

**An investigation into the effect of COVID-19 on the
spatial dimension of a South African university town:
the case of Westdene**

by

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Abstract

This research explores the effect of the coronavirus disease 2019 (COVID-19) on the spatial dimension of Westdene, a residential neighbourhood adjacent to the largest campus of University of Johannesburg (UJ), the Auckland Park Kingsway (UJ APK) Campus, defined as a university town. Notably, studies on university towns conceptualised the associated social, cultural, economic and physical factors, collectively referred to as the spatial dimension, through studentification and destudentification. More specifically, studentification and destudentification were used to describe transformations within university towns attributable to increasing and decreasing student populations, respectively. Although reports highlight effects of COVID-19 on various aspects of society, there is no empirical evidence on its effects on the spatial dimension of Westdene; this university town is located in Johannesburg, the largest city in South Africa. This paucity thus warrants an investigation into the effect of COVID-19 on the spatial dimension of Westdene, through the conceptual lens of studentification and destudentification.

To provide answers to the theoretical concepts, an embedded single-case study approach, employing a multi-method qualitative research approach, was adopted for the empirical exploration. This research design enabled the investigation of real-world contextual conditions within Westdene, using interviews and field observations. The interviews focused and reflected on the experiences and interpretations of owners of UJ-accredited privately owned student accommodation (POSAs), owners/representatives of local businesses, and members of community engagement and policing forums. Photographs taken in the field complemented the interviews by depicting various aspects of and within Westdene relevant to the study, including: UJ APK Campus and its associated student facilities; identifiable private student housing; local businesses; public space and infrastructure; general state of the environment; and neighbourhood safety and security measures. Notably, the rationale for the choice of the techniques and procedures encapsulated by the effective research methodology were underpinned by theoretical concepts of effective research designs and ethical research.

The findings in respect of the spatial dimension of Westdene prior to the COVID-19 pandemic primarily supported studentification literature, given various occurrences noted in Westdene, including: rapid population and demographic restructuring; increased criminal activities; incompatible lifestyles; increased business activity; and increased physical and environmental issues. Contrastingly, the advent of COVID-19 led to various occurrences noted in Westdene that primarily supported destudentification literature, including: student depopulation; fluctuating levels of criminal activities; decrease in student activities; decreased business activity; and decreasing neighbourhood maintenance. Notwithstanding these occurrences, some current and potential ‘positive’ occurrences were also noted in Westdene, which invalidated the proposition that COVID-19 (only) negatively affected the spatial dimension of Westdene. These findings thus bring to the fore further critical propositions, buttressed by the existing body of knowledge, for which further research is required.

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Table of contents

Plagiarism declaration	ii
Abstract	iii
Acknowledgements	iv
Table of contents	v
List of figures	ix
List of tables	xi
Glossary	xii
List of abbreviations and acronyms	xiii
1. Introduction	1
1.1 Introduction and subject of research	1
1.2 Background to the study	3
1.3 Towards the research problem	3
1.4 Problem statement	4
1.5 Research question	4
1.6 Research aim	4
1.7 Research proposition	4
1.8 Research objectives	5
1.9 Overview of research method	5
1.10 Significance and practical applications of research	5
1.11 Limitations of research approach	6
1.12 Scope of the study	6
1.13 Ethical implications	7
1.14 Structure of the dissertation	7
2. Literature review	9

2.1	Introduction to literature review	9
2.2	Overview of the spatial dimension of university towns	9
	2.2.1 Definition of spatial dimension	9
	2.2.2 University towns and the student space	10
	2.2.3 Overview of studentification	11
	2.2.4 From studentification to destudentification	15
2.3	Intersections of COVID-19 and the global student space	18
	2.3.1 Overarching impact of COVID-19 on HE stakeholders	18
	2.3.2 Broad impact of COVID-19 on global university towns	19
2.4	Discourses in the South African context	20
	2.4.1 Contributory factors to the growth of South African university towns	21
	2.4.2 Establishment and growth of the Johannesburg student space	21
	2.4.3 Spatial dimension of the Johannesburg student space	22
	2.4.4 Localised impact of COVID-19 considered in the case study	23
2.5	Summary of literature review	24
3.	Research methodology	25
3.1	Introduction to research methodology	25
3.2	Theoretical context of research approach	25
	3.2.1 Overview of research approach framework	25
	3.2.2 Pragmatist research philosophy	26
	3.2.3 Abductive theory development	27
	3.2.4 Multi-method qualitative approach	27
	3.2.5 Case study research strategy	28
	3.2.6 Cross-sectional time horizon	28
3.3	Data collection and analysis techniques	29
	3.3.1 Description and context of the case study area	29
	3.3.2 Semi-structured interview schedule and procedure	31
	3.3.3 Sampling and recruitment of research participants	33
	3.3.4 Field observations	34
	3.3.5 Qualitative data analysis	36

