatial planning,

i.e. when compiling Integrated Development Plans (IDP) and Spatial Development Frameworks (SDF) for local municipalities (refer to SACN (2016:156); and Viviers, (2015)).

6.2.2 Human capital: juxtaposing quality of life rationalities

Figure 6.2 provides a recapitulation of the codes identified during the analyses for human capital that refers to people's individual capability to achieve, i.e. through knowledge, competencies, education, skills and their health.



Figure 6.2: Recapitulation of human capital code list

In terms of human capital, the South African poor and the South African directives both concentrates largely on **education** and **health**. It is, however, noted that the South African education system is lacking in quality and proper infrastructure, contributing to the low **skill** levels of South Africans in general and reducing capability, especially for the South African poor. Even though the South African directives note the importance of access to health facilities, in practise this research illustrated that these are not accessible to all. The interviewees further noted that the lack in infrastructure maintenance by the municipalities contributes to health challenges, i.e. illness due to sewage leakage. While all South Africans are granted the freedom to choose their “trade, occupation or profession” by the *Constitution of the Republic of South Africa* (1996), the interviewees indicated that this **choice** is not attainable without sufficient economic capital. Considering the sense of being trapped in their circumstances, the health challenges and the limited education and skillset, it is argued that the South African poor possess limited agency to affect social change towards an improved life quality.

Recommendations to spatially address human capital challenges

Human capital is also seemingly unrelated to spatial planning, but spatial planners may, in this instance, also affect the life quality of local citizens, i.e. through planning for schools (**education**), **health** facilities and green and walkable spaces in layout plans and strategic spatial planning, i.e. when compiling IDPs and SDFs. It is recommended that these processes be informed by thorough public participation processes to ensure that the “lives and liberties” of ordinary citizens are protected (refer to Sen (1999:623)) and that appropriate spatial solutions are presented to their actual challenges (**choice**).

6.2.3 Social capital: juxtaposing quality of life rationalities

Figure 6.3 provides a recapitulation of the codes identified during the analyses for social capital that refers to “the social norms, shared values and institutional arrangements that foster co-operation among population groups” (refer to OECD (2020:234)).



Figure 6.3: Recapitulation of social capital code list

Safety seems the largest social capital concern both in the South African directives and for the South African poor with reports of murder, violence, robbery and rape from the interviewees. These safety concerns hinder the capability of the South African poor by further encumbering mobility and their experience of well-being. The interviewees ascribed the safety challenges to the lack of police presence, unemployment and the absence of streetlights. It may, furthermore, be ascribed to limited **social networks** and **social trust** within these settlements. Every man seems to be fending for himself, even though the South African directives seem to strive towards an inclusive and cohesive society.

An economic and social activity that seems to be thriving is shebeens and taverns. These, however, seem to evoke societal concerns towards alcoholism and violent, toxic masculinity and in general, there seem to be some division between **population groups** within these low-income

settlements. Many women expressed their relief for being female, even if it means hard work and hardship to them. These sentiments seem to result from the behaviour of men that accompanies excessive drinking. **Social interactions** seem, nevertheless, to occur regularly in a variety of places.

Considering the substantial benefits that social capital provides for advancing capability, this strained social environment and safety concerns is argued to impede life quality within these settlements. It is, furthermore, argued that **public participation** beyond “mere tokenism” is also hindered by these strained social relations, since it may be difficult to get the people involved. Further to this, it seems that the people lack a sense of agency – they seem to feel that they have no choice or purpose in life. This and a lack in education and the quality thereof, may further decrease people’s willingness to participate in public action. Even though the South African directives require public participation, most of the interviewees did not seem interested in attending public meetings (which is assumably meant as public participation).

The *Constitution of the Republic of South Africa* (1996), nevertheless, ensures that “persons belonging to a cultural [...community...] may not be denied the right [...] to enjoy their culture”. Categorising different groups of people in South Africa may, however, be problematic given the historic segregation policies (SAHO, 2019) which may explain its absence in the South African directives.

Recommendations to spatially address social capital challenges

It is recommended that social capital challenges be addressed through strategic spatial planning by including “ordinary citizens”, especially the South African poor, in the planning process (**public participation**). Davidoff's (1965:337) call for spatial planners to serve as professional advocates for local (and especially underprivileged) citizens and influence social and spatial policy are, therefore, reiterated.

Considering the diverse viewpoints and approaches of the **population groups**, it is, furthermore recommended that spatial planners approach spatial organisation in a culturally sensitive manner to empower local citizens and ultimately increase their available choice sets (refer to Vojtíšková (2016:24)).

Seeing as design influences social life, it is recommended that spatial planners encourage **social interaction** and **social networks** through their layout plans. *Defensible space* principles

for layout designs have been argued to possibly encourage the development of a strong social fabric and active citizenship, thereby decreasing **safety** challenges (Pacione, 2009:409-411).

6.2.4 Natural capital: juxtaposing quality of life rationalities

Figure 6.4 provides a recapitulation of the codes identified during the analyses for natural capital that refers to natural assets (i.e. biodiversity and other ecosystem services) that affect life quality (refer to OECD (2020:217,205)).



Figure 6.4: Recapitulation of natural capital code list

The current state of the **natural environment** in the low-income settlements of South Africa does not seem conducive towards a quality life. Interviewees mentioned various forms of pollution, i.e. air and water pollution, several natural hazards, i.e. fire, flooding and drowning risks and that they are struggling to grow vegetation. Furthermore, a few interviewees have raised the issue of food affordability, causing many to go hungry. The South African directives touch on the provision of sufficient food and water and protecting the **environmental quality**, especially in view of **climate change**, but did not explicitly discuss the risks of natural hazards in the low-income settlements.

Recommendations to spatially address natural capital challenges

Spatial planners are, therefore, encouraged to include nature-based solutions in strategic spatial plans, policies, frameworks and layout plans and during urban revitalisation projects. This may be done via nature-based solutions: an umbrella concept for initiatives that mimic or adapt natural systems, simultaneously benefiting natural, social, economic and human capital (Carsten *et al.*, 2017:1217-1224; Cilliers & Cilliers, 2016:16; Dumitru *et al.*, 2020:108; Pauleit *et al.*, 2017:32; Reeve *et al.*, 2015:5; Villegas-Palacio *et al.*, 2016:306; Xing *et al.*, 2017:156).

6.2.5 Physical space: juxtaposing quality of life rationalities

Figure 6.5 provides a recapitulation of the codes identified during the analyses for physical space that shapes people's economic conditions and their access to human, social and natural capital (refer to OECD (2020:72)).



Figure 6.5: Recapitulation of physical space code list

It was noted that the South African poor 1) are mainly trying to survive, 2) choose their place of living according to what they can afford and 3) seem more concerned with employment than where and how they live. The South African directives argue, however, that people's geographic location and the **spatial organisation** in general, have a major influence on their access to economic, human, social and natural capital. The directives subsequently emphasise the need to address the challenges presented by the **historic development patterns** and the negative social and spatial realities accompanying urbanisation. The South African directives refer to "shared private space" as part of life quality considerations, but the interviewees have not mentioned a need for privacy, they only mentioned a need for quality **housing**.

Recommendations to spatially address physical space challenges

In view of Rosenberg's (1965:3) argument that the aim of spatial planning is "to organise the complexities of human settlement", thus enhancing life quality, it is recommended that spatial planners thoroughly consider the impact of their day-to-day decisions on the life quality of "ordinary citizens".

6.2.6 Institutional context: juxtaposing quality of life rationalities

Figure 6.6 provides a recapitulation of the codes identified during the analyses for institutional context that affects the unity and well-being of a society within a given country (refer to OECD (2020:47)).



Figure 6.6: Recapitulation of institutional context code list

The South African directives state that **governance** has the ability to enhance life quality for local citizens. The South African poor seem to concur this belief and expect the municipalities to provide them with the necessary amenities, i.e. ready access to clean water, proper sanitation facilities, electricity, job opportunities and proper housing. Considering the frequency of violent protests, it may, however, be inferred that **institutional trust** is exceedingly low. This may further hinder public participation efforts since people might not be willing to collaborate on planning and development projects if they do not trust the spatial decision-makers.

Recommendations to spatially address institutional context challenges

In Chapter 5, it was noted that development initiatives are often hindered by being overambitious, without clearly defined role-players and not being aligned with existing economic activity (refer to SACN (2019:28-34)). It may, therefore, be recommended that spatial governance in South Africa be guided by existing resources within the settlement to *enable* rather than *shape* a “good and happy” human settlement.

6.2.7 Individual experience: juxtaposing quality of life rationalities

Figure 6.7 provides a recapitulation of the codes identified during the analyses for individual experience that influences people’s ability to withstand and persevere through hardship (refer to NPC (2012:12)) and, therefore, affect their life quality.



Figure 6.7: Recapitulation of individual experience code list

The South African directives place specific emphasis on **job quality** and a **work-life balance**, but this was not mentioned by the interviewees, arguably since their primary focus is on finding a job in the first place. Furthermore, when considering the reflections in Table 5.7, Chapter 5, it seems if they lack in purpose, something deemed, in the hedonistic school of thought (refer to Chapter 3, section 3.4), an important aspect of life quality. The interviewees' **experience of well-being**, furthermore, does not seem very high, since they experience 1) low levels of health, 2) their living environment of low physical and environmental quality and 3) they struggle to find employment.

Recommendations to spatially address individual experience challenges

Even though the **individual experience** evidently affects life quality, it is arguably impossible for the spatial planner to incorporate every experience and, therefore, community representatives are used to convey individual experiences during the participatory planning process. It is recommended that these individual experiences may provide valuable context for understanding the exogenous life quality of the South African poor.

6.3 Conflicting quality of life rationalities between spatial decision-makers and the South African poor

This research has illustrated the sheer contextual diversity between and within different low-income settlements, i.e. in the access to and the possession of life quality *resources* (namely economic capital, human capital, social capital and natural capital). The rationality that *resources* form an important part of a quality life seem, however, to be relatively shared between the two analysed role-players. When juxtaposing the findings presented in Chapters 4 and 5, it may be concluded that the conflicting rationality between the analysed role-players mainly occurs as a result of the diverse contexts within urban areas producing diverse needs and challenges, while spatial decisions are collectively made for an urban area.

While the South African directives' visions towards economic growth and integrated and sustainable human settlements are purposeful and fundamentally prepared well, the South African poor laments their "struggle to survive" in reality. It is argued that the *vision* to create and shape "good and happy" South African human settlements, although an improvement on historic

development trends, misses the diversity of the South African society; thereby generating conflicting rationalities towards shaping a quality urban life for the South African poor.

6.4 Concluding remarks

In addressing research objective 3 by juxtaposing the quality of life rationalities of the analysed role-players (research objectives 1 and 2), it was concluded that the conflicting quality of life rationalities mostly stem from the diverse and complex *context* of the South African urban landscape.

The South African poor laments the lack in job opportunities within their peripheral low-income settlements. Even though the *vision* of the South African directives to stimulate economic growth are purposed to shape development and improve the life quality of “all citizens”, this growth often takes place within the urban centres. As a result of the lack in mobility that the people in the low-income settlements possess, the opportunity to utilise the economic growth and to *achieve* (refer to Sen’s capability approach, Chapter 1, section 1.8.2) is often beyond the reach of the South African poor.

These limited job opportunities provide the South African poor with exceedingly limited income and, along with a lack in access to “proper” infrastructure, the South African poor are left with a limited sense of agency to effect social change towards an improved life quality. Furthermore, even though both the South African directives and the South African poor seem to deem education and health as important components toward a quality life, the practical implementation thereof seem to be lagging. Many of the interviewees noted limited access to education and health facilities as these are situated in the urban centres.

Individual experience of well-being and the social context also seem to differ between population groups within the low-income settlements, especially with regards to gender groups. Even though the *Constitution of the Republic of South Africa* (1996) refers to people’s right “to enjoy their culture”, differentiation between population groups is not explicitly evident within the other South African directives. This may be a result of the historic segregation policies which may have sensitised decision-makers to distinctions among the population.

The low-income settlements, furthermore, seem to face specific natural hazards, i.e. fire, flooding and drowning risks. Even though the South African directives considers climate change and its accompanying environmental challenges, it does not explicitly focus on the specific hazards faced

within the low-income settlements. Further to these natural capital challenges, food affordability is a problem for the South African poor. The South African directives touched upon this challenge by mentioning the need to provide sufficient food and water.

The South African poor does not seem to explicitly link the spatial organisation of urban South Africa to their challenges with regards to economic, human, social and natural capital; they seem to expect their local municipality to provide them with the economic and human capital to enable quality lives. Since the local municipalities are struggling to keep up with these demands, this research illustrated that institutional trust is quite low.

Considering the spatial decision-making recommendations presented in section 6.2 above, it is argued that that the conflicting quality of life rationalities may be addressed by means of strategic spatial planning, i.e. within the SDFs guiding spatial decision-making on local municipal level. A practical recommendation for strategic spatial planning in South Africa (refer to DDP Task Team (2001?:19)) is, therefore, presented in the following chapter, along with recommendations for future research, to avoid conflicting quality of life rationalities.

CHAPTER 7: A CONCEPTUAL FRAMEWORK TOWARDS AVOIDING CONFLICTING QUALITY OF LIFE RATIONALITIES

7.1 Introduction

In order to reach the research aim of exploring quality of life rationalities between spatial decision-makers and the South African poor, the analysed quality of life rationalities of the aforementioned role-players was juxtaposed. It is concluded in Chapter 6, section 6.4, that the conflicting rationalities between spatial decision-makers and the South African poor lies primarily at the quality of life theme: *context*. It is argued that conflicting quality of life rationalities arises when the unique *context* of the settlement is not thoroughly considered along with a “fair distribution of resources” (refer to Nussbaum and Sen (1993:1)). Therefore, in concurrence with literature (as discussed in Chapter 1, section 1.1), it is recommended that spatial planners incorporate a holistic, multidisciplinary and context-specific approach to planning for the South African poor. It is argued that to increase the “opportunity to achieve” for the South African poor who are currently at a “capability disadvantage”, space needs to be organised according to the specific requirements of a settlement (refer to Alkire (2009:203); Bertaud (2018:354-355) and; Rossouw and Naudé (2008:434)).

To understand these specific requirements of a settlement, it is recommended that a profile be created for the different settlement types within a larger urban area. This chapter offers a conceptual framework for settlement profiling to be included as part of the strategic spatial planning process in South Africa. Table 7.1 presents the content of the conceptual framework within this chapter.

Table 7.1: A conceptual framework for settlement profiling

Section	Object
7.2	Introducing settlement profiling
7.3	Contextualising settlement profiling as part of South African strategic spatial planning
7.4	Presenting the Planner+ principle
7.5	Recommending a settlement profiling concept methodology

The conceptual framework for settlement profiling is presented in the following sections.

7.2 Introducing settlement profiling

This research illustrated that conflicting quality of life rationalities ensue between spatial decision-makers and the South African poor, as a result of a lack in a thorough understanding of the context within which spatial decisions are made. Further to this, it is illustrated that the quality of life differs between people from different settlement types, i.e. sanitation challenges in informal settlements differ from that in settlements with RDP houses.

To avoid conflicting rationalities between these role-players, it is recommended that the status quo (*context*) of the different settlement types within a given municipality be thoroughly considered during the strategic spatial planning process. It is recommended that this be done by compiling separate settlement profiles for the different settlement types within a given municipality. The aim of a settlement profile is, therefore, to provide “a detailed snapshot” of the life quality conditions within the different settlement types (refer to UN-HABITAT & UNHCR (2020:9)) to correctly inform strategic spatial planning.

7.3 Settlement profiling as part of South African strategic spatial planning

Although article 21 of the Spatial Planning and Land Use Management Act 16 of 2013 requires a broad situational analysis¹⁸ on municipal level, it is argued, based on the conclusions from this research, that conflicting rationalities are persisting. Article 21 is, therefore, deemed a first step towards considering the context but it is recommended that the situational analysis principles of the Spatial Planning and Land Use Management Act 16 of 2013 be expanded to detailed settlement profiling – a quality of life status quo snapshot of the different settlement types within a given municipality.

It is recommended that detailed settlement profiling may be beneficial in bridging the gap between spatial decision-makers and the South African poor, especially if duly conducted during long-term strategic spatial planning i.e. for compiling IDPs and SDFs. Conduction of settlement profiles is highly analytical in nature and would naturally resort under the *analysis* phase of strategic spatial planning in South Africa, the first of five phases outlined in the IDP manual (refer to the

¹⁸ This includes (d) identifying development corridors and economic nodes, (e) population growth estimates, (f) estimates for housing demand, (g) estimates of economic activity and employment trends, (h) identifying infrastructure requirements and (j) environmental assessment.

DDP Task Team (2001?:19)). Figure 7.1 visually illustrates where settlement profiling resort within the broader strategic spatial planning process.

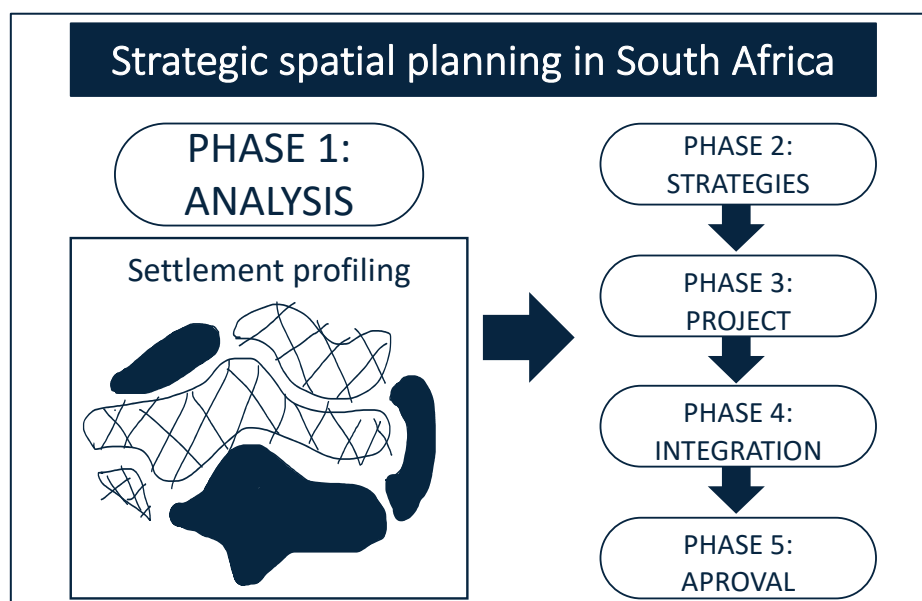


Figure 7.1: Settlement profiling as part of strategic spatial planning in South Africa¹⁹

It is argued that if phases 2 to 5 of strategic spatial planning in South Africa are informed by accurate and diverse settlement profiling, the ultimate identification and prioritisation of projects will be founded on the actual quality of life rationalities of the South African poor. The resolution of ongoing conflicts between spatial decisions-makers and the South African poor may furthermore be resolved if strategic processes, as recommend above, are founded on conducive and detailed settlement profiles.

7.4 The Planner+ principle

It is explained in Chapter 1, section 1.4.2 that the national, provincial and local spheres of government are responsible for compiling the IDPs in South Africa. These are, however, tendered to spatial planners in private practice to compile the IDPs on behalf of the government. Considering the complex and multifaceted nature of urban areas (refer to Chapter 1, section 1.8) and the persisting conflicting quality of life rationalities, the planner+ principle is recommended.

Since the task is tendered to the spatial planner, s/he should take the lead and ensure that the different settlement types are comprehensively profiled. It is, however, recommended that a multi-

¹⁹ Strategic spatial planning phases according to IDP Guide (DDP Task Team, 2001?:19).

disciplinary team, in collaboration with public participants, gather the information for compiling the settlement profile. It is argued that the expertise brought by the different team members, may produce a more accurate snapshot of the quality of life conditions that, in turn, will correctly inform strategic spatial planning and avoid conflicting rationalities between spatial decision-makers and the South African poor.

Suggestions for role-players to be employed as part of the Planner+ settlement profiling team is presented within the settlement profiling concept methodology in the following section.

7.5 Settlement profiling concept methodology

This research illustrated that there is a definitive differentiation in access to quality of life *resources* (economic capital, human capital, social capital and natural capital), within and between low-income settlements. The **first step** of settlement profiling is, therefore, to determine the different settlement types within the municipality for which the respective profiles are to be compiled.

The profiling within the identified settlement types is recommended to follow the social indicators quality of life measurement notion discussed in Chapter 3, section 3.4. Subsequently, the **second step** is to gather the necessary quality of life information according to objective indicators (observable and measurable attributes). It is recommended that these indicators be based on the codes and categories abstracted during the analyses, along with the situational analysis components already required in article 21 of the Spatial Planning and Land Use Management Act 16 of 2013.

In order to avoid conflicting quality of life rationalities and to truly “understand the implications on the ground” (refer to (UN-HABITAT & UNHCR, 2020:9)) public participation (according to a set of individual experience indicators) is recommended as a **third step**. To compile the “detailed snapshot” of the life quality conditions within the different settlement types, it is recommended that the objective and subjective indicators, along with relevant South African spatial directives, be triangulated in the **fourth step**. The settlement profile may then be compiled in the (final) **fifth step**.

These steps are visually presented in Figure 7.2.

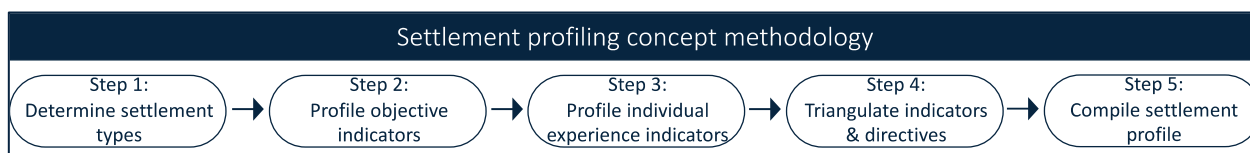


Figure 7.2: Settlement profiling concept methodology

Practical recommendations for completing these steps are provided in the sections below.

7.5.1 STEP 1: DETERMINE SETTLEMENT TYPES

A concept settlement typology is recommended in Figure 7.3 to assist in determining the settlement types within a given municipality.

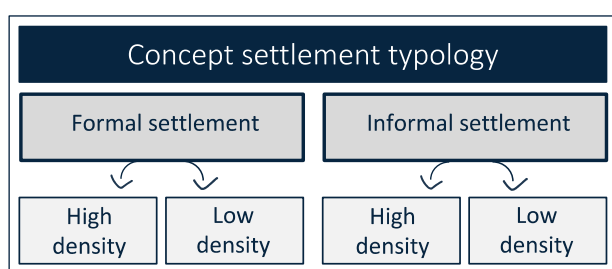


Figure 7.3: A concept settlement typology

In Figure 7.4 it is recommended that the settlements be categorised on to two levels, namely its formality and density. This research illustrated that, depending on the formality of the settlement, the quality of life experience differed. A differentiation between formal and informal settlements is thus recommended during strategic spatial planning, in order to ensure contextually appropriate planning and to, subsequently, avoid conflicting quality of life rationalities.

As a result of the historic development patterns in South Africa, there is often an income differentiation between residents of settlements with high densities and those of low densities (refer to Todes et al. (2010:151)). Considering the income inequality in South Africa and its influence on capability, it is recommended that the settlements be further classified according to their density.

Recommendations for future research

This research highlighted the diversity in the South African urban landscape, especially in the low-income settlements. Future research is, therefore, recommended to further develop the concept settlement typology to ensure that all the nuances within the South African urban

landscape are captured. It is recommended that this may further enhance context-specific planning to avoid conflicting rationalities between the urban role-players.

7.5.2 STEP 2: PROFILE OBJECTIVE INDICATORS

It is recommended that the *objective indicators* may provide spatial decision-makers with a comprehensive status quo of the specific settlement to correctly inform the strategic spatial planning strategies, projects and integration (refer to phases 2-4 of strategic spatial planning, presented in Figure 7.1 above). For this purpose, Table 7.2 recommends a concept assessment matrix based on the codes and categories abstracted during the analyses, along with the situational analysis components required in article 21 of the Spatial Planning and Land Use Management Act 16 of 2013.

Table 7.2: A concept assessment matrix for settlement profiling objective indicators

Concept assessment matrix for settlement profiling			
Objective Indicators			
Category	Indicator	Planner+ team member	Object
Demographics	✓ Population size	Urban economist	This aligns with the Spatial Planning and Land Use Act 16 of 2013's mandate in article 21(e) to conduct population projections for the municipality when compiling an SDF.
	✓ Population projection	Urban economist	This aligns with the Spatial Planning and Land Use Act 16 of 2013's mandate in article 21(e) to conduct population projections for the municipality when compiling an SDF.
	✓ Gender profile	Urban economist	This research indicated the different movement patterns and worldviews of people from different genders and it is, therefore, deemed an important component to understand.
	✓ Income profile	Urban economist	From this research it is evident that income is a large concern for the South African poor and this may provide insight into the needs of the residents of a specific settlement.
	✓ Employment profile	Urban economist	From this research it is evident that employment is a large concern for the South African poor and this may provide insight into the needs of the residents of a specific settlement, as well as their movement patterns and the employment availability.
	✓ Financial assets	Urban economist	From this research it is apparent that financial assets may provide a means for income generation and may therefore, assist in securing economic capital for a quality life.

Concept assessment matrix for settlement profiling			
Objective Indicators			
Category	Indicator	Planner+ team member	Object
Demographics <i>continued</i>	✓ Household size (estimates & location)	Urban economist	This may provide information for the Spatial Planning and Land Use Act 16 of 2013's mandate in article21(f) to estimate the demand for housing units in a municipality when compiling an SDF.
Economic capital	✓ Economic activity	Urban economist	Since the availability of employment is such a dire challenge for the South African poor, as illustrated by the research, mapping the economic activity may provide insight into where employment opportunities are situated relatively within and around the settlement. This may also assist in understanding mobility patterns
	✓ Electricity access	Spatial planner	This was indicated in the research as an important component of a quality life and is, therefore, deemed an important part of the assessment matrix. This may provide information for the Spatial Planning and Land Use Act 16 of 2013's mandate in article21(k) to identify and estimate infrastructure requirements in a municipality when compiling an SDF.
	✓ Sanitation facilities	Spatial planner	This was indicated in the research as an important component of a quality life and is, therefore, deemed an important part of the assessment matrix. This may provide information for the Spatial Planning and Land Use Act 16 of 2013's mandate in article21(k) to identify and estimate infrastructure requirements in a municipality when compiling an SDF.
	✓ Access to water	Spatial planner	This was indicated in the research as an important component of a quality life and is, therefore, deemed an important part of the assessment matrix. This may provide information for the Spatial Planning and Land Use Act 16 of 2013's mandate in article21(k) to identify and estimate infrastructure requirements in a municipality when compiling an SDF.
	✓ Mobility	Urban economist	This research noted the impact that mobility has on people's capability. An analysis of mobility may, therefore, provide insight into people's, especially the poor, access to quality of life resources.

Concept assessment matrix for settlement profiling			
Objective Indicators			
Category	Indicator	Planner+ team member	Object
Economic capital <i>continued</i>	✓ Transport affordability	Urban economist	The research illustrated that a large portion of the South African poor's (already limited) income is spent on transportation. Given the impact of mobility of life quality, it is argued that transport affordability may provide further information for the Spatial Planning and Land Use Act 16 of 2013's mandate in article21(k) to identify and estimate infrastructure requirements in a municipality when compiling an SDF.
Human capital	✓ Access to education	Spatial planner	The research illustrated that the South African poor view access to education an important capability for an improved life quality. It was also indicated that many do not have proper access to education. Mapping education facilities may, therefore, assist in understanding people's quality of life status quo. This may also provide information for the Spatial Planning and Land Use Act 16 of 2013's mandate in article21(k) to identify and estimate infrastructure requirements in a municipality when compiling an SDF.
	✓ Access to health facilities	Spatial planner	The research illustrated that many of the South African experience health challenges and do not have proper access to health facilities. Mapping health facilities may, therefore, assist in understanding people's quality of life status quo. This may also provide information for the Spatial Planning and Land Use Act 16 of 2013's mandate in article21(k) to identify and estimate infrastructure requirements in a municipality when compiling an SDF.
Social capital	✓ Public facilities	Spatial planner	This research illustrated that the South African poor has different, mostly informal, social gathering points. These may guide spatial planning in these settlements to ensure that the social fabric is not disturbed by the spatial organisation.
	✓ Crime incidences (location)	Urban economist	This research illustrated that South African suffers from major safety challenges. These may assist in understanding where the crime hotspots are and, thereby, guide spatial planning in these settlements to spatially assist in decreasing crime levels.
Natural capital	✓ Environmental quality	Environmental consultant	Environmental quality is a global concern. This research, however, also illustrated the importance thereof for the South African poor. This may also provide information for the Spatial Planning and Land Use Act 16 of 2013's mandate in article21(j) to assess the environmental pressures and opportunities in a municipality when compiling an SDF.

Concept assessment matrix for settlement profiling			
Objective Indicators			
Category	Indicator	Planner+ team member	Object
Natural capital <i>continued</i>	✓ Natural assets	Environmental consultant	The natural environment has many benefits to the economic, human, social and natural capital and an assessment thereof may provide information of the environmental opportunities within a municipality, an assessment also mandated by article 21(j) of the Spatial Planning and Land Use Act 16 of 2013.
	✓ Natural hazards	Environmental consultant	The research illustrated that the South African poor experience many natural hazards in the low-income settlement. Profiling it may assist in planning for an increased life quality of the South African poor. It may also provide further information about the environmental pressures, an assessment also mandated by article 21(j) of the Spatial Planning and Land Use Act 16 of 2013.
Physical space	✓ Housing types	Spatial planner	From the research it is evident that the South African poor lives in various housing types, each providing its own challenges to the quality of life. This may also provide further information regarding the Spatial Planning and Land Use Act 16 of 2013's mandate in article 21(f) to estimate the demand for housing units in a municipality when compiling an SDF.
	✓ Distance from economic hub	Urban economist	It was noted that the historic development patterns in South Africa resulted in many of the South African poor living on the urban periphery, far away from economic opportunity. Mapping the distance from economic hubs, may assist in understanding the economic capital and mobility of the people living in the settlement and, thereby, inform spatial planning for the South African poor.

To profile the objective indicators, it is recommended that statistics, models, site visits and existing maps and reports be utilised. Urban economists are skilled in analysing statistics and building models (refer to Bertaud (2018:2,354-355)), spatial planners and environmental consultants are skilled in conducting site visits and information about existing bulk services (access to water, electricity and sanitation) may be retrieved from the local government engineering department. However, for these indicators to be serviceable during the strategic spatial planning process (refer to Figure 7.1 above), an accessible presentation of the indicators is important. In view of its spatial purpose, it is recommended that the indicators be presented visually whenever possible. For this, a GIS²⁰ specialist is recommended. It is argued that GIS maps may provide greater opportunity

²⁰ A Geographic Information System (GIS) is a computer-based map overlay system that allows different features (i.e. the different indicators listed in Table 7.4 above) to be mapped and viewed either separately or combined (Law & Collins, 2013:3).

for analysing and displaying the spatial data (refer to Strahler and Strahler (2005:44)), since it allows the shape and size and/or numeric values of indicators to be displayed and the spatial relations of these indicators to be visually illustrated (Law & Collins, 2013:6-7).

Table 7.3 provides recommendations for presenting the different indicators of the settlement profile.

Table 7.3: A recommendation for presenting the objective settlement profile indicators

Presenting objective indicators			
Representation		Relevant indicators	Object
Graphs	Demographic graphs	✓ Population size ✓ Gender profile ✓ Household size estimates ✓ Population projection estimates	These graphs will allow quick and easy access for spatial decision-makers to understand the demographic profile of the settlement.
	Economic capital graphs	✓ Income profile ✓ Employment profile ✓ Financial assets ✓ Transport affordability	These graphs will allow quick and easy access for spatial decision-makers to understand the economic profile of the settlement.
Maps	Demographic maps	✓ Household size (location)	This map will spatially illustrate the current population distribution.
	Infrastructure maps	✓ Electricity access ✓ Sanitation facilities ✓ Access to water ✓ Housing types	These maps will spatially illustrate the access to infrastructure, creating a visual understanding of the economic capital available within the specific settlement.
	Economic opportunity maps	✓ Economic activity ✓ Distance from economic hub	These maps will spatially illustrate the access to economic opportunity, creating a visual understanding of the economic opportunity available within the specific settlement.
	Mobility maps	✓ Mobility	These maps will spatially illustrate the mobility, creating a visual understanding of the access to quality of life resources, i.e. economic capital, human capital, social capital and natural capital, for residents of the specific settlement.
	Human capital maps	✓ Access to education ✓ Access to health facilities	These maps will spatially illustrate the mobility, creating a visual understanding of the economic capital present within the specific settlement.

Presenting objective indicators			
Representation		Relevant indicators	Object
Maps <i>continued</i>	Social capital maps	✓ Public facilities ✓ Crime incidences (location)	These maps will spatially illustrate the location of public facilities and of crime incidences, creating a visual understanding of social capital considerations within the specific settlement.
Reports	Environmental report	✓ Environmental quality ✓ Natural assets ✓ Natural hazards	Since these are difficult to present visually, it is recommended that concise reports be written about these codes.

To ensure an understanding of the local residents' quality of life rationality and to avoid imposing certain viewpoints, it is recommended that these objective indicators are subjectively explored in the following step.

7.5.3 STEP 3: PROFILE INDIVIDUAL EXPERIENCE INDICATORS

In Chapter 3, section 3.4, it was noted that public policy is often criticised for not reflecting local citizens' priorities. *Subjective indicators* are, therefore, recommended as a means to inform the identification and prioritisation of projects during strategic spatial planning, according to the priorities of local citizens. It is recommended that this may assist in gaining an understanding of the "implications on the ground" of the life quality status quo, enabling spatial decision-makers to avoid conflicting quality of life rationalities.

For this step public participation is recommended and Table 7.4 provides recommendations for the subjective indicators to be used for this step. During theoretical sampling for the storyline analysis (refer to Chapter 4, section 4.3.3) it was discovered that the public participation process is often criticised as "mere tokenism", a notion strengthened by the findings of the case study analysis (refer to Chapter 5, section 5.4.3) and the importance of thorough public participation is, therefore, emphasised.

Table 7.4: A concept assessment matrix for settlement profiling subjective indicators

Concept assessment matrix for settlement profiling				
Subjective Indicators				
Economic capital	Human capital	Social capital	Natural capital	Physical space
✓ Economic activity ✓ Electricity access ✓ Sanitation facilities ✓ Access to water ✓ Mobility ✓ Transport affordability	✓ Access to education ✓ Access to health facilities	✓ Safety ✓ Social gathering points	✓ Environmental quality ✓ Natural assets ✓ Natural hazards	✓ Housing quality ✓ Distance from economic hub

For these indicators to be serviceable during strategic spatial planning, it is also recommended that the indicators be presented visually whenever possible. A GIS specialist is, therefore, in this instance also recommended for completing the task. Recommendations for presenting the subjective indicators are provided in Table 7.5 below.

Table 7.5: A recommendation for presenting the subjective settlement profile indicators

Presenting subjective indicators			
Representation		Relevant indicators	Object
Maps	Infrastructure maps	✓ Electricity access ✓ Sanitation facilities ✓ Access to water	These maps will spatially illustrate the access to infrastructure, creating a visual understanding of the economic capital available within the specific settlement.
	Economic opportunity maps	✓ Economic activity ✓ Distance from economic hub	These maps will spatially illustrate the access to economic opportunity, creating a visual understanding of the economic opportunity available within the specific settlement.
	Mobility maps	✓ Mobility	These maps will spatially illustrate the mobility, especially the movement patterns of residents. This will create a visual understanding of the access to, and usage of, quality of life resources, i.e. economic capital, human capital, social capital and natural capital, for residents of the specific settlement.
	Human capital maps	✓ Access to education ✓ Access to health facilities	These maps will spatially illustrate the mobility, creating a visual understanding of the economic capital present within the specific settlement.
	Natural capital maps	✓ Natural assets	This map will spatially illustrate the current vegetation and other natural assets within the settlement.

Presenting subjective indicators			
Representation		Relevant indicators	Object
Reports	Environmental report	✓ Environmental quality ✓ Natural assets ✓ Natural hazards	Since these are difficult to present visually, it is recommended that concise reports be written about these codes.
	Mobility report	✓ Transport affordability ✓ Mobility	Since these are difficult to present visually, it is recommended that concise reports be written about these codes.
	Social capital report	✓ Safety ✓ Social gathering points	Since these are difficult to present visually, it is recommended that concise reports be written about these codes.
	Housing report	✓ Housing quality	Since these are difficult to present visually, it is recommended that concise reports be written about these codes.

It is recommended in the following step that the subjective indicators be triangulated with the objective indicators.

Recommendations for future research

In order to avoid “mere tokenism” during the public participation process, it is recommended that a rigorous public participation approach be developed, specific to the context and capacity of the South African poor.

7.5.4 STEP 4: TRIANGULATE QUALITY OF LIFE INDICATORS AND RELEVANT DIRECTIVES

In order to ensure a serviceable settlement profile, triangulation of the indicators and relevant South African spatial directives is recommended. To do this, two additional steps are recommended, namely 1) juxtaposing the objective and subjective indicators and 2) developing a narrative report.

7.5.4.1 STEP 4.1: JUXTAPOSE OBJECTIVE AND SUBJECTIVE INDICATORS

It is argued that the subjective indicators (endogenous environment) may explain how the objective indicators (exogenous environment) are experienced (refer to Chapter 3, section 3.2); thereby elucidating the quality of life rationalities of the South African poor. Therefore, Table 7.6 provides a recommendation for juxtaposing the objective and subjective indicators.

Table 7.6: A recommendation for juxtaposing objective and subjective indicators

Juxtaposing the objective and subjective indicators	
Objective indicators	Subjective indicators
Economic capital graphs ✓ Income profile ✓ Employment profile ✓ Financial assets ✓ Transport affordability	Mobility report ✓ Transport affordability
Infrastructure maps ✓ Electricity access ✓ Sanitation facilities ✓ Access to water ✓ Housing types	Infrastructure maps ✓ Electricity access ✓ Sanitation facilities ✓ Access to water Housing report ✓ Housing quality
Economic opportunity maps ✓ Economic activity ✓ Distance from economic hub	Economic opportunity maps ✓ Economic activity ✓ Distance from economic hub
Mobility maps ✓ Mobility	Mobility map Mobility report ✓ Mobility
Human capital maps ✓ Access to education ✓ Access to health facilities	Human capital maps ✓ Access to education ✓ Access to health facilities
Social capital maps ✓ Public facilities ✓ Crime incidences (location)	Social capital report ✓ Social gathering points ✓ Safety
Natural capital map ✓ Natural assets Environmental report ✓ Environmental quality ✓ Natural assets ✓ Natural hazards	Environmental report ✓ Environmental quality ✓ Natural assets ✓ Natural hazards

It is argued that if, as recommended in steps 2 and 3, the maps are created in GIS, this juxtaposing of the maps (recommended in Table 7.6 above) would be simple and accurate. The layered nature of GIS allows for viewing the relevant maps as one map which may simplify comparison of the indicators (refer to Strahler and Strahler (2005:44)). Subsequently, it is recommended that the similar objective and subjective indicators be presented on one map – from these maps it is

recommended that a short narrative report be written about the differences and/or similarities between the objective and subjective indicators. Furthermore, it is recommended that the reports (namely the mobility report, housing report, social capital report, and the environmental reports recommended in Table 7.6 above) may be used to further explain the associated visual representations (namely economic capital graphs, infrastructure maps, mobility maps, social capital maps and natural capital map recommended in Table 7.6 above) in narrative format.

7.5.4.2 STEP 4.2: DEVELOP A NARRATIVE REPORT

In order for the settlement profile to inform strategic spatial planning, it is recommended that a narrative report on the implications of the results, as summarised in step 4.1, be developed (refer to (UN-HABITAT & UNHCR, 2020:9)). This may be done by exploring the following questions:

1. What are the future spatial needs of the settlement?

Indicators to consider

- ✓ Population projection
- ✓ Employment profile
- ✓ Economic activity
- ✓ Electricity access
- ✓ Sanitation facilities
- ✓ Access to water
- ✓ Mobility
- ✓ Access to education
- ✓ Access to health facilities

2. What are the most pressing concerns within the settlement?

Considerations

It is recommended that the results of the objective indicators (maps, graphs and reports) be studied to determine where the largest quality of life gaps within the settlement lies.

3. Which indicators are priorities to the settlement residents?

Considerations

It is recommended that the results of the subjective indicators be studied to determine which of these are most pressing for the residents of the profiled settlement.

4. How does the above (questions 1-3) align with South African directives?

Directives to consider

- ✓ *Constitution of the Republic of South Africa* (1996)
- ✓ Spatial Planning and Land Use Management Act 16 of 2013
- ✓ National Environmental Management Act 107 of 1998
- ✓ National Development Plan
- ✓ Integrated Urban Development Framework
- ✓ National Spatial Development Framework
- ✓ National Framework for Sustainable Development
- ✓ Provincial Spatial Development Framework
- ✓ District Integrated Development Plan and Spatial Development Framework
- ✓ Current Local Spatial Development Framework

It is recommended that the results of the triangulation will correctly inform the South African strategic spatial planning phases following the analysis phase (refer to Figure 7.1 above) to ultimately correctly identify and prioritise projects. It is argued that, in so doing, conflicting quality of life rationalities between spatial decision-makers and the South African poor may be avoided.

7.5.5 STEP 5: COMPILE SETTLEMENT PROFILE

A recommendation for presenting the settlement profile is provided in Table 7.7 below.

Table 7.7: A recommendation for compiling the settlement profile

Settlement profile	
Component	Object
Contextualisation	It is recommended that the settlement be (concisely) contextualised in terms of • its history, • its typology (determined in step 1) and • the demographic graphs and maps (compiled during step 2, refer to Table 7.3 above).
Status quo	It is recommended that the status quo of the settlement be presented according to the recommendation in Table 7.6 above (refer to step 4.1). It is suggested that the subjective indicators be used to narratively explain and elaborate on the objective indicators.
Implications	It is recommended that the narrative report, compiled during step 4.2, be presented to highlight the implications of the quality of life status quo.

If founded on accurate and diverse settlement profiling, the strategic spatial planning phases following the analysis phase, will correctly be informed and the strategies, projects, integration and ultimate prioritisation of projects, will be founded on the actual quality of life rationalities of the South African poor. This may assist in avoiding conflicting quality of life rationalities between spatial decision-makers and the South African poor.

Recommendations for future research

In order for the conceptual framework, presented in sections 7.2 – 7.5 above, to reach its full potential, future research is recommended to apply it practically. This may provide opportunity for:

- 1) refining and expanding the conceptual framework to optimise its applicability and implementability
- 2) developing a comprehensive methodology for measuring each indicator
- 3) refining and possibly expanding the Planner+ team member demarcation for optimally gathering the necessary information
- 4) demonstrating the usefulness of, and developing procedures for, using GIS as a tool for settlement profiling
- 5) providing a realistic timeframe for compiling a settlement profile

7.6 Concluding remarks

It is argued that this research's contribution for spatial decision-making to create "a more equal and humane world" has been to provide insight into where the conflicting quality of life rationalities between spatial decision-makers and the South African poor occur. Furthermore, a conceptional framework to refine the situational analysis principles of South African directives has been recommended. It is argued that phases 2 to 5 of the strategic spatial planning process (refer to Figure 7.1 above) will correctly be informed if founded on accurate and diverse settlement profiling to ultimately identify and prioritise projects that reflect the actual quality of life rationalities of the South African poor. The resolution of ongoing conflicts between spatial decisions-makers and the South African poor may thus be resolved.

CHAPTER 8: CONCLUSION

8.1 Introduction

As pointed out by Binns and Nel (1999:391) and Maganadisa *et al.* (2021), a major challenge for spatial decision-makers is a general failure in delivering meaningful improvements in settlements with a dire need for an improved life quality. This challenge was further validated in the research carried out in the second part of the empirical analysis, which demonstrated low levels of life quality and a general dissatisfaction with municipal service delivery and lack in job opportunities. In response to critique that these challenges result from conflicting rationalities between spatial decision-makers and the urban poor (De Satgé & Watson, 2018:3), this thesis set out to explore conflicting quality of life rationalities between spatial decision-makers and the South African poor to ultimately provide strategic spatial planning recommendations that may bridge conflicting quality of life rationalities.