3.4	Strengths and limitations of the research approach	37
3.5	Ethical considerations	39
3.6	Summary of research methodology	40
4.	Research findings	41
4.1	Introduction to research findings	41
4.2	Findings from semi-structured interviews	41
4.2.1	Insights from private student housing owners	42
4.2.2	Insights from local business owners/representatives	44
4.2.3	Insights from community engagement and policing forum members	47
4.3	Results from field observations	49
4.3.1	Insights on observed UJ student facilities	50
4.3.2	Insights on observed identifiable private student housing	51
4.3.3	Insights on observed local businesses	51
4.3.4	Insights on observed general physical and environmental attributes	52
4.3.5	Insights on observed neighbourhood safety and security measures	53
4.4	Additional factors noted during data collection and analysis	54
4.5	Summary of research findings	55
5.	Discussion of findings	56
5.1	Introduction to discussion of findings	56
5.2	Demographic structure of Westdene	56
5.3	Safety and security within Westdene	57
5.4	Lifestyle behaviours within Westdene	58
5.5	Business activity within Westdene	59
5.6	Physical and environmental conditions within Westdene	60
5.7	Summary of discussion of findings	61
6.	Conclusions and recommendations	62
6.1	Introduction to conclusions and recommendations	62
6.2	Research background and purpose	62
6.2.1	Exploration of meaning and evolution of spatial dimension	63

6.2.2	Examination of role of COVID-19 in spatial dimension of Westdene	63
6.2.3	Substantiation of effect of COVID-19 on spatial dimension Westdene	64
6.3	Ripostes to the research question and preliminary proposition	64
6.4	Implications of the research findings	66
6.5	Research limitations	66
6.6	Suggested further research	67
	References	68
	Appendices	90
	Appendix A: semi-structured interview questions	90
	Appendix B: codes and themes from qualitative data analysis	94
	Appendix C: evidence of ethics clearance	96
	Appendix D: informed consent form	97
	Appendix E: field observation photographs	100

List of figures

Figure 2-1: Model representation of the factors of destudentification	15
Figure 2-2: Process-based conceptualisation of destudentification	17
Figure 2-3: Shifts in the mode of HE teaching and learning in 53 surveyed countries during the COVID-19 pandemic	19
Figure 3-1: Framework of the effective research methodology.....	26
Figure 3-2: Arial view of the case study location	31
Figure A-1: Common themes established from the initial codes.....	95
Figure A-2: Received confirmation email in respect of ethics clearance	96
Figure A-3: Permanently-closed ‘Last steps of UJ’	100
Figure A-4: Entrance to the UJ APK Campus on Perth Road/Kingsway Avenue	100
Figure A-5: UJ APK Campus off-campus student parking facility (left) with a pedestrian bridge (background) leading to the campus (right).....	100
Figure A-6: Taxi (left) and e-hailing vehicles (right) dropping off UJ students	101
Figure A-7: Gloucester Female Residence (foreground) and UJ Stadium (background).....	101
Figure A-8: UJ venues for netball and tennis (left), hockey (middle) and cricket (right)	101
Figure A-9: COVID-19 signage at the entrance to UJ student facilities	102
Figure A-10: Student commune/HMO (left) and a PBSA (right) opposite UJ on-campus residences (background)	102
Figure A-11: Series of student communes/HMOs (left) and a PBSA (right).....	102
Figure A-12: Signage and marketing material advertising student accommodation	103
Figure A-13: Signage and marketing material advertising rental accommodation	103
Figure A-14: Student housing property (background) that was on the market.....	103
Figure A-15: Construction material outside private student housing properties	104
Figure A-16: Alcohol bottles discarded outside private student housing properties	104
Figure A-17: Signage with conduct rules on private student housing and rental properties	104
Figure A-18: Local businesses near or adjacent to arterial and collector/distributor roads.....	105
Figure A-19: Local business with a trading name that includes the term “UJ”.....	105
Figure A-20: Mobile (left) and street (right) vendors	105
Figure A-21: Temporarily- and/or permanently-closed local businesses	106

Figure A-22: Local business premises that was on the market.....	106
Figure A-23: E-hailing drivers transporting passengers (left) and delivering food (right) to private student housing	106
Figure A-24: Taxis and tuk-tuk taxis transporting passengers to/from local businesses.....	107
Figure A-25: Construction material outside residential properties	107
Figure A-26: Residential property adjacent to UJ student facilities and private student housing that was on the market	107
Figure A-27: Advertisements for property sales and management services.....	108
Figure A-28: Dilapidated residential property	108
Figure A-29: Graffiti on residential properties' walls	108
Figure A-30: Graffiti on UJ student facilities' walls	109
Figure A-31: UJ Exiles Park (left) and the grounds of the Westdene Dam (right)	109
Figure A-32: Brightly-coloured bollards and dropped curbs at street intersections	109
Figure A-33: Drains clogged by litter (with water seeping on the right).....	110
Figure A-34: damaged and/or unkept pedestrian walkways.....	110
Figure A-35: Marketing material plastered on public infrastructure	110
Figure A-36: Vandalised/tampered boxes atop utility power poles with connections leading to private student housing (left) and local businesses (right).....	111
Figure A-37: Vandalised/tampered free-standing electricity meter boxes close to local businesses (left) and outside the Gloucester Female Residence (right).....	111
Figure A-38: Road excavations that were fenced adequately (left) and poorly (right)	111
Figure A-39: Recycling sorted by a household (left) for on-demand collection (right).....	112
Figure A-40: Students walking (left) and other youth skating (right) in quiet streets	112
Figure A-41: Private security guards (left) and police (right) vehicular patrols.....	112
Figure A-42: Community policing signage and public surveillance cameras	113
Figure A-43: Private security guardhouses on residential streets	113
Figure A-44: Private security measures at properties	113

List of tables

Table 2-1: Factors affected by the conceptual process of studentification 13

Table 2-2: Predefined checklist to identify studentified neighbourhoods 14

Table A-1: Codes and common themes derived inductively from the collected data 94

Glossary

Destudentification	The process of social, cultural, economic and physical change in an area attributable to a large number of students vacating therefrom (i.e. ‘emptying’ of university towns).
Higher education institution	A provider of post-secondary or tertiary education such as a university or university college.
Spatial dimension	The combination of the social, cultural, economic and physical factors within an area attributable to the student population therein (i.e. the combined factors of either studentification or destudentification), as described by Donaldson et al. (2014).
Student	An individual receiving post-secondary or tertiary education at a higher education institution.
Studentification	The process of social, cultural, economic and physical change in an area attributable to a large number of students settling therein (i.e. ‘invasion’ of university towns).
University town	Particular areas of cities or towns wherein higher education institutions are located and which tend to be dominated by students.

List of abbreviations and acronyms

BRT	bus rapid transit (system)
CHE	Council on Higher Education
CAQDAS	Computer Assisted Qualitative Data Analysis
CID	City Improvement District
CoF	Corridors of Freedom
CoJ	City of Johannesburg (Metropolitan Municipality)
COVID-19	Coronavirus disease 2019
DHET	Department of Higher Education and Training
GPF	Gauteng Property Fund
HE	higher education
HEI	higher education institution
HMO	house in multiple occupation
IFC	International Finance Corporation
JDA	Johannesburg Development Agency
ISFAP	Ikusasa Student Financial Aid Programme
NCOP	National Council of Provinces Committee
NSFAS	National Student Financial Aid Scheme
OECD	Organisation for Economic Co-operation and Development
PBSA	purpose built student accommodation
PIC	Public Investment Corporation
POSA	privately owned student accommodation
PPP	Public-Private Partnership
RAU	Rand Afrikaans University
SA Cities	South African Cities Network
Stats SA	Statistics South Africa
UCT	University of Cape Town
UDZ	Urban Development Zone
UJ	University of Johannesburg

UJ APK	UJ's Auckland Park Kingsway (Campus)
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
US	United States
USAf	Universities South Africa
WHO	World Health Organisation
Wits	University of the Witwatersrand
WSRA	Westdene-Sophiatown Residents' Association

1. Introduction

1.1 Introduction and subject of research

The outbreak of the coronavirus disease 2019 (COVID-19) was declared a pandemic in early 2020 (World Health Organisation, WHO, 2021). This declaration led governments to adopt strict measures to limit the rampant transmission of COVID-19 and its variants, particularly in public areas (Honey-Rosés et al., 2020; Phillips, 2021; Salyer et al., 2021; Teslya et al., 2020). Moreover, economic disruptions were experienced globally (Jackson et al., 2021; Organisation for Economic Co-operation and Development, OECD, 2020; Vitenu-Sackey & Barfi, 2021). Whilst every aspect of society was affected by COVID-19, the areas hosting higher education institutions (HEIs) and their students, termed ‘university towns’, faced unique challenges due to their target market and composition. These challenges were underpinned by global HEI closures, which led to the mass displacement and repatriation of students (World Bank, 2020a; 2020b). The forced decampment of students back to their homes, pursuant to study-at-home policies, affected student accommodation and other student services (United Nations Educational, Scientific and Cultural Organization, UNESCO, 2020b). However, there is no empirical evidence on the effect of COVID-19 on the ‘spatial dimension’ of South African university towns. Notably, these concepts relating to university towns are defined and discussed further herein.