In this chapter the research is synthesised to illustrate the accomplishment of the research aims and objectives (section 8.2), the research contribution is reflected upon (section 8.3) and a recapitulation is provided of the recommendations from this research (section 8.4).

8.2 Synthesis of the research process: accomplishing the research aims and objectives

In Chapter 1, section 1.3, it is stated that the aim of this research was 1) to explore conflicting quality of life rationalities between spatial decision-makers and the South African poor and 2) to provide strategic spatial planning recommendations to bridge conflicting quality of life rationalities. This was accomplished by following the research objectives, as is illustrated in the sections below.

8.2.1 Research objective 1: to explore the quality of life rationality guiding spatial decision-makers

In order to explore conflicting quality of life rationalities, it was argued that an understanding of the respective quality of life rationalities must firstly be gained. The first research objective was, therefore, to explore the quality of life rationality guiding spatial decision-makers. This objective was accomplished by conducting a storyline analysis of underlying quality of life rationalities within the South African directives guiding spatial decision-making. To conduct this analysis and to enhance sensitivity to nuances in the data, a codebook (a list of quality of life themes, categories

and codes) were abstracted from international Quality of Life Index reports. The codebook was subsequently utilised for, and refined during, a qualitative coding analysis of South African directives guiding spatial decision-makers.

This first part of the empirical analysis, presented in Chapter 4, confirmed the critique in literature and in the international Quality of Life index reports, that government directives concentrate primarily on economic capital. The analysis illustrated that the South African directives' main focus is on infrastructure, transportation, economic growth and financial assets (especially land ownership), as drivers of life quality. A specific focus on sanitary facilities was also noted, arguably because of the personal safety and health challenges associated with the absence of, or improper, sanitation facilities.

Choice, education, skills, health, safety, and social networks are also often referred to in the South African directives. The natural environment, along with its quality and climate change seem to be viewed as exceedingly important to people's overall well-being. In terms of physical space, the historic development, housing, human settlements, and urbanisation seem to be viewed as the main drivers influencing life quality. Lastly, governance seem to be believed to largely affect life quality while not much attention is given to the individual experience.

8.2.2 Research objective 2: to explore the quality of life rationality of the South African poor

To further explore the respective quality of life rationalities, the second research objective was to explore the quality of life rationality of the South African poor. For this reason, the codebook, abstracted and refined during the first part of the empirical analysis (refer to section 8.2.1 above) was utilised and further refined during a case study analysis. This was accomplished by qualitatively coding semi-structured interview results.

The second part of the empirical analysis, presented in Chapter 5, illustrated a strong desire for job opportunities within the settlements. It was explained that without a job, one does not have money and without money, one does not have choices. Some have also expressed a belief that if only they were able to further their education, jobs would be more readily accessible.

Another major quality of life challenge that was identified during the analysis, is a lack in proper infrastructure, resulting in frequent violent protests against service delivery. Many expressed their disdain with a lack in proper sanitation infrastructure and some were not satisfied with their lack in access to electricity. The interviewees did, however, seem content with water access outside their yard, as long as it is clean and within a manageable distance. Furthermore, many of the

interviewees indicated low quality housing that is often damaged by wind and rain. Safety was also highlighted with many incidences of violent crime mentioned. Further to this people seem to generally “have to fend for themselves” and contrary to literature assumptions, only small social networks exist.

This analysis also highlighted the interconnectivity of the different capabilities (quality of life codes). For example, an interviewee complained that the lack in sanitation infrastructure maintenance (sewage leakage), causes illness and, as mentioned above, it is believed that income affects choice.

8.2.3 Research objective 3: to juxtapose the quality of life rationalities of these role-players

To explore the conflicting quality of life rationalities between spatial decision-makers and the South African poor, the findings of the analyses exploring the respective quality of life rationalities (refer to section 8.2.1 and 8.2.2 above) were juxtaposed and is presented in Chapter 6.

The first research aim²¹ was accomplished by concluding that the conflicting quality of life rationalities between spatial decision-makers and the South African poor, mostly stem from the diverse and complex *context* of the South African urban landscape. It is argued that this highlights the need for thoroughly considering the context during spatial decision-making in South Africa. In accomplishing the second research aim²², it was recommended (refer to Chapter 7, sections 7.1 – 7.3) that the situational analysis, required by article 21 of the Spatial Planning and Land Use Management Act 16 of 2013, be refined and contextually focussed to avoid the persistent conflicting quality of life rationalities between spatial decision-makers and the South African poor. To this end, the research contributed a conceptual framework for settlement profiling (refer to Chapter 7) for use during the *analysis* phase of strategic spatial planning in South Africa (refer to Figure 7.1, Chapter 7). A recapitulation of this conceptual framework is presented in Table 8.1.

Table 8.1: A recapitulation of the conceptual framework for settlement profiling

Refer to	Conceptual framework for settlement profiling recapitulation
Chapter 7, section 7.2	<i>Introducing settlement profiling</i> It is recommended that detailed snapshots of different settlement types within a given municipality be created for spatial decision-makers to thoroughly understand the context for which decisions are made.

²¹ To explore conflicting quality of life rationalities between spatial decision-makers and the South African poor.

²² To provide strategic spatial planning recommendations to bridge conflicting quality of life rationalities.

Refer to	Conceptual framework for settlement profiling recapitulation
Chapter 7, section 7.3	<i>Contextualising settlement profiling as part of South African strategic spatial planning</i> The Spatial Planning and Land Use Management Act 16 of 2013 requires a broad situational analysis as the first phase of strategic spatial planning. It is recommended that this situational analysis be refined and focussed to ensure a sufficient understanding of the context for which spatial decisions are being made. To this end it is recommended that the conceptual framework, developed by this research, be implemented during the analysis phase of strategic spatial planning in South Africa (refer to Figure 7.1, Chapter 7).
Chapter 7, section 7.4	<i>Presenting the Planner+ principle</i> Since strategic spatial planning is usually conducted by the spatial planner, it is recommended that s/he also take the lead in compiling the settlement profile. A multi-disciplinary team, including public participants, are, however, recommended to produce an accurate profile. It is recommended that this team includes 1) spatial planners, 2) urban economists, 3) environmental consultants, 4) GIS specialists and 5) public participants.
Chapter 7, section 7.5	<i>Recommending a settlement profiling concept methodology</i> Step 1: Determine settlement types Step 2: Profile objective indicators Step 3: Profile individual experience indicators Step 4: Triangulate indicators & directives Step 5: Compile settlement profile

The research contribution is discussed in the following section.

8.3 Research contribution

It is argued that this research contributes both to the spatial planning theoretical discourse and to spatial planning practice, as is discussed in the sections below.

8.3.1 Contribution to the spatial planning theoretical discourse

Many criticisms towards spatial decision-makers about conflicting rationalities between them and the urban poor are found in literature. To the author's knowledge, no study has, however, been conducted to determine 1) the respective quality of life rationalities guiding South African spatial decision-making and the quality of life rationalities of the South African poor or 2) the gap where conflicting quality of life rationalities occur. This research illustrated that, while the South African directives' spatial *visions* are purposeful and fundamentally prepared well, the South African poor laments their "struggle to survive" in reality. The theoretical significance of this research lies in the generated theory. The theory argues that, although aspiration to create "good and happy" South

African human settlements does improve on historic trends, these aspirations also lack in depth. The South African society is diverse and complex, and it is through these diversities and complexities that conflicting quality of life rationalities are generated.

This contribution to the spatial planning theoretical discourse is elaborated upon in Table 8.2.

Table 8.2: Research contribution to the spatial planning theoretical discourse

Research contribution to the spatial planning theoretical discourse	
Object	Contribution
Contribution to developing a unique philosophy that encourages innovative and context-appropriate spatial planning approaches	The research contributed to the call in literature for developing a “unique philosophy to encourage spatial planners to pursue innovative and context-appropriate approaches” (refer to Chapter 1, section 1.1). This contribution is twofold, as is explained below. • The generated theory attributes the conflicting quality of life rationalities to a misalliance with the complex and diverse context of urban South Africa. This research, therefore, contributed to the development of this unique philosophy by providing insight to where the challenge originates. • Further to the generated theory, a practical recommendation in the form of a conceptual framework for settlement profiling to thoroughly analyse the context before developing strategies during strategic spatial planning is created.
Contribution to furthering global South theory	This research illustrates the quality of life rationalities of two role-players in the South African urban context, namely spatial decision-makers and the urban poor. These role-players were situated specifically in low-income settlements that are widely associated with the global South urban context. It is argued that this typical global South case enables a greater (empirical) understanding of urban southern Africa, highlighting its challenges and opportunities. Thereby this research contributes to the further development of global South theory.
Contribution of scoping opportunity for further research	The research recommended scope for future research as is explicated in Chapter 7 and recapitalised in section 8.4 below.

Global relevance of the contributions to the spatial planning theoretical discourse

Urban areas are increasingly becoming more diverse (Berg & Nowicka, 2019; Kihato et al., 2010) and, as is illustrated by this research, different quality of life rationalities are inevitably present within these diverse urban areas. It may, therefore, be argued that the focus on context-appropriate spatial planning approaches have global relevance and this position may also serve to alleviate urban challenges relating to conflicting rationalities in other parts of the world.

Further to this, this research illustrates the important and unique characteristics of the global South social and urban landscape, re-emphasising the importance of unique approaches.

The following section discusses the research contribution to spatial planning practice.

8.3.2 Contribution to spatial planning practice

Urban South Africa is widely believed to suffer from exceedingly low levels of life quality (refer to Chapter 1, section 1.1). This assumption is further validated by the second part of the empirical analysis, illustrating low levels of experienced well-being amongst the South African poor (Chapter 5, section 5.6). The research, furthermore, illustrated a discontentment amongst the South African poor about these life quality levels, which is further highlighted by the frequent violent protests against service delivery (refer to Chapter 5, section 5.4.1). The failure to deliver meaningful improvements to these life quality challenges is attributed to conflicting rationalities between spatial decision-makers and the South African poor (refer to Chapter 1, sections 1.1 and 1.8.4). This research contributed a conceptual framework in Chapter 7 for settlement profiling as part of strategic spatial decision-making in South Africa to avoid conflicting quality of life rationalities. Further to the conceptual framework, the research also contributed spatial planning strategies for addressing the life quality challenges highlighted by the settlement profile.

These contributions to spatial planning practice are elaborated upon in Table 8.3.

Table 8.3: Research contribution to spatial planning practice

Research contribution to spatial planning practice	
Object	Contribution
Contribution of a call to action for more context-appropriate spatial planning measures	Though acknowledging the limitations determined by broader socio-political and socio-economic events, this research is a call to action for spatial planners to be more aware of the influence they have in shaping policy frameworks, mediating policy implementation and shaping the physical environment which ultimately shapes the life quality of “ordinary citizens”.
Contribution to the South African strategic spatial planning process	Although article 21 of the Spatial Planning and Land Use Management Act 16 of 2013 requires a broad situational analysis on municipal level, it is argued, based on the conclusions from this research, that conflicting rationalities are persisting. Article 21 is deemed a first, but lacking, step towards considering the context and, therefore, a conceptual framework to profile the quality of life status quo of the different settlement types within a given municipality are contributed in this research. It is recommended that detailed settlement profiling may be beneficial in bridging the gap between spatial decision-makers and the South African poor, especially if duly conducted during long-term strategic spatial planning i.e. for compiling IDPs and SDFs. Conduction of settlement profiles is highly analytical in nature and would naturally resort under the analysis phase of strategic spatial planning in South Africa, the first of five phases outlined in the IDP manual (refer to Chapter 7, uresection 7.3).

Research contribution to spatial planning practice	
Object	Contribution
Contribution of the conceptual framework for settlement profiling	A conceptual framework for settlement profiling is contributed for spatial decision-makers to avoid conflicting quality of life rationalities. Settlement profiling is the respective profiling of different settlement types within a given municipality. It was recommended to enable clarity and a common understanding of the quality of life status quos within the different settlement types. It is argued that settlement profiling will enable the strategic spatial planning process to base the identification and prioritisation of projects on the actual quality of life rationalities of the South African poor. The ongoing conflicts between spatial decisions-makers and the South African poor may thereby be resolved. The conceptual framework contributed to spatial planning practice by: • contributing a concept settlement typology, based on the findings of this research, • contextualising settlement profiling within the broader South African strategic spatial planning process, • discussing the Planner+ principle for compiling settlement profiles and recommending a concept methodology informed by the quality of life categories and themes abstracted during the analyses of this research and the situational analysis requirements of article 21 of the Spatial Planning and Land Use Management Act 16 of 2013.
Contribution to land use planning	Further to informing strategic spatial planning, the settlement profiles may serve to inform municipal land use schemes. It is argued that the greater understanding of the life quality status quo may contribute to the land use scheme's adherence to article 25(1) of the Spatial Planning and Land Use Management Act 16 of 2013 requiring land use schemes to promote (a) economic growth, (b) social inclusion, (c) effect land development and (d) minimal impact on public health, the environment and natural resources.
Contribution to forwarding the multidisciplinary nature of spatial planning	Considering the contextual diversity in South Africa, as re-emphasised in this research, the Planner+ principle was contributed as part of the conceptual framework for settlement profiling. It is argued that this principle may assist in bridging the gap where conflicting quality of life rationalities occur, since a multi-disciplinary team, in collaboration with public participants, may produce a more accurate snapshot of the life conditions as it broadens the expertise and skillset.
Contribution of strategies to spatially address quality of life challenges	Further to settlement profiling, various spatial strategies were recommended for spatial decision-makers to address challenges specific to the different quality of life categories, namely economic capital, human capital, social capital, natural capital, physical space, institutional context and individual context. These strategies are recommended in Chapter 6 and recapitulated in section 8.4 below.

The recommendations from this research, presented in Chapters 6 and 7, are recapitulated in the following section.

8.4 Recommendations

From this research, recommendations are provided (in Chapter 7) for avoiding conflicting quality of life rationalities, (in Chapter 6) for spatially improving life quality and (in Chapter 7) for future research. These recommendations are recapitulated in the following sections.

8.4.1 Recommendations for avoiding conflicting quality of life rationalities

This research concluded that the conflicting quality of life rationalities between spatial decision-makers and the South African poor, mostly stem from the diverse and complex *context* of the South African urban landscape. In order to avoid these conflicting quality of life rationalities, it is recommended in Chapter 7 that spatial decision-makers gain a thorough understanding of the context for which they are making decisions. Settlement profiling is, therefore, recommended to compile “a detailed snapshot” of the life quality conditions within different settlement types in a given municipality. To this end a conceptual framework for settlement profiling is contributed in Chapter 7. Table 8.4 provides a recapitulation of recommendations for the implementation of the conceptual framework for settlement profiling

Table 8.4: Recapitulation of recommendations for the implementation of the conceptual framework for settlement profiling

Recommendations for the implementation of the conceptual framework for settlement profiling	
Object	Recommendation
Recommendation for settlement profiling as part strategic spatial planning	Conduction of settlement profiles is highly analytical in nature and it is, therefore, recommended that settlement profiling resort under the <i>analysis</i> phase of strategic spatial planning in South Africa, the first of five phases as illustrated in Figure 7.1, Chapter 7.
Recommendation for refining the situational analysis required by South African directives for spatial decision-making	It is recommended that the conceptual framework, contributed by this research, be included as measure to refine the broad situational analysis, required in article 21 of the Spatial Planning and Land Use Management Act 16 of 2013, to ultimately ensure that the identification and prioritisation of projects will be founded on the actual quality of life rationalities of the South African poor.
Recommendation for multi-disciplinary team to conduct settlement profiling	Strategic spatial planning is usually conducted by the spatial planner and it is recommended that s/he also take the lead in compiling the settlement profile. A multi-disciplinary team, including public participants, are, however, recommended to produce an accurate profile, since they may contribute skills and knowledge specific to their discipline or, in the case of public participants, their experience of the space. It is argued that the expertise brought by the different team members, may produce a more accurate snapshot of the quality of life conditions that, in turn, will correctly inform strategic spatial planning and avoid conflicting rationalities between spatial decision-makers and the South African poor. The recommended team includes 1) spatial planners, 2) urban economists, 3) environmental consultants, 4) GIS specialists and 5) public participants. Furthermore, in the Draft Planning Profession Act, 2002: Rules, only the technical planner's “core scope of work” includes the “ability to work in multi-disciplinary teams”, it is recommended that this also be included as a “core scope of work” for professional planners to forward capacity building in implementing the Planner+ principle, as recommended in the conceptual framework for settlement profiling.

Recommendations for the implementation of the conceptual framework for settlement profiling	
Object	Recommendation
Recommendation for implementing settlement profiling	This research illustrated that there is a definitive differentiation in access to quality of life <i>resources</i> (economic capital, human capital, social capital and natural capital), within and between low-income settlements. The recommended first step of settlement profiling is, therefore, to determine the different settlement types within the municipality for which the respective profiles are to be compiled (refer to Chapter 7, section 7.5.1). The profiling within the identified settlement types is recommended to follow the notion of social indicators as measurement for the quality of life, discussed in Chapter 3, section 3.4. Subsequently, the second step is to gather the necessary quality of life information according to objective indicators (observable and measurable attributes). It is recommended that these indicators be based on the codes and categories, abstracted during the analyses, along with the situational analysis components already required in article 21 of the Spatial Planning and Land Use Management Act 16 of 2013 (refer to Chapter 7, section 7.5.2). In order to avoid conflicting quality of life rationalities and to truly “understand the implications on the ground” public participation (according to subjective indicators) is recommended as a third step (refer to Chapter 7, section 7.5.3). To compile the “detailed snapshot” of the life quality conditions within the different settlement types, it is recommended that the objective and subjective indicators be triangulated, along with considering relevant South African spatial directives, in the fourth step (refer to Chapter 7, section 7.5.4). The settlement profile may then be compiled in the fifth and final step (refer to Chapter 7, section 7.5.5).

This research was conducted in a South African context and the discussion thus far, therefore, focuses on the implementation of settlement profiling specifically in the South African strategic spatial planning context. It is, however, argued that the settlement profile may be implemented in other parts of the world as well, as is discussed below.

Global relevance of the conceptual framework for settlement profiling

Urban areas are increasingly becoming more diverse (Berg & Nowicka, 2019; Kihato *et al.*, 2010) and, as is illustrated by this research, different quality of life rationalities are inevitably present within these diverse urban areas. It is, therefore, argued that the conceptual framework for settlement profiling may be beneficial for spatial decision-making worldwide in order to avoid conflicting quality of life rationalities.

The conceptual framework contextualised settlement profiling within the South African spatial decision-making process. It is, however, argued that this may serve as a point of reference to find similar processes and contextualise it within the spatial decision-making processes of the relevant country.

The recommended team members to compile the settlement profiles may, furthermore, be found worldwide, and it is therefore recommended that they be included in all settlement profiling teams to ensure a thorough and accurate profile.

The settlement profiling methodology, recommended in this thesis, is all-encompassing and customisable to be implemented within any human settlement worldwide. The list of South African directives to consider during the triangulation step may serve as a point of departure to identify the spatial decision-making directives of the country where the settlement profiling is conducted.

8.4.2 Recommendations for spatially improving life quality

In the previous section recommendations are recapitulated for spatial decision-makers to thoroughly consider the life quality of “ordinary citizens” to inform strategic spatial planning and ultimately their day-to-day spatial decisions. A recapitulation of spatial strategies recommended in Chapter 6 to address the quality of life indicators highlighted as priorities during the fourth step of settlement profiling (refer to Chapter 7, section 7.5.4.2) are recommended in Table 8.5.

Table 8.5: Recapitulation of recommendations for spatial strategies to address life quality challenges

Recommendations for spatial strategies to address life quality challenges		
Quality of life indicator(s)	Object	Recommendation
✓ Economic activity ✓ Employment profile ✓ Income profile ✓ Financial assets ✓ Transport affordability	Recommendation for affecting non-spatial economic capital	Spatial planning is seemingly not linked to these quality of life indicators. It is, however, argued that the spatial organisation has a large impact on economic markets. Therefore, it is recommended that, during the strategies phase of strategic spatial planning (refer to Figure 7.1, Chapter 7), spatial planners work in close collaboration with urban economists who understand these markets and may assist in affecting the necessary change to allow the South African poor access to employment opportunities, thereby improving their quality of life.
✓ Electricity access ✓ Sanitation facilities ✓ Access to water ✓ Mobility ✓ Housing types	Recommendation for fairly distributing economic capital resources	Integrated and holistic infrastructure provision may allow “all citizens” within a given community to benefit from infrastructure and transportation systems. It is, thus, recommended that spatial planners may assist in distributing resources fairly through their layout plans and during strategic spatial planning, i.e. when compiling Integrated Development Plans (IDP) and Spatial Development Frameworks (SDF) for local municipalities in South Africa.
✓ Access to education ✓ Access to health facilities ✓ Natural assets	Recommendation for spatially affecting human capital	Spatial planners may affect the (human capital) life quality of local citizens through planning for schools (education), health facilities and green and walkable spaces in layout plans and strategic spatial planning, i.e. when compiling IDPs and SDFs in South Africa.

Recommendations for spatial strategies to address life quality challenges		
Quality of life indicator(s)	Object	Recommendation
✓ Public facilities ✓ Social gathering points	Recommendation for spatially affecting social capital	Seeing as design influences social life, it is recommended that spatial planners encourage social interaction and social networks through their layout plans.
✓ Safety ✓ Crime incidences (location)	Recommendation for spatially affecting safety challenges	<i>Defensible space</i> principles (refer to Pacione (2009:409-411)) for layout plans have been argued to possibly encourage the development of a strong social fabric and active citizenship, thereby decreasing safety challenges
✓ Environmental quality ✓ Natural assets ✓ Natural hazards	Recommendation for including the “natural” within the “urban”	Spatial planners are encouraged to include nature-based solutions in strategic spatial plans, policies, frameworks and layout plans and during urban revitalisation projects to ensure that local citizens gain from the quality of life benefits provided by natural capital. This may be done via nature-based solutions: an umbrella concept for initiatives that mimic or adapt natural systems, simultaneously benefiting natural, social, economic and human capital.

It is recommended that these strategies, presented in Table 8.5, be informed by thorough public participation processes to ensure that the quality of life rationale of “ordinary citizens”, especially the South African poor, are considered. It is argued that this will protect the “lives and liberties” of ordinary citizens and ensure that appropriate spatial solutions are presented to their actual challenges. Davidoff’s (1965:337) call for spatial planners to serve as professional advocates for local (and especially underprivileged) citizens and influence social and spatial policy is, therefore, reiterated.

Considering the diverse viewpoints and approaches of different population groups it is, furthermore, recommended that spatial planners approach spatial organisation in a culturally sensitive manner to empower local citizens and ultimately increase their available choice sets

In view of the often criticised failure of governments to provide meaningful improvements in settlements with an urgent need for an improved life quality, it is recommended that spatial governance in South Africa be guided by existing resources within the settlement to *enable* rather than *shape* a “good and happy” human settlement.

8.4.3 Recommendations for future research

It is argued that this research provides a point of departure for future research as is recommended in Table 8.6.

Table 8.6: Recapitulation of recommendations for future research

Recommendations for future research	
Object	Recommendation
Recommendation to further develop the concept settlement typology	This research highlighted the diversity in the South African urban landscape, especially in the low-income settlements and contributed a concept settlement typology (presented in Figure 7.3, Chapter 7). Future research is, however, recommended to further develop the concept settlement typology and to ensure that all the nuances within the South African urban landscape are captured within this typology. It is recommended that this may further enhance context-specific planning to avoid conflicting quality of life rationalities between the urban role-players.
Recommendation to develop an efficient public participation process for the South African context	In order to avoid “mere tokenism” during the public participation process, it is recommended that a rigorous public participation approach be developed, specific to the South African context and capacity of the South African urban role-players.
Recommendation to practically apply the conceptual framework for settlement profiling in a South African case study	In order for the settlement profiling concept methodology, presented in Chapter 7, section 7.5, to reach its full potential, future research is recommended to apply it practically within a South African case study. This may provide opportunity for: 1) refining and expanding the conceptual framework to optimise its applicability and implementability 2) developing a comprehensive methodology for measuring each indicator 3) refining and possibly expanding the Planner+ team member demarcation for optimally gathering the necessary information 4) demonstrating the usefulness of, and developing procedures for, using GIS as a tool for settlement profiling 5) providing a realistic timeframe for compiling a settlement profile

8.5 Concluding remarks

This research identified conflicting quality of life rationalities and contributed to spatial decision-making thought and processes towards creating equilibrium in the complex urban system.

Life and growth depend, not on the absence of negative conditions, but on a sufficient degree of equilibrium, [...] to permit continued repair, to absorb novelties, to regulate quantities, [...].

– Lewis Mumford (1961:556)

REFERENCE LIST

Adjei-Poku, B. 2017. Rationality and power in land use planning: a conceptual view of the relationship. *Journal of planning literature*, 33(1):45-60.

African News Agency. 2018. Petrol bombs hurled in destructive Steynsrus protests. <https://www.iol.co.za/travel/south-africa/free-state/petrol-bombs-hurled-in-destructive-steynsrus-protests-15750469> Date of access: 10 Nov. 2021.

Alkire, S. 2008. The capability approach to the quality of life. https://ora.ox.ac.uk/objects/uuid:daa69468-daa9-4c47-b8b5-028ebae0e319/download_file?file_format=pdf&safe_filename=The%2Bcapability%2Bapproach%2Bto%2Bthe%2Bquality%2Bof%2Blife%2Bmeasures%2B2a.pdf&type_of_work=Research+paper Date of access: 18 Nov. 2021.

Alkire, S. 2009. Development: “a misconceive theory can kill”. In: Morris, C.W., ed. 1st ed. *Amartya Sen: Contemporary Philosophy in Focus*. Cambridge: Cambridge University Press. pp. 191-219.

Allen, N. & Davey, M. 2018. The Value of Constructivist Grounded Theory for Built Environment Researchers. *Journal of Planning Education and Research*, 38(2):222-232.

Amnesty international. 2020. South Africa: broken and unequal education perpetuating poverty and inequality. <https://www.amnesty.org/en/latest/news/2020/02/south-africa-broken-and-unequal-education-perpetuating-poverty-and-inequality/> Date of access: 28 July 2021.

Andereck, K.L., Valentine, K.M., Vogt, C.A. & Knopf, R.C. 2007. A cross-cultural analysis of tourism and quality of life perceptions. *Journal of Sustainable Tourism*, 15(5):483-502.

Aspinall, A., Cukier, J. & Doberstein, B. 2011. Quality of life assessments and social sustainability: Ski tourism development in Invermere, British Columbia. *Journal of Environmental Assessment Policy and Management*, 13(2):179-201.

ATLAS.ti. 2021. ATLAS.ti 9 MAC Full Manual. https://doc.atlasti.com/ManualMac.v9/ATLAS.ti_ManualMac.v9.pdf Date of access: 31 March 2021.

Bardhan, R., Kurisu, K. & Hanaki, K. 2015. Does compact urban forms relate to good quality of life in high density cities of India? Case of Kolkata. *Cities*, 48:55-65.

Bayulken, B. & Huisinigh, D. 2015. Perceived ‘Quality of Life’ in eco-developments and in conventional residential settings: an explorative study. *Journal of Cleaner Production*, 98:253-262.

Beauregard, R. 2013. The neglected places of practice. In: Fainstein, S.S. & Defilippis, J., eds. 2016. *Readings in planning theory*. 4th ed. West Sussex: Wiley Blackwell. pp. 277-292.

Berg, M.L. & Nowicka, M. 2019. Studying diversity, migration and urban multicultural: convivial tools for research and practice. London: UCL Press

Bertaud, A. 2018. Order without design: how markets shape cities. Cambridge: MIT Press.

Beukes, E. & Van Der Colff, A. 1997. Aspects of the quality of life in black townships in a South African city: implications for human development. *Quality of Life in South Africa*, 41(1/3):229-250.

Binder, M. & Coad, A. 2014. Capability, Functioning, and Resources. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 524-529.

Binns, T. & Nel, E. 1999. Beyond the Development Impasse: The Role of Local Economic Development and Community Self-Reliance in Rural South Africa. *The Journal of Modern African Studies*, 37(3):389.

Birks, M. & Mills, J. 2015. Grounded theory: A practical guide. 2nd ed. London: SAGE.

Blaauw, D. & Pretorius, A. 2013. The determinants of subjective well-being in South Africa – an exploratory enquiry. *Journal of Economic and Financial Sciences*, 6(1):179-194.

Blaikie, N. 2010. Designing social research: the logic of anticipation. 2nd ed. Cambridge: Polity Press.

Blečić, I., Cecchini, A.B. & Talu, V. 2013. The capability approach in urban quality of life and urban policies: Towards a conceptual framework. In: Serreli, S. & Maciocco, G., eds. *City project and public space*. Dordrecht: Springer. pp. 269-288.

Bodur, A. & Yüksel, Y.D. 2017. Assessing change in quality of life following rehousing from slum settlements to social housing. *Journal of the Faculty of Architecture*, 14(3):53-65.

Born, D., Colamarco, V., Delamónica, E. & Minujín, A. 2019. South American Children's Quality of Life: Intra-Urban Disparities along Life-Cycle Indicators. *Applied Research in Quality of Life*, 14(3):799-817.

Bukharova, E.B., Vorontsova, I.P., Semenova, A.R., Vitkovskaya, L.K., Popelnitskaya, I.M. & Drobyshev, I.A. 2019. Methodological Approaches to Homogenous Regional Clusters Formation for Human Capital and Quality of Life Assessment in the Yenisei Siberia Macro-Region. *Journal of Siberian Federal University – Humanities & Social Sciences*, 12(12):2137-2154.

Bulmer, M. 1982. The methodology of early social indicator research: William Fielding Ogburn and 'recent social trends', 1933. *Social Indicators Research*, 13:109-130.

Burlacu, F. 2018. The Importance of the Quality of Life in Achieving Happiness. *Cogito-Multidisciplinary research Journal*(2):96-104.

- Business Insider SA. 2021. Expropriation without compensation is coming - what you need to know. <https://www.businessinsider.co.za/expropriation-bill-2021-3> Date of access: 28 July 2021.
- Businesstech. 2018. South Africa's poorest can't afford the R20 a day needed just to eat: Pacsa. <https://businesstech.co.za/news/wealth/223430/south-africas-poorest-cant-afford-the-r20-a-day-needed-just-to-eat-pacsa/> Date of access: 12 Nov. 2021.
- Businesstech. 2019. Skills vs employment in South Africa and the truth about getting a job. <https://businesstech.co.za/news/business/332367/skills-vs-employment-in-south-africa-and-the-truth-about-getting-a-job/> Date of access: 28 July 2021.
- Businesstech. 2021a. Food prices in South Africa are much higher than last year – here's what you're paying more for. <https://businesstech.co.za/news/lifestyle/502299/food-prices-in-south-africa-are-much-higher-than-last-year-heres-what-youre-paying-more-for/> Date of access: 12 Nov. 2021.
- Businesstech. 2021b. How much money the poorest in South Africa are living on each month. <https://businesstech.co.za/news/finance/519958/how-much-money-the-poorest-in-south-africa-are-living-on-each-month/> Date of access: 11 Nov. 2021.
- Campbell, H., Tait, M. & Watkins, C. 2014. Is there space for better planning in a neoliberal world? Implications for planning practice and theory. In: Fainstein, S.S. & Defilippis, J., eds. 2016. *Readings in planning theory*. 4th ed. West Sussex: Wiley Blackwell. pp. 139-155.
- Campbell, S. 1996. Green cities, growing cities, just cities? Urban planning and the contradictions of sustainable development. In: Fainstein, S.S. & Defilippis, J., eds. 2016. *Readings in planning theory*. 4th ed. West Sussex: Wiley Blackwell. pp. 214-240.
- Carsten, N., Timo, A., Katherine, I.N., Graciela, R.M., Kerry, W.A., Ben, D., Dagmar, H., Lawrence, J.-W., Hans, K., Eszter, K., Kinga, K., Mart, K., Freddy, R., Jiska, V.D., Inge, V.O., Mark, W.E. & Heidi, W. 2017. The science, policy and practice of nature-based solutions: An interdisciplinary perspective. *Science of the total environment*, 579:1215-1227.
- Cazacova, L., Erdelhun, A., Saymanlier, A., Cazacova, N. & Ulbar, U. 2010. Social and spatial aspects of housing development affecting urban quality of life-the case of Famagusta. *World Academy of Science, Engineering and Technology*, 66:931-944.
- Cele, S.t. & Wilson, L. 2021. South Africa Economy Set to Take \$3.4 Billion Hit From Riots. <https://www.bloomberg.com/news/articles/2021-07-20/south-african-economy-set-to-take-3-4-billion-hit-from-riots> Date of access: 27 July 2021.
- Chancellor, C., Yu, C.P.S. & Cole, S.T. 2011. Exploring quality of life perceptions in rural midwestern (USA) communities: An application of the core-periphery concept in a tourism development context. *International Journal of Tourism Research*, 13(5):496-507.

Charman, A., Petersen, L. & Govender, T. 2020. Township economy: people, spaces and practices. Cape Town: HSRC Press.

Charmaz, K. 2014. Constructing grounded theory. 2nd ed. Los Angeles: SAGE.

Charmaz, K., Thornberg, R. & Keane, E. 2018. Evolving grounded theory and social justice inquiry. In: Denzin, N.K. & Lincoln, Y.S., eds. *The SAGE handbook of qualitative research*. Los Angeles: SAGE. pp. 411-443.

Cheung, C.K. & Leung, K. 2010. Ways that social change predicts personal quality of life. *Social Indicators Research*, 96(3):459-477.

Cheung, C.K. & Leung, K.K. 2008. Retrospective and prospective evaluations of environmental quality under urban renewal as determinants of residents' subjective quality of life. *Social indicators research*, 85(2):223-241.

Cieslak, I., Szuniewicz, K., Czyza, S. & Ogrodniczak, M. 2018. Infrastructure Development and Quality of Life in Selected Communes of the Province of Warmia and Mazury. In: *Conference proceedings*. Proceedings - 2018 Baltic Geodetic Congress, BGC-Geomatics 2018: Institute of Electrical and Electronics Engineers Inc. pp. 246-249.

Cilliers, J. & Cilliers, S. 2016. Planning for Green Infrastructure: options for South African cities. Johannesburg: South African Cities Network.

Claasen, N. 2018. Introducing qualitative data analysis with ATLAS.ti 8 by NWU AUTHeR. [PowerPoint presentation]. Unpublished workshop notes.

Clark, D., Kahn, J.R. & Ofek, H. 1988. City size, quality of life, and the urbanization deflator of the GNP: 1910-1984. *Southern Economic Journal*, 54(3):701-714.

COGTA (Department Cooperative Governance and Traditional Affairs). 2016. Integrated Urban Development Framework: a new deal for South African cities and towns. https://www.africancentreforcities.net/wp-content/uploads/2017/05/IUDF-2016_WEB-min.pdf 30 Nov. 2021.

Cohen, G.A. 1993. Equality of what? on welfare, goods, and capabilities. In: Nussbaum, M.C. & Sen, A., eds. *The quality of life*. Oxford: Clarendon Press.

Cohen, L., Manion, L. & Morrison, K. 2011. Research methods in education. 7th ed. London: Routledge.

Cohen, L., Manion, L. & Morrison, K. 2018. Research methods in education. 8th. Oxon: Routledge.

- Cohen, M. 2021. Land-Seizure Plans in South Africa Hit Major Stumbling Block. <https://www.bloomberg.com/news/articles/2021-06-02/land-seizure-plans-in-south-africa-hit-major-stumbling-block> Date of access: 28 July 2021.
- Collados, C. & Duane, T.P. 1999. Natural Capital and Quality of Life: A Model for Evaluating the Sustainability of Alternative Regional Development Paths. *Ecological Economics*, 30(3):441-460.
- Constitution of the Republic of South Africa* 1996.
- Cornelius, S., Viviers, J., Cilliers, J. & Niesing, C. 2017. Considering complexities in unique african planning approaches: Abstracting the role of african urban residents. *WIT Transactions on Ecology and the Environment*, 223:415-426.
- Costanza, R., Hart, M., Kubiszewski, I. & Talberth, J. 2014. A short history of GDP: Moving towards better measures of human well-being. *Solutions*, 5(1):91-97.
- Creswell, J.W. & Creswell, J.D. 2018. Research design: qualitative, quantitative & mixed methods approaches. 5th ed. California: SAGE.
- Crimmins, J.E. 2021. Jeremy Bentham. <https://plato.stanford.edu/archives/sum2021/entries/bentham/> Date of access: 27 Sep. 2021.
- Crocker, D.A. & Robeyns, I. 2009. Capability and agency. In: Morris, C.W., ed. 1st ed. *Amartya Sen: Contemporary Philosophy in Focus*. Cambridge: Cambridge University Press. pp. 60-90.
- CSLS (Centre for the Study of Living Standards). 2011. Index of economic well-being. <http://www.csls.ca/iwb.asp> Date of access: 27 Nov. 2021.
- D'Acci, L. 2014. Monetary, subjective and quantitative approaches to assess urban quality of life and pleasantness in cities (hedonic price, willingness-to-pay, positional value, life satisfaction, isobenefit lines). *Social Indicators Research*, 115(2):531-559.
- Dalu, M.T.B., Shackleton, C.M. & Dalu, T. 2018. Influence of land cover, proximity to streams and household topographical T location on flooding impact in informal settlements in the Eastern Cape, South Africa. *International Journal of Disaster Risk Reduction*, 28:481-490.
- Daly, K.J. 2007. Qualitative methods for family studies and human development. Los Angeles: SAGE.
- Darkey, D. & Visagie, J. 2013. The more things change the more they remain the same: A study on the quality of life in an informal township in Tshwane. *Habitat International*, 39:302-309.

REFERENCE LIST

Davidoff, P. 1965. Advocacy and pluralism in planning. *Journal of the American Institute of planners*, 31(4):331-338.

Davis, M. 2006. Planet of slums. London: Versi.

Dayimani, M. 2021. Makana Local Municipality blames thieves after boy, 13, drowns in water-filled trench. <https://www.news24.com/news24/southafrica/news/makana-local-municipality-blames-thieves-after-boy-13-drowns-in-water-filled-trench-20211006> Date of access: 12 Nov. 2021.

DCGTA (Department of cooperative governance and traditional affairs). 2021. Local Economic Development (LED). <https://www.cogta.gov.za/index.php/local-economic-development-led/> Date of access: 11 Nov. 2021.

DDP (Decentralised Development Planning) Task Team. 2001? IDP Guide Pack. <https://www.westerncape.gov.za/general-publication/integrated-development-planning-idp-guide-pack> Date of access: 18 Nov. 2021.

De Groot, J. & Lemanski, C. 2021. COVID-19 responses: infrastructure inequality and privileged capacity to transform everyday life in South Africa. *Environment and Urbanization*, 33(1):255-272.

De Satgé, R. & Watson, V. 2018. Urban planning in the global south: conflicting rationalities in contested urban space. Cham: Palgrave Macmillan.

DEAT (Department Environmental Affairs and Tourism). 2008. A National Framework for Sustainable Development in South Africa. https://www.gov.za/sites/default/files/gcis_document/201409/nationalframeworkforsustainabledevelopmenta0.pdf Date of access: 1 Feb. 2021.

Derwin, B. & Greenberg, B.S. 1972. The communication environment of the urban poor. <https://files.eric.ed.gov/fulltext/ED075553.pdf> 8 Mrt. 2022.

Development Facilitation Act 67 of 1995 [repealed].

Dhongde, H. & Pattanaik, P.K. 2009. Preference, choice, and rationality: Amartya Sen's critique of the theory of rational choice in Economics. In: Morris, C.W., ed. 1st ed. *Amartya Sen: Contemporary Philosophy in Focus*. Cambridge: Cambridge University Press. pp. 13-39.

Diener, E., Lucas, R.E. & Oishi, S. 2002. Subjective well-being: the science of happiness and life satisfaction. In: Snyder, C.R. & Lopez, S.J. 2005. *Handbook of positive psychology*. Oxford: Oxford University Press.

DoC (Department of Communications) & DCDT (Department of Digital Technologies). 2021. Communication. <https://www.gov.za/about-sa/communications> Date of access: 17 Sep. 2021.

Dolan, P. & Kudrna, L. 2016. Sentimental Hedonism: Pleasure, Purpose, and Public Policy. In: Vittersø, J., ed. *Handbook of Eudaimonic Well-Being*. Cham: Springer. pp. 437-452.

Donaldson, R. 2014. South African township transformation. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 6223-6227.

DRDLR (Department Rural Development and Land Reform). 2017. SDF Guidelines: Guidelines for the Development of Provincial, Regional and Municipal Spatial Development Frameworks and Precinct Plans.
[http://mfma.treasury.gov.za/Documents/08.%20Planning,%20Budgeting%20and%20Reporting%20Reforms/Document%20Repository/Planning%20Reforms/SDF%20guidelines%2027-06-2017%20\(4\).pdf](http://mfma.treasury.gov.za/Documents/08.%20Planning,%20Budgeting%20and%20Reporting%20Reforms/Document%20Repository/Planning%20Reforms/SDF%20guidelines%2027-06-2017%20(4).pdf) Date of access: 18 Nov. 2021.

DRDLR (Department Rural Development and Land Reform) & DPME (Department Planning Monitoring and Evaluation). 2019. Draft National Spatial Development Framework.
https://www.gov.za/sites/default/files/gcis_document/202002/draftnsdf20jan2020-compressed.pdf Date of access: 1 Feb. 2021.

Du Plessis, E. 2016. Begronde teorie as naborsingsmetode. In: Joubert, I., Hartell, C. & Lombard, K., eds. *Navorsing: 'n Gids vir die beginnervorser*. Pretoria: Van Schaik Uitgewers. pp. 217-230.

Dumitru, A., Frantzeskaki, N. & Collier, M. 2020. Identifying principles for the design of robust impact evaluation frameworks for nature-based solutions in cities. *Environmental Science and Policy*, 112:107-116.

EIU. 2019. The Global Liveability Index 2019: a free overview. London: EIU.

Eloff, I. 2020. Narratives of quality of life in Africa: a kaleidoscope of hope. In: Eloff, I., ed. *Handbook of quality of life in African societies*. Cham: Springer.

Epley, D.R. & Menon, M. 2008. A method of assembling cross-sectional indicators into a community quality of life. *Social Indicators Research*, 88(2):281-296.

Eras, J.J.C., Varela, D.C., Perez, G.D.H., Gutierrez, A.S., Lorenzo, D.G., Vandecasteele, C. & Hens, L. 2014. Comparative study of the urban quality of life in Cuban first-level cities from an objective dimension. *Environment, development and sustainability*, 16(1):195-215.

Fadda, G. & Jirón, P. 1999. Quality of life and gender: a methodology for urban research. *Environment and Urbanization*, 11(2):261-270.

Fahy, F. & Cinnéide, M.Ó. 2006. Community-based quality of life indicators for urban areas as derived in Galway City, Ireland. *WIT Transactions on Ecology and the Environment*, 93:601-702.

REFERENCE LIST

- Fahy, F. & Cinnéide, M.Ó. 2008. Developing and testing an operational framework for assessing quality of life. *Environmental Impact Assessment Review*, 28(6):366-379.
- Farthing, S.M. 2016. Research design in urban planning: a student's guide. London: SAGE.
- Feng, J., Tang, S. & Chuai, X. 2018. The impact of neighbourhood environments on quality of life of elderly people: Evidence from Nanjing, China. *Urban studies*, 55(9):2020-2039.
- Filipe Amado, C.A., Barreira, A.P., Santos, S.P. & Guimaraes, M.H. 2019. Comparing the quality of life of cities that gained and lost population: An assessment with DEA and the Malmquist index. *Papers in regional science*, 98(5):2075-2078.
- Flyvbjerg, B. 1998. Rationality and power.
https://www.researchgate.net/publication/235951940_Rationality_and_Power_Democracy_in_Practice Date of access: 10 March 2022.
- Forouhar, A. & Hasankhani, M. 2018. Urban Renewal Mega Projects and Residents' Quality of Life: Evidence from Historical Religious Center of Mashhad Metropolis. *Journal of Urban Health*, 95(2):232-244.
- Freedom House. 2020. Freedom of the world: South Africa.
<https://freedomhouse.org/country/south-africa/freedom-world/2020> Date of access: 28 July 2021.
- Friese, S. 2012. Qualitative data analysis with ATLAS.ti. London: SAGE.
- Fung, A. 2015. Putting the Public Back into Governance: The Challenges of Citizen Participation and Its Future. *Public Administration Review*, 75(4):513-522.
- Gaertner, W. 1993. Amartya Sen: Capability and Well-Being. In: Nussbaum, M.C. & Sen, A., eds. *The quality of life*. Oxford: Clarendon Press. pp. 62-66.
- Ghasemzadeh, B. & Toofan, S. 2014. The role of cultural gathering spaces in the promotion of citizen quality of life case study: Tehran City Theater. *Geographica Pannonica*, 18(1):18-25.
- Gibbons, O., Hendrix, E., Hiller, M., McLellan, R. & Pols, D. 2011. The energy report: 100% renewable energy by 2050.
https://files.worldwildlife.org/wwfcmssprod/files/Publication/file/51ss8r9qav_The_Energy_Report.pdf?_ga=2.72669456.241052949.1636616044-1248958536.1636616044 Date of access: 11 Nov. 2021.
- Glasson, J. & Marshall, T. 2007. Regional planning. Oxfordshire: Routledge.
- Goldberg, A., Leyden, K.M. & Scotto, T.J. 2012. Untangling what makes cities liveable: happiness in five cities. *Proceedings of the Institution of Civil Engineers-Urban Design and Planning*, 165(3):127-136.

- Gov.UK. 2021. Foreign travel advice: South Africa. <https://www.gov.uk/foreign-travel-advice/south-africa/safety-and-security> Date of access: 29 July 2021.
- Govan Mbeki Local Municipality (South Africa). 2014. Govan Mbeki Spatial Development Framework 2014 -2034. http://www.govanmbeki.gov.za/wp-content/strategic_documents/sdf2034.pdf Date of access: 11 Nov. 2021.
- Green, J. 2014. *Rethinking Civilization – Crash Course World History 201*. [Youtube video]. <https://www.youtube.com/watch?v=wyz9GNZFMU&t=19s> Date of access: 15 July 2021.
- Greyling, T. & Rossouw, S. 2017. Non-Economic Quality of Life and Population Density in South Africa. *Social Indicators Research*, 134(3):1051-1075.
- Greyling, T. & Tregenna, F. 2017. Construction and analysis of a composite quality of life index for a region of South Africa. *Social Indicators Research*, 131(3):887-930.
- Habibi, S. & Zebardast, E. 2018. Exploring the physical-environmental domains of quality of life; the experience of midsize cities in Iran. *Urban Research & Practice*, 11(4):426-440.
- Haslauer, E., Delmelle, E.C., Keul, A., Blaschke, T. & Prinz, T. 2015. Comparing subjective and objective quality of life criteria: A case study of green space and public transport in Vienna, Austria. *Social Indicators Research*, 124(3):911-927.
- Hayek, U.W., Efthymiou, D., Farooq, B., von Wirth, T., Teich, M., Neuenschwander, N. & Grêt-Regamey, A. 2015. Quality of urban patterns: Spatially explicit evidence for multiple scales. *Landscape and Urban Planning*, 142:47-62.
- Healey, P. 2010. The planning project. In: Fainstein, S.S. & Defilippis, J., eds. 2016. *Readings in planning theory*. 4th ed. West Sussex: Wiley Blackwell. pp. 139-155.
- Helliwell, J.F., Layard, R., Sachs, J. & De Neve, J.-E. 2020. World Happiness Report 2020. New York: Sustainable Development Solutions Network.
- HPI. 2016. Happy Planet Index Score. <http://happyplanetindex.org> Date of access: 16 Sep. 2021.
- HPI & NEF. 2016. The Happy Planet Index 2016: a global index of sustainable wellbeing. <http://happyplanetindex.org/s/Briefing-paper-HPI-2016.pdf> Date of access: 1 Feb. 2021.
- IPCC. 2021. 2021: Summary for Policymakers. https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf Date of access: 28 Sep. 2021.
- Jacobs, J. 1961. The death and life of great American cities. New York: Vintage books.

REFERENCE LIST

- Joanknecht, L., Argent, A.C., Van Dijk, M. & Van As, A.B. 2015. Childhood drowning in South Africa: local data should inform prevention strategies. *Pediatric Surgery International*, 31(2):123-130.
- Johnston, D.F. & Carley, M.J. 1981. Chapter 11: Social Measurement and Social Indicators. *The Annals of the American Academy of Political and Social Science*, 453(1):237-253.
- Joscelyne, K. 2015. The nature, scope and purpose of spatial planning in South Africa: towards a more coherent legal framework under SPLUMA. Cape Town: University of Cape Town. (Dissertation – MPhil).
- Kazemzadeh-Zow, A., Darvishi Boloorani, A., Samany, N.N., Toomanian, A. & Pourahmad, A. 2018. Spatiotemporal modelling of urban quality of life (UQoL) using satellite images and GIS. *International Journal of Remote Sensing*, 39(19):6095-6116.
- Khalil, H.A.E.E. 2012. Enhancing quality of life through strategic urban planning. *Sustainable cities and society*, 5:77-86.
- Kihato, C.W., Massoumi, M., Ruble, B.A., Subriós, P. & Garlans, A.M. 2010. [Urban diversity: space, culture, and inclusive pluralism in cities worldwide]. [Abstract]. <https://www.wilsoncenter.org/book/urban-diversity-space-culture-and-inclusive-pluralism-cities-worldwide> Date of access: 03 Des. 2021.
- Kladivo, P. & Halás, M. 2012. Quality of life in an urban environment: A typology of urban units of Olomouc. *Quaestiones Geographicae*, 31(2):49-60.
- Klein, J.R. 2014. State-Corporate Crime and Public Opinion. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 6325-6331.
- Klerksdorp Record. 2021. Breaking news: Residents of Alabama took to the streets today to protest against service delivery. Alabama and Manzilpark are without electricity since Thursday evening 22:50. Residents are protesting on the N12 at the intersection at Tower Mall. "It's been more than 60 hours and we have had no response from the mayor or the municipal manager. They leave us no choice," an angry resident told Klerksdorp Record. [Facebook status update].
- Korsgaard, C.M. 1993. G.A. Cohen: Equality of What? on Welfare, Goods and Capabilities Amartya Sen: Capability and Well-Being. In: Nussbaum, M.C. & Sen, A., eds. *The quality of life*. Oxford: Clarendon Press. pp. 54-61.
- Kuras, E.R., Warren, P.S., Zinda, J.A., Aronson, M.F.J., Cilliers, S., Goddard, M.A., Nilon, C.H. & Winkler, R. 2020. Urban socioeconomic inequality and biodiversity often converge, but not always: A global meta-analysis. *Landscape and Urban Planning*, 198(103799).
- Land, K.C. 2014a. Composite index construction. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 1152-1156.

REFERENCE LIST

- Land, K.C. 2014b. History of Social Indicators and Its Evolution. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 2875-2882.
- Land, K.C., Michalos, A.C. & Sirgy, M.J. 2012. Prologue: The Development and Evolution of Research on Social Indicators and Quality of Life (QOL). In: Land, K., Michalos, A. & Sirgy, M., eds. *Handbook of Social Indicators and Quality of Life Research*. Dordrecht: Springer.
- Lategan, L., Cilliers, J. & Jacobs, N.S. 2020. Wonings as multidimensionele bates: die rol van informele agterplaasverhuring vanuit 'n beplanningsperspektief. *LitNet Akademies (Ekonomiese en Bestuurswetenskappe)*, 17(3):98-122.
- Lau, L.K.P., Lai, W.C.L. & Ho, C.W.D. 2018. Quality of life in a “high-rise lawless slum”: A study of the “Kowloon Walled City”. *Land Use Policy*, 76:157-165.
- Law, M. & Collins, A. 2013. Getting to know ArcGIS for desktop. 3rd ed. California: Esri Press.
- Lee, R.J. & Sener, I.N. 2016. Transportation planning and quality of life: Where do they intersect? *Transport policy*, 48:146-155.
- Lempert, L.B. 2007. Asking questions of the date: memo writing in the grounded theory tradition. In: Bryant, A. & Charmaz, K., eds. *The SAGE handbook of grounded theory*. Los Angeles: SAGE. pp. 245-264.
- Li, F., Liu, X., Hu, D., Wang, R., Yang, W., Li, D. & Zhao, D. 2009. Measurement indicators and an evaluation approach for assessing urban sustainable development: A case study for China's Jining City. *Landscape and Urban Planning*, 90(3):134-142.
- Li, G. & Weng, Q. 2007. Measuring the quality of life in city of Indianapolis by integration of remote sensing and census data. *International Journal of Remote Sensing*, 28(2):249-267.
- Lindeque, M. 2018. Freedom Park protesters want govt to take demands seriously. <https://ewn.co.za/2018/05/02/freedom-park-protesters-want-govt-to-take-demands-seriously>
Date of access: 11 Nov. 2021.
- Local Government: Municipal Systems Act 32 of 2000.*
- Londong, J. 2019a. *Introduction to Sanitation Systems [PowerPoint]. Unpublished lecture notes.*
- Londong, J. 2019b. *Sanitation Systems Management [PowerPoint]. Unpublished lecture notes.*
- Lucas, E.T. 2018. Apartheid. *Salem Press Encyclopedia* (pp. 3): Salem Press.
- MacCallum, D., Babb, C. & Curtis, C. 2019. Doing research in urban and regional planning: lessons in practical methods. New York: Routledge.

REFERENCE LIST

- Maganadisa, K., Letsoko, V. & Pretorius, O. 2021. Effectiveness of In Situ Upgrading in Improving the Quality of Life of Beneficiaries Living in Informal Settlements in South Africa. In: CITIES 20.50—Creating Habitats for the 3rd Millennium: Smart—Sustainable—Climate Neutral. Proceedings of REAL CORP 2021, 26th International Conference on Urban Development, Regional Planning and Information Society: CORP—Competence Center of Urban and Regional Planning. pp. 301-312.
- Mahadea, D. 2017. The economics of happiness. In: Roos, A. *Economics: an introduction*. Cape Town: Pearson.
- Mahajan, S. 2014. Economics of South African townships: special focus on Diepsloot. Washington: The World Bank.
- Mahlokwane, J. 2021. Two boys drown in unfenced quarry in Mamelodi. <https://www.iol.co.za/pretoria-news/news/two-boys-drown-in-unfenced-quarry-in-mamelodi-2ec83d9e-70d4-461a-a84a-e906099517b9> Date of access: 12 Nov. 2021.
- Maphumulo, W.T. & Bhengu, B.R. 2019. Challenges of quality improvement in the healthcare of South Africa post-apartheid: A critical review. *Curationis*, 42(1).
- Martín, J.C. & Mendoza, C. 2013. A DEA approach to measure the quality-of-life in the municipalities of the Canary Islands. *Social Indicators Research*, 113(1):335-353.
- Mathebula, S. 2018. [UPDATE: Protest] Protesters burn down Mall@eMba. <https://ridgetimes.co.za/118241/police-already-arrested-35-people-protest-embalenhle/> Date of access: 10 Nov. 2021.
- Metz, T. 2014. Ubuntu: The Good Life. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 6761-6765.
- Michalos, A.C. 2014a. Aristotle. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 225-229.
- Michalos, A.C. 2014b. Plato. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 4826-4833.
- Mitchell, W.C. 1918. Bentham's Felicific Calculus. *Political Science Quarterly*, 33(2):161-183.
- Mkhwanazi, S. 2020. eMbalenhle may experience unrest again as power cuts continue. <https://thebulletin.co.za/community-news/embalenhle-may-experience-unrest-again/> Date of access: 11 Nov. 2021.
- Mmotlane, R., Struwig, J. & Roberts, B. 2010. The glue that binds or divides: social trust in South Africa. *HSRC Review*, 8(3)(3):4-5.

REFERENCE LIST

- Mohr, P. & Fourie, L. 2008. *Ekonomie vir Suid-Afrikaanse studente*. 4th ed. Pretoria: Van Schaik Uitgewers.
- Molebatsi, K., Musindo, O., Ntlantsana, V. & Wambua, G.N. 2021. Mental Health and Psychosocial Support During COVID-19: A Review of Health Guidelines in Sub-Saharan Africa. *Frontiers in Psychiatry*, 12(499).
- Møller, V. 2001. Monitoring quality of life in cities: The Durban case. *Development Southern Africa*, 18(2):217-238.
- Montgomery, C. 2013. *Happy City: transforming our lives through urban design*. Great Britain: Penguin Books.
- Moqhaka Local Municipality (South Africa). 2018. Moqhaka Spatial Development Framework 2019/2020. https://ba5a7825-f1f6-464c-8d62-8673d2a8edfb.filesusr.com/ugd/2eec3a_35bda9762f7d48a6bc1486d39edc88a2.pdf Date of access: 10 Nov. 2021.
- Moroke, T., Schoeman, C. & Schoeman, I. 2020. Neighbourhood sustainability assessment model for developing countries: A comprehensive approach to urban quality of life. *International Journal of Sustainable Development and Planning*, 15(1):107-123.
- Motse, O. 2018. #BreakingNews: Moqhaka Municipality hands out land sites at Steynsrus following #FSprotests. <https://www.ofm.co.za/article/local-news/260969/-breakingnews-moghaka-municipality-hands-out-land-sites-at-steynsrus-following-fsprotests> Date of access: 10 Nov. 2021.
- Mudombi, S. 2018. South Africa's natural capital challenge. <https://www.greeneconomycoalition.org/news-and-resources/south-africas-natural-capital-challenge> Date of access: 30 July 2021.
- Mumford, L. 1961. *The city in history: its origins, its transformations, and its prospects*: Harcourt.
- Municipal representative. 2019. Panel discussion with municipal officials and ward members in Matlwangtlwang [Panel discussion] [personal interview]. 7 Oct., Matlwangtlwang.
- Murgaš, F. 2014. Linking environmental ethics and quality of life. In: Fialová, J. & Pernicová, D., eds. *Conference proceedings*. Public recreation and landscape protection—with man hand in hand?, Universitatis Mendeliana Brunensis.
- Murgaš, F. & Heřmanová, E. 2013. Recreation and nature conservation as part of the quality of life concept. In: Horáček, P., Chalupa, T., Hašek, M. & Onderka, R., eds. *Public recreation and landscape protection—with man hand in hand...*, Mendel University.

REFERENCE LIST

- Murgaš, F. & Klobučník, M. 2016. Municipalities and regions as good places to live: Index of quality of life in the Czech Republic. *Applied Research in Quality of Life*, 11(2):553-570.
- Murgaš, F. & Klobučník, M. 2018. Quality of life in the city, quality of urban life or well-being in the city: Conceptualization and case study. *Ekológia (Bratislava)*, 37(2):183-200.
- Musakwa, W., Tshesane, R.M. & Kangethe, M. 2017. The strategically located land index support system for human settlements land reform in South Africa. *Cities*, 60:91-101.
- Myers, D. 1988. Building knowledge about quality of life for urban planning. *Journal of the American Planning Association*, 54(3):347-358.
- Næss, P. & Saglie, I.L. 2000. Surviving Between the Trenches: Planning Research, Methodology and Theory of Science. *European Planning Studies*, 8(6):729-750.
- Nakanishi, H. 2015. How does urban policy influence quality of life? The case of Canberra, Australia. *Policy Studies*, 36(1):72-91.
- Nakanishi, H., Sinclair, H. & Lintern, J. 2013. Measuring quality of life: An integrated evaluation of built environment. In: *Conference proceedings*. The 13th International Conference on Computers in Urban Planning and Urban Management (CUPUM), Utrecht University, Netherlands. pp. 2-5.
- Nanor, M.A., Poku-Boansi, M. & Adarkwa, K.K. 2018. An objective analysis of the relationship between quality of life and socio-economic characteristics in Kumasi, Ghana. *GeoJournal: Spatially Integrated Social Sciences and Humanities*, 83(4):835-851.
- National Environmental Management Act* 107 of 1998.
- NEF. 2016. Happy Planet Index 2016: Methods Paper. http://happyplanetindex.org/s/Methods-paper_2016-48te.pdf Date of access: 1 Feb. 2021.
- Nel, E. 2014. South African urban growth (1911-2000). In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 6228-6233.
- Nel-Buitendag, A. 2021. Violent service delivery protest actions will not improve service delivery in Govan Mbeki Municipality. <https://vfplus.org.za/media-releases/violent-service-delivery-protest-actions-will-not-improve-service-delivery-in-govan-mbeki-municipality> Date of access: 10 Nov. 2021.
- News24. 2014. 35 North West protesters arrested. <https://www.news24.com/News24/35-North-West-protesters-arrested-20140327> Date of access: 11 Nov. 2021.
- Ngubane, L. 2018? The state of public transport in South Africa. <https://www.saferspaces.org.za/understand/entry/the-state-of-public-transport-in-south-africa#References> Date of access: 28 July 2021.

REFERENCE LIST

- Nhemachena, C., Chakwizira, J., Dube, S., Maponya, G., Rashopola, R. & Mayindi, D. 2011. Integrating indigenous knowledge systems (IKS) in improving rural accessibility and mobility (in support of the comprehensive rural development programme in South Africa). https://repository.up.ac.za/bitstream/handle/2263/17301/Nhemachena_Integrating%20%282011%29.pdf?sequence=1 Date of access 27 Nov. 2021.
- Nkondo, G.M. 2007. Ubuntu as public policy in South Africa: a conceptual framework. *International Journal of African Renaissance Studies*, 2(1):88-100.
- Nkuyane, L. 2019. Protest action reported in Klerksdorp. <https://www.ofm.co.za/article/centralsa/276215/protest-action-reported-in-klersdorp> Date of access: 11 Nov. 2021.
- Nova Institute & North-West University. 2013. Quality of life and offset baseline study in selected communities surrounding Sasol Secunda: Full Qola Survey Standalone Report. (Unpublished report).
- Nova Institute & North-West University. 2017. Quality of life baseline status of the Zamdela community surrounding the Sasol Sasolburg complex: Summary Report Quality of life baseline surveys conducted between Augustus and October 2016. (Unpublished report).
- NPC (National Planning Commission). 2012. National Development Plan 2030: our future - make it work. <https://www.gov.za/documents/national-development-plan-2030-our-future-make-it-work> Date of access: 1 Feb. 2021.
- NUMBEO. 2021. Quality of life index. <https://www.numbeo.com/quality-of-life/> Date of access: 20 Nov. 2021.
- Nussbaum, M.C. & Sen, A. 1993. Introduction. In: Nussbaum, M.C. & Sen, A., eds. *The quality of life*. Oxford: Clarendon Press.
- NWU ethics committee. 2016. Gaining access to the NWU for research: gatekeeper process. <http://services.nwu.ac.za/sites/services.nwu.ac.za/files/files/research-support/ethics/Gatekeeper-process-letter.pdf> Date of access: 21 October 2019.
- OECD. 2013. Environmental performance reviews: South Africa highlights. <https://www.oecd.org/env/country-reviews/South%20Africa%20EPR%20%5Bf%5D%20%5Bf%5D.pdf> Date of access: 30 July 2021.
- OECD. 2020. How's life? 2020: measuring well-being. Paris: OECD Publishing.
- OECD. 2021. The effect of COVID-19 on alcohol consumption, and policy responses to prevent harmful alcohol consumption. <https://www.oecd.org/coronavirus/policy-responses/the-effect-of-covid-19-on-alcohol-consumption-and-policy-responses-to-prevent-harmful-alcohol-consumption-53890024/> Date of access: 15 Nov. 2021.

Omar, D.B. 2006. Urban planning and the quality of life in Putrajaya, Malaysia. *WIT Transactions on The Built Environment*, 86:83-90.

Oxford Reference. 2021. Felicific calculus.

<https://www.oxfordreference.com/view/10.1093/oi/authority.20110803095813650> Date of access: 27 Sep. 2021.

Pacione, M. 2003. Introduction on urban environmental quality and human wellbeing. *Landscape and Urban Planning*, 65(1-2):3-5.

Pacione, M. 2009. *Urban Geography: a global perspective*. 3rd. Oxon: Routledge.

Palmer, I., Graham, N., Swilling, M., Robinson, B., Eales, K., Fisher-Jeffes, L., Käsner, S.-A. & Skeen, J. 2016. South Africa's Urban Infrastructure Challenge.

https://www.cogta.gov.za/cogta_2016/wp-content/uploads/2016/05/IUDF-INFRASTRUCTURE-PAPER.pdf Date of access: 17 Sep. 2021.

Papageorgiou, J.C. 1976. Quality of life indicators. *International Journal of Environmental Studies*, 9(3):177-186.

Paprzyca, K. 2019. Sustainable Development of the Medium-Sized City on the Example of Oswiecim. In: *Conference proceedings*. IOP Conference Series: Materials Science and Engineering: IOP Publishing. pp. 102024.

Pauleit, S., Zölch, T., Hansen, R., Randrup, T.B. & van den Bosch, C.K. 2017. Nature-Based Solutions and Climate Change – Four Shades of Green. In: Kabisch, N., Korn, H., Stadler, J. & Bonn, A., eds. *Nature-Based Solutions to Climate Change Adaptation in Urban Areas: Linkages between Science*. Cham: Springer. pp. 29-49.

Peach, N.D. & Petach, L.A. 2016. Development and quality of life in cities. *Economic Development Quarterly*, 30(1):32-45.

Pijoo, I. 2019. Five arrested for Steynrus unrest. <https://www.sowetanlive.co.za/news/south-africa/2019-04-16-five-arrested-for-steynrus-unrest/> Date of access: 10 Nov. 2021.

Pindyck, R.S. & Rubinfeld, D.L. 2015. *Microeconomics*. 8th. Boston: Pearson.

Ponterotto, J.G. 2005. Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of Counseling Psychology*, 52(2):126-136.

Pukeliene, V. & Starkauskiene, V. 2011. Quality of life: Factors determining its measurement complexity. *Engineering Economics*, 22(2):147-156.

Reeve, A., Desha, C., Hargreaves, D. & Hargroves, K.C. 2015. Biophilic urbanism: Contributions to holistic urban greening for urban renewal. *Smart and sustainable built environment*, 4(2):215-233.

REFERENCE LIST

- Richards, R., O'Leary, B. & Mutsonziwa, K. 2007. Measuring quality of life in informal settlements in South Africa. *Social indicators research*, 81(2):375-388.
- Robeyns, I. 2005. Selecting capabilities for quality of life measurement. *Social indicators research*, 74(1):191-215.
- Rosenberg, A. 2016. Philosophy of social science. 5th ed. New York: Routledge.
- Rosenberg, G. 1965. City planning theory and the quality of life. *American Behavioral Scientist*, 9(4-5):3-7.
- Rossouw, S. & Naudé, W. 2008. The Non-Economic Quality of Life on a Sub-National Level in South Africa. *Social Indicators Research*, 86(3):433-452.
- Royuela, V., Moreno, R. & Vaya, E. 2010. Influence of quality of life on urban growth: A case study of Barcelona, Spain. *Regional Studies*, 44(5):551-567.
- SACN (South African Cities Network). 2016. The State of South African Cities Report. <https://www.sacities.net/wp-content/uploads/2020/09/SoCR16-Main-Report-online.pdf> Date of access: 17 Sep. 2021.
- SACN (South African Cities Network). 2019. Rethinking LED: "Local Economic Development" in Intermediate Cities. <https://www.sacities.net/wp-content/uploads/2020/03/Rethinking-LED-Local-Economic-Development-in-Intermediate-Cities.-Released-2019.-pdf.pdf> Date of access: 27 Nov. 2021.
- SACPLAN. 2021. Draft Planning profession act, 2002: Rules. <https://sacplan.org.za/wp-content/uploads/Draft-PPA-Rules-2020-Work-Identification-Consultation-document2021-02-1.pdf> Date of access: 20 April 2021.
- SAHO (South African History Online). 2019. Defining culture, heritage and identity. <https://www.sahistory.org.za/article/defining-culture-heritage-and-identity> Date of access: 29 July 2021.
- Salenson, I., Scheba, A., Turok, I. & Visagie, J. 2021. Can social housing help South Africa overcome its legacy of apartheid? <https://theconversation.com/can-social-housing-help-south-africa-overcome-its-legacy-of-apartheid-157830> Date of access: 31 July 2021.
- Santos, L.D. & Martins, I. 2007. Monitoring urban quality of life: The Porto experience. *Social Indicators Research*, 80(2):411-425.
- SAPA. 2014. Twenty in court for protest violence. <https://www.iol.co.za/news/south-africa/north-west/twenty-in-court-for-protest-violence-1668020> Date of access: 11 Nov. 2020.

REFERENCE LIST

- Sapena, M., Wurm, M., Taubenböck, H., Tuia, D. & Ruiz, L.A. 2021. Estimating quality of life dimensions from urban spatial pattern metrics. *Computers, Environment and Urban Systems*, 85.
- Scholtz, L. & Gulati, M. 2016. Future of renewable energy in Africa. http://awsassets.wwf.org.za/downloads/future_of_renewable_energy_in_africa_report.pdf Date of access: 11 Nov. 2021.
- Sen, A. 1999. Health in development. *Bulletin of the World Health Organization*, 77(8):619-623.
- Sen, A. 2002. Opinion: To Build a Country, Build a Schoolhouse. *New York Times*, 27 May, p. 13.
- Sen, A.K. 1992. Inequality re-examined. Oxford: Clarendon Press.
- Shekhar, H., Schmidt, A.J. & Wehling, H.-W. 2019. Exploring wellbeing in human settlements- A spatial planning perspective. *Habitat International*, 87:66-74.
- Shin, S. & Jung, K. 2019. Mediating Role of Community Participation between Physical Environments, Social Relationships, Social Conflicts, and Quality of Life: Evidence from South Korea. *Applied Research in Quality of Life*:1-18.
- South African Government. 2020. Social cohesion and nation building compact. <https://www.gov.za/SocialCohesion> Date of access: 29 July 2021.
- South African Government. 2021. Tourism. <https://www.gov.za/about-sa/tourism> Date of access: 30 July 2021.
- South African Government. 2021? Land reform. <https://www.gov.za/issues/land-reform> Date of access: 28 July 2021.
- Spatial Planning and Land Use Management Act* 16 of 2013.
- Stanca, I. 2018. Measuring urban quality of life: A life satisfaction approach. In: Michelangeli, A., ed. *Quality of life in cities: Equity, sustainable development and happiness from a policy perspective*. Oxfordshire: Routledge.
- StatsSA. 2018. The latest household statistics and more. <http://www.statssa.gov.za/?p=11241> Date of access: 13 Nov. 2021.
- StatsSA. 2019a. General Household Survey. <http://www.statssa.gov.za/publications/P0318/P03182019.pdf> Date of access: 16 April 2021.

StatsSA. 2019b. Inequality Trends in South Africa: multidimensional diagnostic of inequality. <http://www.statssa.gov.za/publications/Report-03-10-19/Report-03-10-192017.pdf> Date of access: 16 April 2021.

StatsSA. 2020a. Governance, public safety, and justice survey: gpsjs 2019/20. <http://www.statssa.gov.za/publications/P0340/P03402020.pdf> Date of access: 6 Oct. 2021.

StatsSA. 2020b. Public-sector infrastructure investment falls for a third year. <http://www.statssa.gov.za/?p=13729> Date of access: 17 Sep. 2021.

StatsSA. 2021a. 10,1 million SA learners walk all the way to their educational institution. <http://www.statssa.gov.za/?p=14054> Date of access: 20 Sep. 2020.

StatsSA. 2021b. Kanana. http://www.statssa.gov.za/?page_id=4286&id=11146 Date of access: 11 Nov. 2021.

StatsSA. 2021c. KwaDela. http://www.statssa.gov.za/?page_id=4286&id=11470 Date of access: 12 Nov. 2021.

StatsSA. 2021d. Lebohang. http://www.statssa.gov.za/?page_id=4286&id=11509 Date of access: 12 Nov. 2021.

StatsSA. 2021e. Matlwangtlwang. http://www.statssa.gov.za/?page_id=4286&id=7284 Date of access: 11 Nov. 2021.

StatsSA. 2021f. Sustainable development goals. http://www.statssa.gov.za/?page_id=739&id=5 Date of access: 16 April 2021.

StatsSA. 2021g. Zamdela. http://www.statssa.gov.za/?page_id=4286&id=7309 Date of access: 12 Nov. 2021.

Steyn, J.J. 2015. Reforming normative planning: Essays on a Christian approach to planning. Bloemfontein: Prisca uitgewers.

Strahler, A. & Strahler, A. 2005. Physical geography: science and systems of the human environment. 3rd ed. Danvers: John Wiley & Sons.

Štreimikienė, D. & Barauskaitė-Jakubauskienė, N. 2012. Sustainable development and quality of life in Lithuania compared to other countries. *Technological and Economic Development of Economy*, 18(4):588-607.

Swanepoel, D. 2020. Social cohesion, social justice and the South African dream. <https://www.businesslive.co.za/bd/opinion/2020-11-09-social-cohesion-social-justice-and-the-south-african-dream/> Date of access: 29 July 2021.

REFERENCE LIST

- Szafranek, E. 2016. The Quality of Life of Residents of a Satellite Degraded City District as Part of Urban Development Policy. *European Spatial Research and Policy*, 23(2):97-113.
- Talmage, C.A. & Frederick, C. 2019. Quality of Life, Multimodality, and the Demise of the Autocentric Metropolis: A Multivariate Analysis of 148 Mid-Size U.S. Cities. *Social Indicators Research*, 141(1):365-390.
- Taylor, N. 1998. Urban planning theory since 1945. London: SAGE.
- Tesfazghi, E.S., Martinez, J. & Verplanke, J. 2010. Variability of quality of life at small scales: Addis Ababa, Kirkos Sub-City. *Social indicators research*, 98(1):73-88.
- Thukwana, N. 2020. Government is ending free housing projects – here's what it will offer instead. <https://www.businessinsider.co.za/government-is-calling-for-the-downscaling-of-housing-projects-heres-how-it-will-work-2020-12> Date of access: 29 October 2021.
- Tiberius, V. 2014. Well-Being, Philosophical Theories of. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 7110-7113.
- Tiran, J. 2016. Measuring urban quality of life: case study of Ljubljana. *Acta geographica Slovenica*, 56(1):57-73.
- Tobin, W.A. 1995. Studying Society: The Making of "Recent Social Trends in the United States, 1929-1933. *Theory and Society*, 24(4):537-565.
- Todaro, M.P. & Smith, S.C. 2015. Economic development. 12. Harlow: Pearson.
- Todaro, M.P. & Smith, S.C. 2020. Economic development. 13th. Harlow: Pearson.
- Todes, A., Kok, P., Wentzel, M., van Zyl, J. & Cross, C. 2010. Contemporary South African Urbanization Dynamics. *Urban Forum*, 21(3):331-348.
- UN-HABITAT & UNHCR. 2020. Settlement profiling tool: a spatial analysis framework for settlements accommodating displaced populations. https://unhabitat.org/sites/default/files/2020/08/200720_settlement_profiling_tool_web.pdf Date of access: 26 Nov. 2021.
- UNDP (United Nations Development Programme). 2020. Human Development Index (HDI). <http://hdr.undp.org/en/content/human-development-index-hdi> Date of access: 20 Nov. 2021.
- USRG (Urban safety reference group). 2018? Urban Safety in South Africa. <https://www.saferspaces.org.za/understand/entry/urban-safety-in-south-africa> Date of access: 29 July 2021.

REFERENCE LIST

- Van Huyssteen, E. 2020. Protest actions flared up in eMbalenhle this evening in anger to the electricity disruptions. <https://thebulletin.co.za/news/protests-embalenhle-electricity/> Date of access: 10 Nov. 2021.
- Van Huyssteen, E., Green, C., Sogoni, Z., Maritz, J. & McKelly, D. 2018. South African Functional Town Typology (CSIR 2018 v2). http://stepsa.org/pdf/2018_CSIR_Town_Typology.pdf Date of access.
- Van Noorloos, F. & Kloosterboer, M. 2018. Africa's new cities: The contested future of urbanisation. *Urban Studies*, 55(6):1223-1241.
- Van Wyk, R.B. & Dlamini, C. 2018. The impact of food prices on the welfare of households in South Africa. https://www.usb.ac.za/usb_features/the-impact-of-food-prices-on-the-welfare-of-households-in-south-africa/ Date of access: 12 Nov. 2021.
- Verkerk, M., Busschbach, J. & Karssing, E. 2001. Health-related quality of life research and the capability approach of Amartya Sen. *Quality of Life Research*, 10(1):49-55.
- Villegas-Palacio, C., Berrouet, L., López, C., Ruiz, A. & Upegui, A. 2016. Lessons from the integrated valuation of ecosystem services in a developing country: Three case studies on ecological, socio-cultural and economic valuation. *Ecosystem services*, 22:297-308.
- Viviers, J. 2015. Engineering for Town Planners [Lecture]. Potchefstroom.
- Vojtíšková, K., Poláková, M. & Patočková, V. 2016. Cultural Planning: New Inspiration for Local Governments in the Czech Context. *The journal of arts management, law, and society*, 46(1):22-33.
- Wachs, M. 2013. The past, present and future of professional ethics in planning. In: Fainstein, S.S. & Defilippis, J., eds. 2016. *Readings in planning theory*. 4th ed. West Sussex: Wiley Blackwell. pp. 464-479.
- Walls, R., Olivier, G. & Eksteen, R. 2017. Informal settlement fires in South Africa: Fire engineering overview and full-scale tests on "shacks". *Fire Safety Journal* 91:997–1006.
- Wann-Ming, W. 2019. Constructing urban dynamic transportation planning strategies for improving quality of life and urban sustainability under emerging growth management principles. *Sustainable Cities and Society*, 44:275-290.
- Washinyira, T. 2021. Cape Town child drowns in sewer after manhole left uncovered. <https://www.groundup.org.za/article/cape-town-child-drowns-sewer-after-manhole-left-uncovered/> Date of access: 21 Nov. 2021.
- Wasserman, H. & Madrid-Morales, D. 2021. South African government's handling of COVID-19: study shows declining trust. <https://theconversation.com/south-african-governments-handling-of-covid-19-study-shows-declining-trust-163372> Date of access: 6 Oct. 2021.

- Watson, V. 2009. Seeing from the South: Refocusing Urban Planning on the Globe's Central Urban Issues. *Urban Studies*, 46(11):2259-2275.
- Watson, V. 2016. Shifting Approaches to Planning Theory: Global North and South. *Urban Planning*, 1(4):32-41.
- Weimann, J., Knabe, A. & Schob, R. 2015. Measuring Happiness: The Economics of Well-Being. Cambridge: MIT Press.
- Westaway, M.S. 2006. A longitudinal investigation of satisfaction with personal and environmental quality of life in an informal South African housing settlement, Doornkop, Soweto. *Habitat International*, 30(1):175-189.
- Węziak-Białowolska, D. 2016. Quality of life in cities – Empirical evidence in comparative European perspective. *Cities*, 58:87-96.
- Wills-Herrera, E. 2014. Confidence in Government. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 1188-1190.
- Wong, C. 2001. The relationship between quality of life and local economic development: an empirical study of local authority areas in England. *Cities*, 18(1):25-32.
- Wong, C. 2014. Economic and social indicators. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 1789-1791.
- World Bank. 2021. The World Bank in South Africa: Overview. <https://www.worldbank.org/en/country/southafrica/overview> Date of access: 27 July 2021.
- Xiao, Y. & Watson, M. 2019. Guidance on Conducting a Systematic Literature Review. *Journal of Planning Education & Research*, 39(1):93-112.
- Xing, Y., Jones, P. & Donnison, I. 2017. Characterisation of Nature-Based Solutions for the Built Environment. *Sustainability*, 9:149-169.
- Yin, R. 2018. Case study research and applications: design and methods. 6th ed. California: SAGE.
- Zakhour, S. 2020. The democratic legitimacy of public participation in planning: Contrasting optimistic, critical, and agnostic understandings. *Planning Theory*, 19(4):349-370.
- Zheng, S. 2014. Political Stability Comparisons Among Nations. In: Michalos, A.C., ed. *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer. pp. 4882-4887.

ADDENDA A: ADMINISTRATION

ADDENDUM A1: Ethical clearance



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ETHICS APPROVAL LETTER OF STUDY

Based on approval by the **Faculty of Natural and Agricultural Sciences Ethics Committee (FNAS-REC)**, the Faculty of Natural and Agricultural Sciences Ethics Committee hereby **approves** your study as indicated below. This implies that the North-West University Senate Committee for Research Ethics (NWU-SCRE) grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: Conflicting quality of life rationalities between spatial decision-makers and the South African poor			
Study Leader/Supervisor: Prof EJ Cilliers			
Student: NS Jacobs			
Ethics number:	N	W	U - 0 1 9 5 1 - 1 9 - A 9
	Institution	Study Number	Year Status
Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation			
Application type: Single	Risk Category: Minimal		
Commencement date: 01/02/2019			
Expiry date: 31/01/2023			
Approval of the study is initially provided for a year, after which continuation of the study is dependent on receipt and review of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation.			

Special in process conditions of the research for approval (if applicable):

- The following documentation are archived by FNASREC and should be complete and kept up to date:
 - Research proposal
 - Signed approval from the scientific committee indicating the proposed risk category
- All researchers involved in the study should submit signed NWU code of conduct statements annually.
- All researchers of low risk studies should submit proof of relevant ethics training every two years.
- All researchers that take part in activities that pose a safety and security threat to the researchers or the environment should submit a risk assessment form annually.
- All research involving human interaction should follow best ethical practise and keep documents as proof. This includes informed consent, questionnaires, incorporation of risk-benefit, and responsible data management.
- Any research at governmental or private institutions, permission must still be obtained from relevant authorities and provided to the FNASREC. Ethics approval is required BEFORE approval can be obtained from these authorities.

ADDENDUM A2: Language editing

RUAN FOURIE

Certificate of editing

CONFLICTING QUALITY OF LIFE
RATIONALITIES BETWEEN SPATIAL
DECISION-MAKERS AND THE SOUTH
AFRICAN POOR

This document
certifies that the
above-mentioned
thesis has been
edited by me for
proper English
language usage.



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2021-12-10

ADDENDA B: ANALYSES

ADDENDUM B1: Social indicators analysis report

ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021		ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021	
I- I Economic capital 179 Quotations: 2:10 p 2 work 2:12 p 2 finance 3:21 p 9 Transport 3:36 p 9 cost of living 3:37 p 9 employment 3:45 p 6 employment 3:46 p 6 income 6:5 p 8, Financial 6:7 p 8, 58 x 15 Employment 6:11 p 8, 59 x 33 Economic and Physical Safety 10:7 p 4 WORK 10:8 p 4 STANDARD OF LIVING 10:20 p 5 Work 10:21 p 5 Job security 10:27 p 5 income 10:28 p 5 wealth 57:7 p 5 income 57:8 p 5 employment 57:25 p 6 Income 57:26 p 6 Jobs 59:8 p 3 work 62:7 p 8 Transport 62:14 p 8 employment 68:11 p 3 roads 68:12 p 3 staircases 68:13 p 3 terraces 68:14 p 3 pools 68:15 p 3 walls 68:16 p 3 benches 75:9 p 4 Economic resources 75:11 p 4 Employment 75:22 p 4 Prospects for a meaningful work life	Word cloud labels for economic capital indicators - Work - Financial_assets - Mobility - Living_costs - Work - Work - Income - Financial_assets - Work - Economic_safety - Work - Living_standard - Work - Work_Security - Income - Wealth - Income - Work - Income - Work - Work - Mobility - Work - Roads - Infrastructure - Infrastructure - Infrastructure - Infrastructure - Infrastructure - Financial_assets - Work - Work	I- I Economic capital 179 Quotations: 80:11 p 6 Basic infrastructure 80:18 p 6 Mobility 80:19 p 6 Retailing 80:20 p 6 Income 82:9 p 5, 71 x 12 Economic well-being 82:10 p 5, 45 x 10 Employment/ 83:9 p 10 Income 86:8 p 6 Economy 108:11 p 2 Communication 108:15 p 3 Financial base 108:16 p 3 Employment 108:31 p 3 mobility 108:46 p 2 Residential land values 108:48 p 2 Supplying initial resources 108:52 p 2 transport 108:55 p 2 Pedestrian spaces 109:12 p 5 facilities 109:16 p 5 job opportunities 109:30 p 5 ownership of consumer durables 109:34 p 5 mobility 109:37 p 5 transport 109:39 p 5 transport 109:48 p 6 public facilities 114:8 p 1 GDP 114:17 p 6 income 114:18 p 6 jobs 114:29 p 6 living standard 114:30 p 6 Economy 114:32 p 6 entrepreneurship 114:33 p 6 opportunity 114:41 p 6 income 114:42 p 6 jobs	Word cloud labels for economic capital indicators - Infrastructure - Mobility - Entrepreneurship - Income - Economic_situation - Work - Income - Economy - Communication_infrastructure - Financial_assets - Work - Mobility - Land_Values - Financial_assets - Mobility - Mobility_Walkability - Infrastructure - Work - Entrepreneurship - Mobility - Mobility - Mobility - Infrastructure_Retail - GDP - Income - Work - Living_standard - Economy - Entrepreneurship - Economic_opportunity - Income - Work

ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021		ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021	
• I- I Human capital 159 Quotations:	Word cloud labels for institutional context indicators	• I- I Human capital 159 Quotations:	Word cloud labels for institutional context indicators
 283:17 p 3, 35 x 17 <i>Health.</i>	Health	 326:8 p 3 health	Health
 283:18 p 3, 47 x 12 <i>Education.</i>	Education	 326:9 p 3 education	Education
 293:9 p 1 health	Health	 326:18 p 3 health	Health
 293:10 p 1 education	Education	 326:19 p 3 freedom,	Freedom
 301:7 p 3 health	Health	 326:20 p 3 personal values	Personal_values
 301:8 p 3 education	Education	 327:23 p 5 freedom	Freedom
 304:5 p 1 health	Health	 327:24 p 5 self-reliance	Self_reliance
 304:9 p 1 education	Education	 327:26 p 5 creativity	Creativity
 304:18 p 6 education	Education	 327:31 p 6 health	Health
 304:19 p 6 employment	Employment	 327:32 p 6 education	Education
 305:10 p 4 health	Health	 327:52 p 10 education	Education
 306:24 p 2 health	Health	 327:53 p 10 health	Health
 306:26 p 2 education	Education	 329:9 p 9 Health	Health
 306:27 p 2 skills	Skills	 329:11 p 9 Education	Education
 308:5 p 2 health	Health		

ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021		ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021	
I- I Social capital 144 Quotations:	Word cloud labels for institutional context indicators	I- I Social capital 144 Quotations:	Word cloud labels for institutional context indicators
306:29 p 2 civic engagement 306:33 p 2 security 308:8 p 2 relationships with family and friends 326:7 p 3 family life 327:17 p 5 participation 327:18 p 5 affection 327:20 p 5 respect 327:22 p 5 security	Civic_engagement Safety Social_network Family_life Civic_engagement Affection Respect Safety	327:36 p 6 participation opportunities 327:43 p 10 social environment 327:44 p 10 family 327:54 p 10 culture 329:8 p 9 Crime 329:12 p 9 Recreation 343:2 p 4 safety 343:5 p 4 cultural opportunity	Civic_engagement Social_network Family_life Culture Safety Recreation Safety Culture

ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021		ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021	
I- I Natural capital 78 Quotations:	Word cloud labels for institutional context indicators	I- I Natural capital 78 Quotations:	Word cloud labels for institutional context indicators
 283:8 p 3, 57 × 17 <i>Soil Quality.</i>	Soil_quality	 306:8 p 1 environment	Natural_environment
 283:9 p 3, 149 × 14 <i>Natural Conditions and Hazards</i>	Natural_environment Hazards	 306:9 p 1 sustainable development	Sustainability
 293:15 p 1 natural environment	Natural_environment	 306:31 p 2 environmental	Natural_environment
 301:6 p 3 environment	Natural_environment	 306:32 p 2 environmental quality	Environmental_quality
 304:15 p 1 environmental quality	Environmental_quality	 308:10 p 2 parks and green spaces	Urban_green
 305:9 p 4 climate	Climate	 327:28 p 6 habitat	Habitat
 305:15 p 4 sustainability	Sustainability	 327:40 p 10 natural environment	Natural_environment
 305:25 p 5 environment	Natural_environment	 343:7 p 4 environmental benignity	Environmental_benignity

ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021	Word cloud labels for institutional context indicators	ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021	Word cloud labels for institutional context indicators
• I- I Physical space 101 Quotations: 168:3 p 1 house 168:11 p 1 recreational facilities 168:12 p 1 sense of privacy at home 168:13 p 1 crowding 168:15 p 1 nearness of neighbourhood facilities 174:10 p 3 housing 183:11 p 2 place of residence 189:9 p 3 Housing 189:17 p 4 Land use 198:21 p 2 homes 204:6 p 1 amenities 206:7 p 2 recreation facilities 218:33 p 3 Housing 218:43 p 4 geography 218:59 p 6 Housing 230:21 p 5 development 230:24 p 5 material beauty 230:27 p 5 privacy 238:10 p 2 land use 238:12 p 2 amusement facilities 238:18 p 2 local identity 242:4 p 2 housing 248:8 p 2 living environment 257:11 p 3 housing 266:19 p 3 Spatial experience	- Housing - Recreational_facilities - Privacy - Crowding - Accessibility - Housing - Place_of_residence - Housing - Land_use - Housing - Amenities - Recreational_facilities - Housing - Geography - Housing - Development - Aesthetics - Privacy - Land_use - Amusement_facilities - Urban_Identity - Housing - Material_living_conditions - Housing - Spatial_experience	• I- I Physical space 101 Quotations: 266:27 p 6 Street layout 266:28 p 6 Public space 266:31 p 6 Housing 266:32 p 6 urban form 266:33 p 6 Land use 266:38 p 6 Identity 283:10 p 3, 70 × 13 <i>Shelter Quality.</i> 283:12 p 3, 63 × 12 <i>Urbanization.</i> 293:8 p 1 material living conditions 304:14 p 1 housing 304:17 p 6 housing 305:18 p 4 liveability 306:5 p 1 urban migration 306:6 p 1 housing 306:13 p 2 urban form 306:14 p 2 built environment 306:39 p 2 housing 308:9 p 2 quality of the neighbourhood 327:25 p 5 beauty 327:29 p 6 household facilities 327:30 p 6 social facilities 327:41 p 10 human settlements 327:42 p 10 Housing 343:6 p 4 spatial amenity	- Street_layout - Public_space - Housing - Urban_form - Land_use - Urban_Identity - Housing_quality - Urbanisation - Material_living_conditions - Housing - Housing - Livability - Urban_migration - Housing - Urban_form - Urban_space - Housing - Neighbourhood_quality - Aesthetics - Household_facilities - Social_facilities - Human_settlements - Housing - Spatial_amenity

ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 30 Apr 2021	Word cloud labels for institutional context indicators	ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 30 Apr 2021	Word cloud labels for institutional context indicators
• I- I Institutional context 47 Quotations: 6:12 p 8, 66 × 14 Governance 6:13 p 8, 71 × 23 and Basic Human Rights 10:5 p 4 HUMAN RIGHTS 10:6 p 4: POLITICS 57:15 p 5 Governance 57:16 p 5 trust in institutions 57:17 p 5 public services 75:20 p 4 Activities of Politics 108:41 p 3 Human rights 108:42 p 3 Legal rights 108:60 p 3 Legal right 109:42 p 5 services 114:36 p 6 governance 114:51 p 6 Stability 114:69 p 6 pro-active policy development 114:71 p 6 Political and social environment 114:78 p 6 public services 137:15 p 2 human rights 146:5 p 3, 49 × 13 Public service 146:11 p 3, 50 × 11 Management 146:12 p 3, 52 × 14 Social security 198:17 p 2 human rights 218:29 p 3 Public services 218:38 p 4 Political stability	Governance Human_rights Human_rights Politics Governance Institutional_trust Public_services Politics Human_rights Legal_rights Legal_rights Public_services Governance Stability Policy Politics Public_services Human_rights Public_services Governance Social_security Public_services Public_services Stability	• I- I Institutional context 47 Quotations: 218:45 p 4 Political freedom 218:47 p 5 Stability 218:55 Individual rights 218:65 p 6 Governance 218:70 p 3 Internal stability 218:72 p 3 Law enforcement 218:73 p 3 Economic environment Currency exchange Regulations 238:11 p 2 services 238:21 p 2 urban politics 276:13 p 4 trust in and connections with the community and government officials 304:11 p 1 public services 304:21 p 6 access to institutions and public services 305:26 p 5 political system 306:30 governance 326:15 p 3 economic governance 327:21 p 5 power 327:37 p 6 quality of administration 327:51 p 10 services for the population 327:56 p 10 social assistance 327:58 p 10 quality of the political environment 327:59 p 10 state institutions 327:60 p 10 public order 343:4 p 4 service and cultural opportunity	Politics Stability Human_rights Governance Stability Law_enforcement Policy Public_services Politics Institutional_trust Public_services Acess Politics Governance Governance Power Administration_quality Public_services Social_security Politics Institutions Law_enforcement Public_services

ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021		ATLAS.ti Report Literature review Codes (selection) Report created by Niké Jacobs on 18 May 2021	
• I- I Individual experience 87 Quotations:	Word cloud labels for institutional context indicators	• I- I Individual experience 87 Quotations:	Word cloud labels for institutional context indicators
266:16 p 3 Meaning 283:26 p 3, 32 x 14 Leisure 293:12 p 1 leisure time 304:16 p 6 individual's conditions and their perception 304:20 p 6 work-life balance 305:28 p 5 satisfaction 306:19 p 2 perceptions 306:20 p 2 satisfaction 306:25 p 2 work-life balance 306:34 p 2 subjective well-being 308:7 p 2 coping	Meaning Leisure Leisure Living_conditions Subjective_well_being Work_life_balance Life_satisfaction Subjective_well_being Life_satisfaction Work_life_balance Subjective_well_being Coping	326:10 p 3 relative economic position 326:11 p 3 age 326:13 p 3 gender 326:14 p 3 marital status 327:19 p 5 status 327:33 p 6 leisure time 327:35 p 6 working conditions 327:38 p 6 satisfaction 327:46 p 10 quality of working life 327:57 p 10 leisure time	Relative_economic_position Age Gender Marital_status Social_status Leisure Job_quality Life_satisfaction Job_quality Leisure

ADDENDUM B2: ATLAS.ti coding report for empirical analysis, part 1

ATLAS.ti Report

Empiries, deel 1

Codes

Report created by Niké Jacobs on 29 Apr 2021

• A_*ACHIEVE

Groups:

General rationale

Comment:

The Constitution of the Republic of South Africa declared that "the quality of life of all citizens" needs to be improved. It is, therefore, argued that creating or maintaining a quality life for all citizens forms the foundation of all South African policies, legislation, and frameworks. This notion is also apparent in most of the international quality of life reports that aim to provide guidance for securing this quality life to all.

• A_Future well-being

Used In Documents:

1 OECD Better Life Index 3 Happy Planet Index 6 Constitution 9 NDP

Groups:

General rationale

Comment:

Where well-being is concerned it is emphasised, especially by the international quality of life index reports, that well-being needs to be sustained for both the planet and future generations. It is explained that this future well-being may be secured by resources. The Integrated urban development framework adds that care should be taken to utilise these resources where the largest economic and social benefit may arise.

• A_Guidance & Policy

Used In Documents:

1 OECD Better Life Index 3 Happy Planet Index 4 The Global Liveability Index 5 The World Happiness report 7 Integrated urban development framework

Groups:

General rationale

Comment:

The main goal of most of the international quality of life index reports, and South African legislation, policies and frameworks are to provide guidance to decision-makers as to how to secure future well-being for all citizens.

• A_Quality of life

Used In Documents:

1 OECD Better Life Index 3 Happy Planet Index 4 The Global Liveability Index 5 The World Happiness report 7 Integrated urban development framework 8 National framework for sustainable development

Groups:

General rationale

Comment:

The texts mostly describe quality of life as living a good life, as context driven and as measuring how good life is going. It is also argued that to form a true picture of the quality of life, both endogenous and exogenous quality of life must be considered and that these good lives must last over time for both people and the planet.

• A_Quality of life_Risks

Used In Documents:

5 The World Happiness report 7 Integrated urban development framework 8 National framework for sustainable development

Groups:

General rationale

• A_Resources

Used In Documents:

 1 OECD Better Life Index  3 Happy Planet Index  6 Constitution  8 National framework for sustainable development

Groups:

 General rationale

Comment:

The resources needed to secure future well-being are divided into four categories, namely: social capital, human capital, economic capital and natural capital. The Constitution of the Republic of South Africa spesifically states that such resources must be promoted and cultivated.

• E_*ECONOMIC CAPITAL

Groups:

 Resources

Comment:

Economic capital supports and facilitates the material aspects that enables a society's desired living standards BL_71,201

• E_Economic growth

Used In Documents:

 1 OECD Better Life Index  7 Integrated urban development framework  8 National framework for sustainable development  9 NDP  11 NSDF  12 SPLUMA

Groups:

 Resources

Comment:

It is said that economic growth is prioritised as the central objective of government influences.

It is believed that economic interventions may positively influence people's livelihoods.

It is believed that inclusive economic development supports the following to benefit the quality of life:1) Number and profitability of enterprises2) Increased empyment3) The development of new skills and resourcefulness4) The development of social networks, where people share their resources to create a better life for all5) Participation in productive work, furthemore, promoing people's self-respect 6) Imporved skills, promoting work and livelihood opportunities

• E_Financial assets

Used In Documents:

 1 OECD Better Life Index  3 Happy Planet Index  7 Integrated urban development framework  9 NDP  11 NSDF  12 SPLUMA

Groups:

 Resources

Comment:

GDP is currently used as the standard measure of economic growth. This approach is criticised to result in deteriorating social conditions and climate change. It is, furthermore, noted that it does not effectuate a quality life on its own, since it does not include the following "things that really matter to people" HP_2:1) Inequalities in material conditions 2) Social networks3) Health4) Leisure time5) Planetary limits

Sustainable finances are critical in achieving integrated transport.

The South African policies, legislation, and frameworks also highly emphasise the value of property in the strive to overcome impediments to a quality life. It is argued that owning land may provide opportunities for economic growth, agriculture, and a space for social and cultural activities.

• E_Income

Used In Documents:

 1 OECD Better Life Index  5 The World Happiness report  6 Constitution  9 NDP

Groups:

Resources

Comment:

Income provides advantages to life quality, since it defines people's living standards and determine their consumption possibilities.

• E_Infrastructure

Used In Documents:

1 OECD Better Life Index 7 Integrated urban development framework 9 NDP 11 NSDF 12 SPLUMA

Groups:

Resources

Comment:

It is believed that integrated urban infrastructure development supports the following to benefit the quality of life:1) Equity and inclusivity through access to basic social services2) Economic growth, through electricity, water, transportation, and telecommunications infrastructure3) Environmental benefits, by protecting natural resources4) Providing shelter, i.e., housing5) Job, Income & Wealth creation6) Social network promotion, through electricity, water, transportation, and telecommunications infrastructure7) Urban resilience

Specific emphasis is placed on1) A compact urban form, and 2) Sanitary facilities (specifically toilets)

It is believed that home internet infrastructure provides better access to job opportunities and supports social connections.

• E_Mobility

Used In Documents:

7 Integrated urban development framework 8 National framework for sustainable development 11 NSDF

Groups:

Resources

Comment:

It is believed that sustainable and integrated transportation infrastructure supports the following to benefit the quality of life:1) Improved access to and connectivity with economic opportunities, education institutions, health facilities, and places to spend leisure time.2)

Reduced travel time and cost, resulting in higher productivity, education and employment levels3) Compact urban forms4) Reduced emissions, benefiting health and the natural environment5) More efficient use of resources

Alternative transportation modes to the private car are believed to induce a higher quality of life, i.e., walking, cycling, and public transportation.

• E_Wealth

Used In Documents:

1 OECD Better Life Index

Groups:

Resources

Comment:

Wealth "provides a buffer" that may "smooth consumption and enable longer-term investments" BL_71

• E_Work

Used In Documents:

1 OECD Better Life Index 5 The World Happiness report 7 Integrated urban development framework 9 NDP

Groups:

Resources

Comment:

Work refers to paid and unpaid productive activity. It is believed that hard work will create economic growth

• H_*HUMAN CAPITAL

Groups:

Resources

Comment:

Human capital refers to people's individual potential, i.e., knowledge, competencies, education, skills, and their health. This individual potential is believed to provide individuals the opportunity to increase their life quality.

• **H_Choice**

Used In Documents:

3 Happy Planet Index 5 The World Happiness report 6 Constitution 9 NDP 11 NSDF

Groups:

Resources

Comment:

It is believed that the following benefits life quality: 1) Having "a sense of freedom to make key life decisions" WH_42) Being satisfied with one's ability to make life choices 3) Being able to "freely choose your trade, occupation or profession" Constitution

It is, furthermore, believed that a freedom of choice significantly reduces the effect that negative circumstances have on people's quality of life

• **H_Education**

Used In Documents:

1 OECD Better Life Index 5 The World Happiness report 6 Constitution 7 Integrated urban development framework 9 NDP 11 NSDF

Groups:

Resources

Comment:

"Science and digital skills are increasingly becoming a basic requirement for inclusion in economic activities" BL_127 and, according to the World Happiness report WH_70 there is "a gap in well-being between tertiary and non-tertiary educated people". Education is, therefore, believed to significantly affect people's quality of life.

It is, furthermore, noted that not only education but also the quality of education is affects people's quality of life.

• **H_Health**

Used In Documents:

1 OECD Better Life Index 3 Happy Planet Index 5 The World Happiness report 6 Constitution 7 Integrated urban development framework 9 NDP 11 NSDF

Groups:

Resources

Comment:

It is believed that a long life, unencumbered by the following, contributes to quality life: 1) Physical illness 2) Mental illness 3) Inability "to participate in activities that people value" BL_103

Access to medical care is also deemed important, especially by the South African policies, legislation and frameworks.

• **H_Knowledge**

Used In Documents:

1 OECD Better Life Index 9 NDP

Groups:

Resources

Comment:

Knowledge pertains what people know, and it contributes towards life and job-specific skills, affecting people's quality of life

• **H_Potential**

Used In Documents:

1 OECD Better Life Index 9 NDP

Groups:

Resources

Comment:

Skills, education, knowledge, and good health provides an individual with the potential to increase their quality of life, i.e., by finding a job. The NDP_11 places specific emphasis on the importance that people's full potential be embraced

● **H_Skills**

Used In Documents:

1 OECD Better Life Index 7 Integrated urban development framework 8 National framework for sustainable development 9 NDP

Groups:

Resources

Comment:

It is argued that literacy, numeracy, and other job-specific skills improve the employability of a person and thereby significantly influence their life quality

It is, furthermore, believed that social and emotional skills also meaningfully influence people's quality of life by affecting their experience of their social environment

● **I_*INSTITUTIONAL CONTEXT**

Groups:

Context

Comment:

The institutional context influence the level to which a country or society is united and thereby also affects the well-being of this country or society BL_47

● **I_Governance**

Used In Documents:

5 The World Happiness report 7 Integrated urban development framework 8 National framework for sustainable development 9 NDP 11 NSDF 12 SPLUMA

Groups:

Context

Comment:

Governments are believed to "enhance the capacity of the state and its citizens to work together to achieve spatial and social integration" IUDF_8 which is, in turn, believed to enhance life quality.

Spatial planning is believed to affect life quality through the coordination of "role-players that shape and control land use, the urban form and the delivery of infrastructure and services" IUDF_43

It is believed that efficient land governance and management provide social, economic, material and locational conditions that induce a proper life quality.

● **I_Institutional trust**

Used In Documents:

1 OECD Better Life Index 5 The World Happiness report 9 NDP

Groups:

Context

Comment:

It is believed that people's trust in their government and public institutions, i.e. police, influences their overall well-being and alleviate the effect of negative circumstances

● **I_Stability**

Used In Documents:

4 The Global Liveability Index

Groups:

↔ Context

Comment:

Stability, i.e., the absence of terrorism, peace in neighbouring countries, and low crime rates, effect the overall well-being within a country or region

● **IE_ *Individual experience**

Groups:

↔ Context

Comment:

People's individual experience influences their ability to withstand and persevere through hardship NDP_12, and it is, therefore, believed to greatly influence their quality of life

● **IE_ Job quality**

Used In Documents:

1 OECD Better Life Index 6 Constitution

Groups:

↔ Context

Comment:

People's experience of their life quality is affected by their job quality including: the gender wage gap remuneration job availability risk of job loss physical safety the feeling of contentness with their job weather the job matches their skills people's learning opportunities working time arrangements people's relationships with their co-workers

● **IE_ Subjective well-being**

Used In Documents:

1 OECD Better Life Index 3 Happy Planet Index 5 The World Happiness report 9 NDP

Groups:

↔ Context

Comment:

There is a Aristotelian presumption that "sustained positive emotions are important supports for a good life" WH_15. This is believed to be influenced by mental health, "how people experience their lives" WH_4, and external family circumstances.

● **IE_ Work-life balance**

Used In Documents:

1 OECD Better Life Index 9 NDP

Groups:

↔ Context

Comment:

People's work-life balance affects their life quality. This includes:
the balance between "family commitments, leisure time and work" OECD_28,
the commute time between the above aspects of life
the quantity of time devoted to each of the above aspects.
people's satisfaction with how their time is spent

● **N_ *NATURAL CAPITAL**

Used In Documents:

1 OECD Better Life Index

Groups:

↔ Resources

Comment:

Natural capital refers to natural assets (i.e. biodiversity and other ecosystem services) that affect life quality BL_217,205. Climate change and Environmental quality are, furthermore, viewed as significant threats to natural capital and subsequently to future well-being.

● **N_Climate change**

Used In Documents:

 1 OECD Better Life Index  4 The Global Liveability Index  5 The World Happiness report  7 Integrated urban development framework  8 National framework for sustainable development  11 NSDF

Groups:

 Resources

Comment:

Temperatures are rapidly rising, threatening the current levels of life quality. The poor and vulnerable are, furthermore, especially exposed to climate-related extreme events

Climate change are believed to hinder agricultural productivity causing the following, that affects quality of life:1) Water and food scarcity2) Economic decline

● **N_Environmental quality**

Used In Documents:

 1 OECD Better Life Index  3 Happy Planet Index  5 The World Happiness report  6 Constitution  8 National framework for sustainable development  9 NDP  10 NEMA  11 NSDF

Groups:

 Resources

Comment:

The environmental quality is believed to not be limited to geographic context and affect the entire planet's life quality. A low environmental quality is believed to decrease:1) health levels, i.e., by toxic levels of air, water, and soil quality2) the esthetic enjoyment of the natural environment 3) the availability of ecosystem services

● **N_Natural environment**

Used In Documents:

 1 OECD Better Life Index  5 The World Happiness report  6 Constitution  7 Integrated urban development framework  8 National framework for sustainable development  9 NDP  10 NEMA  11 NSDF  12 SPLUMA

Groups:

 Resources

Comment:

People benefit from environmental services and assets, and, therefore, the natural environment affects both endogenous and exogenous quality of life, i.e., in the following respects:1) Providing sufficient food and water2) Affecting people's emotional well-being

Some people value the beauty of the natural environment, and access thereto are, thus, extremely important to them. To these people this desire may also influence their choice of place of residence

● **P_*PHYSICAL SPACE**

Used In Documents:

 1 OECD Better Life Index  11 NSDF

Groups:

 Context

Comment:

The Better life index BL_22 explains that the physical space "shape people's economic conditions and can have wide-ranging consequences for other aspects of life", i.e., education and health. The South African policies, legislation, and frameworks, therefore, places a large emphasis on spatial transformation

● **P_Geographic location**

Used In Documents:

 1 OECD Better Life Index  5 The World Happiness report  7 Integrated urban development framework  11 NSDF

Groups:

↔ Context

Comment:

Social and natural environments differ within and between “communities, nations and cultures” WH_32, and people’s experience thereof also differs. It is, therefore, suggested that subjective experiences in a given geographic location may vary from person to person.

It is believed that the geographic location determines the access people have to different services, opportunities, and choices and thereby affect life quality, i.e., access to 1) a variety of transportation modes, 2) social services, 3) recreation spaces, 4) cultural gatherings, 5) health facilities, 6) economic activities and 7) work and education opportunities. Access to these is deemed exceedingly important as the South African policies, legislation and frameworks aim to “ensure equal access for all to the services, amenities, and opportunities that [...] urban and rural settlements offer NSDF_31.

The geographic location of a property may also hold the potential for creating future well-being through possible social and economic gains from future development and greater inclusion, for an individual, in economic and social activities.

- **P_Historic development**

Used In Documents:

📄 7 Integrated urban development framework 📄 9 NDP 📄 12 SPLUMA

Comment:

The South African policies, legislation, and frameworks highly emphasize the effect of the historic South African urban development policies on current South African life quality. It is argued that certain settlements are economically underdeveloped and residents of these settlements suffer from social and economic exclusion.

- **P_Housing**

Used In Documents:

📄 1 OECD Better Life Index 📄 5 The World Happiness report 📄 6 Constitution 📄 7 Integrated urban development framework 📄 9 NDP 📄 11 NSDF 📄 12 SPLUMA

Groups:

↔ Context

Comment:

Emphasis is placed on the importance of personal space for a quality life.

Housing is deemed a basic right by the Constitution of the Republic of South Africa (1996) and an important aspect of a quality life NDP_38, since it provides “shelter, safety, privacy, and personal space” OECD_80.

Housing costs are argued to influence individuals’ spending ability that, in turn, affect their life quality. Especially those with a low income.

- **P_Human settlements**

Used In Documents:

📄 4 The Global Liveability Index 📄 5 The World Happiness report 📄 7 Integrated urban development framework 📄 9 NDP 📄 11 NSDF 📄 12 SPLUMA

Groups:

↔ Context

Comment:

It is argued that the size of a human settlement affect life quality, i.e., larger cities tend to suffer more from terrorism and safety but are also associated with more employment opportunities and other economic and social amenities.

There is an emphasis placed on the importance of rural-urban linkages for the well-being of rural residents, since it is argued that people in rural settlements need access to the amenities that urban areas offer.

- **P_Population groups**

Used In Documents:

📄 1 OECD Better Life Index 📄 9 NDP

Groups:

↔ Context

Comment:

Well-being differs between population groups, i.e., gender and age groups or education levels, especially resulting from inequalities present between these groups.

● **P_Urbanisation**

Used In Documents:

 5 The World Happiness report  7 Integrated urban development framework  8 National framework for sustainable development  11 NSDF  12 SPLUMA

Groups:

 Context

Comment:

It is argued that urbanisation poses a threat to life quality, since it:

- 1) creates a lack in housing availability and the affordability thereof
- 2) creates large informal settlements with poor living conditions
- 3) reduce the availability of green and open spaces and thereby hindering social interaction and reducing ecosystem services
- 4) places strain on existing infrastructure

● **S_*SOCIAL CAPITAL**

Used In Documents:

 1 OECD Better Life Index  5 The World Happiness report

Groups:

 Resources

Comment:

Social capital refers to "the social norms, shared values and institutional arrangements that foster co-operation among population groups" BL_234. These attributes are extended to future generations and subsequently affect future well-being. The South African National Development Plan NDP_11, therefore, emphasise the importance of social capital to South African quality of life.

● **S_Civic engagement**

Used In Documents:

 1 OECD Better Life Index  5 The World Happiness report  7 Integrated urban development framework  9 NDP

Groups:

 Resources

Comment:

Civic engagement refers to people's ability to shape their society. This includes: 1) the availability of opportunities (i.e., grassroots activism, citizen-led neighbourhood vision and planning processes, and voting) 2) the necessary resources (i.e., skills and ability) to engage 3) whether people utilise these available opportunities and resources 4) whether this engagement affect change.

Civic engagement is believed to enable people to better their own quality of life and is especially advocated for in the South African policies, legislation, and frameworks that were analysed.

● **S_Safety**

Used In Documents:

 1 OECD Better Life Index  4 The Global Liveability Index  5 The World Happiness report  6 Constitution  7 Integrated urban development framework  9 NDP  11 NSDF

Groups:

 Resources

Comment:

It is believed that freedom from harm, unencumbered by the following, is an important part of a quality life: 1) crime against property, i.e., theft 2) Cybercrime, i.e., privacy breaches or online fraud 3) Financial crime, i.e., corruption or money-laundering 4) Non-conventional crime, i.e., hate crime or emotional abuse 5) Fear of violence, i.e., assault or domestic violence 6) Conflict 7) Terrorism 8) Traffic accidents 9) Natural disasters

● **S_Social interactions**

Used In Documents:

 1 OECD Better Life Index  5 The World Happiness report  9 NDP

Groups:

 Resources

Comment:

It is believed the following contributes to life quality: 1) The “frequency and amount of time individuals spend with household members, their family, friends, colleagues, and other known persons” BI_1812) Satisfaction with social interactions 3) Perceived loneliness

● **S_Social network**

Used In Documents:

 1 OECD Better Life Index  5 The World Happiness report  6 Constitution  9 NDP  11 NSDF  12 SPLUMA

Groups:

 Resources

Comment:

It is believed that a large social network reduces the effect of negative circumstances on people's quality of life.
It is believed that this network may be expanded by the ability to speak different languages and a general knowledge of the history of various population groups

● **S_Social support**

Used In Documents:

 1 OECD Better Life Index  5 The World Happiness report  9 NDP

Groups:

 Resources

Comment:

It is believed that being able to rely on family and friends during hardship, significantly affects people's quality of life

● **S_Social trust**

Used In Documents:

 1 OECD Better Life Index  5 The World Happiness report  8 National framework for sustainable development  9 NDP

Groups:

 Resources

Comment:

It is believed that trust, unity, coherence, functionality, and pride exceedingly affect people's quality of life
It is, furthermore, believed that a perception amongst “young people that the odds are stacked against them” NDP_24 significantly influence people's quality of life

ADDENDUM B3: ATLAS.ti coding report for empirical analysis, part 2

ATLAS.ti Report

Empiries, deel 2

Codes

Report created by Niké Jacobs on 06 Nov 2021

• E_*ECONOMIC CAPTIAL

• E_Economic activity

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Economic activity seems limited in all the case studies. Most interviewees mentioned spaza shops and shabeens. In Matlwangtlwang there is a café and, in Kanana and Freedom Park there are shopping centres. An interviewee in eMbalenhle complained, however, that there are no shops in their vicinity.

No comments captured about economic activity from interviewees in Lebohang, or Zamdela.

• E_Electricity

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 4 Matlwangtlwang_2018_a.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 10 Matlwangtlwang_2019_e.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Interviewees from eMbalenhle, Freedom Park and Kanana have electricity, but complained about frequent power interruptions.

Many interviewees do not have direct access to electricity in their homes, but seem content to use alternative sources, i.e., solar panels to charge their phones; batteries for radio and TV; gas, paraffin, coal, wood, or cow manure for cooking; Solar panels, candles (indoor), fire (outdoor) for light. Some interviewees stated that access electricity at work or by visiting friends and family and others tap electricity illegally.

No comments captured about access to electricity and other energy sources from interviewees in KwaDela, or Zamdela.

• E_Financial assets

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 4 Matlwangtlwang_2018_a.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 14 Kanana_2020_a.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Most of the people live illegally and does not own land, an interviewee in Matlwangtlwang expressed a desire for land tenure. In the formalised area they do, however, own the property or rent it.

Other financial assets include goats in Lebohang and pigs in Matlwangtlwang.

No comments captured about financial assets from interviewees in eMbalenhle, Freedom Park, eMzinoni, KwaDela, or Zamdela.

• E_Income

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Income seems to be a great concern to all the interviewees. Most live by government grants and others have listed a payout after being retrenched, loans from loan sharks and low wages from, often temporary, jobs.

• E_Infrastructure

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 4 Matlwangtlwang_2018_a.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 12 Alabama_2020_b.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

There seem to be a general dissatisfaction with the lack in or inadequacy of the infrastructure, provided by the municipality. The level of dissatisfaction seems, however, to differ, with Matlwangtlwang residents being visibly dissatisfied and those in eMbalenhle

only mildly so. An interviewee in Kanana stated, however, that their settlement had recently been upgraded and that they have adequate infrastructure.

Some interviewees in eMbalenhle, Kanana, and Matlwangtlwang commented on the bad state of the roads.

No comments captured about infrastructure from interviewees in Alabama, Freedom Park, KwaDela, Lebohang or Zamdela

• E_Mobility

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 4 Matlwangtlwang_2018_a.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 10 Matlwangtlwang_2019_e.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

The interviewees seem quite content with their mobility. Most of them walk, as this is the cheapest option and when it is too far to walk, they usually travel by taxi. It seems that they prefer walking as, according to an interviewee in Alabama, most of their income is spent of taxi fares. The Matlwangtlwang interviewees does not have ready access to taxis and use bicycles and mototcycles, or hitchhike, and one interviewee's employer picks him up.

No comments about transportation captured from interviewees in KwaDela, Lebohang and Zamdela

• E_Roads

Used In Documents:

8 Matlwangtlwang_2019_c.pdf 12 Alabama_2020_b.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

• E_Sanitation

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 4 Matlwangtlwang_2018_a.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 10 Matlwangtlwang_2019_e.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Built houses (mostly RDP):

In Alabama, Freedom Park and Kanana the residents staying in RDP houses seem satisfied with their "proper" indoor toilets. In eMbalenhle, however, people are very dissatisfied. At the time of the interviews the sewage has been leaking into the streets for at least a week and interviewees complained 1) about the health implications and that 2) they cannot sit outside when their house is too hot and 3) the children cannot play outside as a result of the stench. Some interviewees blame the municipality, while others blame children who open the sewage holes or throw things in that block it.

Informal settlements:

Most of the informal settlement residents are dissatisfied with the lack of formal sanitation provision from the municipality, while an interviewee in the Matlwangtlwang informal settlement stated that the community believe toilets to be unhealthy for children and to have chemicals, harmful to women. In the informal settlement of Freedom Park, the municipality provided temporary communal toilets during the covid-19 pandemic. The interviewees stated, however, that these are significantly inferior to those in the RDP houses and that it is very unsanitary. They, furthermore, use the bucket system that are collected twice a week. In the informal settlements of Alabama, Kanana, and a few people in Matlwangtlwang use pit toilets. Some in Matlwangtlwang use their neighbours' pit toilets or indoor flush toilets in the formal area, but most people use a nearby quarry.

No comments about sanitation captured from interviewees in KwaDela, Lebohang and Zamdela

• E_Water

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 3 Zamdela_2016.pdf 4 Matlwangtlwang_2018_a.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 10 Matlwangtlwang_2019_e.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Regular access to clean water seems very important to the interviewees.

The RDP houses have indoor taps.

Residents of the informal settlements have to fetch water as part of their daily routine, but this does not seem to bother the interviewees. In Alabama there is a pipe running through the informal settlement where residents install their own taps. In Freedom Park, Kanana and Matlwangtlwang, the municipality installed a communal tap.

Most of the interviewees note that the water supply is unreliable. In Alabama, Lebohang, Freedom Park, Kanana, Matlwangtlwang, and Zamdela the water supply is often interrupted. In Kanana they fetch water at the river and in Matlwangtlwang

the municipality supply water at the library when the people don't have access via the piped system. The other interviewees did not mention alternative water sources.

In Lebohang the interviewee stated that the water is fresh and healthy. Interviewees in Kanana and Zamdela, however, complain that the water is often dirty and in eMbalenhle an interviewee explained that the water causes illness when not boiled. The water in eMbalenhle, furthermore, have a Jik smell and the colour is often white.

- No comments about water access captured from interviewees in eMbalenhle, KwaDela, Lebohang and Zamdela
- No comments about water supply captured from interviewees in eMbalenhle and KwaDela
- No comments about water quality captured from interviewees in eMbalenhle, KwaDela, and Lebohang

• E_Work

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 3 Zamdela_2016.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 10 Matlwangtlwang_2019_e.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

The lack of job opportunities seems to be the most pressing concern for the interviewees and a sense of hopelessness may be perceived. Most people seem to be unemployed, while some have temporary low wage jobs on farms or in nearby urban centres, and others farm informally with chickens, goats, or pigs. Within a household it seems that, oftentimes, only one member or none is employed. There also seem to be a particular concern for the youth sitting idly and not having any form of employment.

• H_HUMAN CAPITAL

• H_Choice

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 3 Zamdela_2016.pdf

Comment:

There seem to be a sense amongst the interviewees of being trapped in their circumstances. Many explain that when you are not working, you do not have money and, therefore, do not have choices.

No comments captured about choices from interviewees in Alabama, Freedom Park, Kanana, or Matlwangtlwang.

• H_Education

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 10 Matlwangtlwang_2019_e.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Most of the interviewees are not well educated, although a few indicated that they can read and write. There seem to be a general belief that if only they were better educated, life would be better. A few indicated that financial need and circumstances at home necessitated them to leave school early.

Most of the interviewees talk, however of children going to school and crèches.

Freedom Park, Kanana, and some areas in Matlwangtlwang have ready access to schools, especially primary schools, while interviewees from Alabama and some from Matlwangtlwang expressed a need for nearby schools as the children have to travel too far.

The interviewees from Matlwangtlwang often mention the library but it is unclear if they actually take out some books.

• H_Health

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Many of the interviewees complained of health problems, i.e., eye problems, high blood pressure, and difficulty in walking.

In eMbalenhle an interviewee complained about the sewage leakage causing health problems, and in Kanana and Zamdela interviewees noted that the dirty water causes health problems.

Some interviewees mentioned going to traditional African healers, but also noted that it is quite expensive.

Interviewees from Freedom Park and some from Matlwangtlwang noted that they do not have easy access to medical facilities, while others in Matlwangtlwang and interviewees from Alabama mentioned that they have access to mobile clinics on a weekly basis. Kanana has a clinic. When other medical services are required they have to visit hospitals in the urban centres.

● I_*INSTITUTIONAL CONTEXT

● I_Institutional trust

Used In Documents:

 1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf  3 Zamdela_2016.pdf  4 Matlwangtlwang_2018_a.pdf  5 Matlwangtlwang_2018_b.pdf  6 Matlwangtlwang_2019_a.pdf  7 Matlwangtlwang_2019_b.pdf  8 Matlwangtlwang_2019_c.pdf  9 Matlwangtlwang_2019_d.pdf  10 Matlwangtlwang_2019_e.pdf  11 Alabama_2020_a.pdf  13 Freedom Park_2020.pdf  14 Kanana_2020_a.pdf  15 Kanana_2020_b.pdf

Comment:

Institutional trust seems very low. Interviewees complain about:

- 1) a lack in municipal service delivery, i.e., waste removal
- 2) a lack in infrastructure provision, i.e., sanitation amenities
- 3) a lack in infrastructure maintenance, i.e., sewage leakage
- 4) the municipality not following through on promises, i.e., building a taxi rank and soccer veld at the school
- 5) the councillors and municipality not addressing their complaints,
- 6) the municipality not creating job opportunities

● IE_*INDIVIDUAL EXPERIENCE

● IE_Subjective well-being

Used In Documents:

 1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf  11 Alabama_2020_a.pdf  13 Freedom Park_2020.pdf

Comment:

As mentioned in Table X, most of the interviewees are very concerned with unemployment. A few interviewees mentioned that they are bothered by the noise from nearby taverns, especially at night.

Two interviewees noted that the South African poor are only trying to survive and do not bother with much else.

No comments captured about subjective well-being from interviewees in Freedom Park, Kanana, KwaDela, Lebohang, Matlwangtlwang, or Zamdela.

● IE_Work-life balance

Used In Documents:

 1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf  12 Alabama_2020_b.pdf  13 Freedom Park_2020.pdf  14 Kanana_2020_a.pdf  15 Kanana_2020_b.pdf  16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Since most of the interviewees does not have jobs, they explained that they do not have much to do during the day. After helping the children to school and/or doing house chores, they:

- sit,
- sleep,
- watch television,
- visit some friends, and
- visit taverns, especially the men.

An interviewee in KwaDela explained that lack in “interesting things to do” induces crimes and unwanted pregnancies.

An interviewee in Freedom Park mentioned going to parks in other parts of the city.

● N_*NATURAL CAPITAL

● N_Environmental quality

Used In Documents:

 1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf  3 Zamdela_2016.pdf  5 Matlwangtlwang_2018_b.pdf  6 Matlwangtlwang_2019_a.pdf  7 Matlwangtlwang_2019_b.pdf  8 Matlwangtlwang_2019_c.pdf  10 Matlwangtlwang_2019_e.pdf  11 Alabama_2020_a.pdf  14 Kanana_2020_a.pdf  16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

The interviewees complained of the following:

1. Garbage pollution in Alabama, KwaDela, Kanana, and Matlwangtlwang.
2. Air pollution in eMbalenhle, KwaDela, Lebohang, and Zamdela.
3. Water pollution in Kanana and Matlwangtlwang.
4. Storm water drainage issues and erosion in Matlwangtlwang.

● N_Food

Used In Documents:

 1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf  3 Zamdela_2016.pdf  4 Matlwangtlwang_2018_a.pdf  7 Matlwangtlwang_2019_b.pdf  9 Matlwangtlwang_2019_d.pdf  14 Kanana_2020_a.pdf

Comment:

Some of the interviewees have enough food, but many can't afford enough for the whole month and go hungry. One interviewee mentioned unemployed family members come to them for help in this matter, further straining an already limited income.

An interviewee in eMbalenhle complained that vegetables will not grow in the soil, but there are vegetable gardens in KwaDela, Lebohang, Kanana, and Matlwangtlwang. In Matlwangtlwang they have to cover the soil with manure to let things grow.

● N_Natural environment

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 4 Matlwangtlwang_2018_a.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 10 Matlwangtlwang_2019_e.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Most of the interviewees indicated a lack of vegetation, causing a dusty environment. An interviewee in Lebohang mentioned a tree and garden near their house which makes him very happy as they like beautifying their surroundings.

Interviewees in Alabama and Kanana mentioned a river close to the settlements and interviewees in Alabama and Matlwangtlwang mentioned soccer fields.

Interviewees in eMbalenhle and KwaDela do not like the weather, since it fluctuates between being too hot and too cold.

● N_Natural Hazards

Used In Documents:

4 Matlwangtlwang_2018_a.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 10 Matlwangtlwang_2019_e.pdf 11 Alabama_2020_a.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

The interviewees listed the following natural hazards:

1. Fires in Alabama and Kanana.
2. Severe winds in Kanana and Matlwangtlwang.
3. Risk of drowning in the river, especially for children, in Kanana.
4. There is a quarry in Matlwangtlwang wherein children have fallen and gotten hurt.
5. Flooding in Matlwangtlwang.

● P_*PHYSICAL SPACE

● P_Housing

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 4 Matlwangtlwang_2018_a.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 10 Matlwangtlwang_2019_e.pdf

Comment:

It seems that they are more concerned with employment than where and how they live.

The household sizes are between 3 and 9 people, but mostly 3-5 people.

Interviewees from Freedom Park, Alabama, and Matlwangtlwang indicated that they live in those settlement since that is what they can afford. Interviewees from Matlwangtlwang explained that they used to work on farms but was retrenched and relocated to be closer to services and job opportunities.

Most of the settlements have both shacks and RDP houses. Interviewees complained that the shacks 1) are dusty, 2) leak when it rains, 3) shake or the roof lift when the wind is blowing, and 4) are not isolated and the temperature changes with the weather. Interviewees living in RDP houses complained that parts of the wall break, and the house shakes when the wind blows and it leaks when it rains.

● P_Housing household

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 7 Matlwangtlwang_2019_b.pdf 11 Alabama_2020_a.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf

● P_Housing quality

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 3 Zamdela_2016.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

● P_Housing reason

Used In Documents:

4 Matlwangtlwang_2018_a.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 10 Matlwangtlwang_2019_e.pdf 11 Alabama_2020_a.pdf 13 Freedom Park_2020.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

● P_Housing type

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

● P_Spatial organisation

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 4 Matlwangtlwang_2018_a.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 10 Matlwangtlwang_2019_e.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Interviewees from eMbalenhle noted that when you live near a tavern, there is constant noise, especially at night. They do not seem very happy about it.

One of the Matlwangtlwang informal settlements are illegally situated next to a main road, they have limited access to shops, and education and health facilities. Some of the interviewees stated that they have an RDP house but choose to live in the shack. The community tap, tavern, soccer field, and library seem important social gathering points within the settlement.

In Alabama spaza shops seem accessible.

Interviewees from Freedom Park mentioned that they socialise in the street and have ready access to shops.

In Kanana shacks pop up overnight and the soccer field was mentioned as an social gathering point.

● S_*SOCIAL CAPITAL

Used In Documents:

5 Matlwangtlwang_2018_b.pdf

● S_Population groups

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 11 Alabama_2020_a.pdf 14 Kanana_2020_a.pdf

Comment:

Interviewees in Alabama noted that there are people from diverse cultures living in the settlement, but that the people from similar cultures usually stick together.

One interviewee in eMbalenhle mentioned status differentiations between those more and less privileged.

There also seem to be a disparity between the gender groups. Men described themselves as respected for being a man and women described them as cruel, not being willing to do house chores and to drink excessively. Women described themselves as carrying a lot of burdens, showing the "men the right way", taking care of the children, cleaning the house and making it beautiful.

● S_Public participation

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 4 Matlwangtlwang_2018_a.pdf 6 Matlwangtlwang_2019_a.pdf 11 Alabama_2020_a.pdf 14 Kanana_2020_a.pdf

Comment:

In Matlwangtlwang, Alabama, and Kanana interviewees mentioned (it seems regular) community meetings with municipal representatives. It seems, however, that not all attend these meetings and an interviewee in Alabama said that the community is not very involved in the decision-making process.

● S_Safety

Used In Documents:

1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf 5 Matlwangtlwang_2018_b.pdf 6 Matlwangtlwang_2019_a.pdf 7 Matlwangtlwang_2019_b.pdf 8 Matlwangtlwang_2019_c.pdf 9 Matlwangtlwang_2019_d.pdf 11 Alabama_2020_a.pdf 12 Alabama_2020_b.pdf 13 Freedom Park_2020.pdf 14 Kanana_2020_a.pdf 15 Kanana_2020_b.pdf 16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Crime seem a commonplace occurrence in eMbalenhle, Lebohang, Matlwangtlwang, Alabama, Freedom Park, and Kanana, with instances of murder, violence, robbery, and rape mentioned by the interviewees. In Matlwangtlwang, Alabama, Freedom Park, and Kanana interviewees blamed it on the lack of police presence and in Lebohang an interviewee blamed it on unemployment. An interviewee from Alabama suggested streetlights for safety at night.

● S_Social interactions

Used In Documents:

 1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf  4 Matlwangtlwang_2018_a.pdf  5 Matlwangtlwang_2018_b.pdf  6 Matlwangtlwang_2019_a.pdf  7 Matlwangtlwang_2019_b.pdf  8 Matlwangtlwang_2019_c.pdf  9 Matlwangtlwang_2019_d.pdf  11 Alabama_2020_a.pdf  12 Alabama_2020_b.pdf  13 Freedom Park_2020.pdf  14 Kanana_2020_a.pdf  15 Kanana_2020_b.pdf  16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

Interviewees mentioned the following places where social interactions occur:

1. In the streets, in Alabama, Freedom Park, and Matlwangtlwang.
2. In houses, in eMbalenhle, KwaDela, Matlwangtlwang, Alabama, and Freedom Park
3. In taverns, in eMbalenhle, Matlwangtlwang, Alabama, and Kanana
4. At sportgrounds, in KwaDela, Matlwangtlwang, Alabama, and Kanana
5. At church, in Lebohang, eMbalenhle, Alabama, and Kanana
6. At the community tap, in Matlwangtlwang
7. At the library, in Matlwangtlwang
8. At a café, in Matlwangtlwang
9. Under trees, in Kanana

● **S_Social network**

Used In Documents:

 1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf  4 Matlwangtlwang_2018_a.pdf  5 Matlwangtlwang_2018_b.pdf  7 Matlwangtlwang_2019_b.pdf  11 Alabama_2020_a.pdf  12 Alabama_2020_b.pdf  13 Freedom Park_2020.pdf  14 Kanana_2020_a.pdf  15 Kanana_2020_b.pdf  16 Matlwangtlwang_2019_e_SNA.pdf

Comment:

The social networks seem to vary. Some interviewees find support in family members and neighbours that look after their children and help in times of need, i.e., when without food. Other interviewees, contrarily, indicated that it is every man for himself.

● **S_Social trust**

Used In Documents:

 1 eMbalenhle, eMzinoni, KwaDela & Lebohang_2013.pdf  11 Alabama_2020_a.pdf

Comment:

The social trust seems low. A few interviewees respectively indicated that they trust only their child, their grandmother, the ladies at the church or no one. An interviewee also said that it's "asking for trouble" to complain about the noise from the tavern and others mentioned neighbours gossiping, arguing with neighbours, and family members looking down on the less fortunate members. It was also noted that there is an alcohol problem amongst the youth and men.