The term ‘urban spatial structure’ is frequently used to denote and discuss the distribution of activity within a metropolitan area (Krehl, 2015). Moreover, this distribution is seen as a ‘morphological dimension’, given that the notion thereof is multifaceted and encompasses the distribution of population, land uses, built-up volumes, transportation networks and employment (Krehl, 2015; Parr, 2014). According to Farber and Li (2013), this understanding of urban spatial structure can be completed by functional features such as interactions between people and infrastructure, flows of goods and services, and face-to-face engagements among people in the urban space. Notably, the production of urban space is scarcely explored in urban and historical studies, with the urban setting (e.g. cities) still primarily seen as the frame in which activities and social relationship develop, not a produce in itself (Gauthiez, 2020). In the case of university towns, Donaldson et al. (2014) referred to the combination of the social, cultural, economic and physical factors attributable to student populations therein as the ‘spatial dimension’. This term, which was applied in a similar fashion in this research when making references to university towns, was predicated on earlier literature on ‘studentification’ and ‘destudentification’.

Studies on university towns, primarily in the Global North, conceptualised the social, cultural, economic and physical factors attributable to increasing student populations through ‘studentification’ (see Smith, 2005; Smith & Holt, 2007; Smith, Sage & Balsdon, 2014). Notably, the first and second ‘wave’ of studentification were spurred by the proliferation of houses in multiple occupation (HMOs) and purpose built student accommodation (PBSAs), respectively (Allinson, 2006; Rugg, Rhodes & Jones, 2000; 2002; Smith, 2007; 2008). This growth in private student housing demonstrated the strong economic incentive to provide student accommodation

(Newell & Marzuki, 2018) amidst students' increasing purchasing power (Chatterton, 2010b; Hubbard, 2009). Student accommodation was therefore rarely discussed outside of discourses on studentification (Reynolds, 2020; Simpeh & Akinlolu, 2020). When striving to understand university towns and studentification therein, Chatterton (2010b), noted four key themes thereto, namely: (1) the role of neoliberal regulatory environments in shaping student life and the consumption-oriented student city; (2) the role businesses in the 'student urban service sector' targeting student populations; (3) students' representation as a monetarised and commodified persona; and (4) the role of HEIs and students in the (re)shaping and (re)generation of urban landscapes.

Whilst university towns and transformations therein were often viewed in the context of studentification, Smith (2008) identified a converse phenomenon, termed 'destudentification'. Smith (2008) defined destudentification broadly as the reduction of the student population within a previously student-dominated or studentified neighbourhood, leading to the decline in social, cultural, economic, and physical attributes thereof. Notably, this reduction in the student populations within previously student-dominated areas was also referred to as 'student exodus' (Kinton, 2013; Kinton, Smith & Harrison, 2016). Notwithstanding its original conceptualisation, destudentification was also seen as a by-product of alternative student housing options and, in some cases, the decline in (local) student enrolment (Hubbard, 2009; Kinton, 2013; Kinton, Smith & Harrison, 2016; Kinton et al., 2018; Mulhearn & Franco, 2018; Sage, Smith & Hubbard, 2012a; 2013; Smith, 2008). When proposing a process-led definition of destudentification, with due consideration for the underlying private student housing, Kinton, Smith and Harrison (2016) Kinton, Smith and Harrison (2016) identified three distinct stages thereto, namely: (1) emptying of bedspaces; (2) transitioning from full/partial occupancy to empty properties; and (3) complete emptying of streets or areas. However, explorations of destudentification thus far are limited to the United Kingdom (UK).

The advent of COVID-19 ushered in new variables worth considering when investigating the spatial dimension of South African university towns. Notably, South African HEIs implemented physical closures during the COVID-19 pandemic and embraced 'physically distanced learning', marked by the rapid shift to online learning (Monama, 2021; Naidu, 2021). Furthermore, the South African government also targeted the National Student Financial Aid Scheme (NSFAS) budget, particularly allowances for off-campus student accommodation, as part of its de facto austerity measures during the COVID-19 pandemic (Department of Higher Education and Training, DHET, 2021c; National Council of Provinces, NCOP, 2021; NSFAS, 2021; Steinacker, 2021). Several studies therefore mapped the broad impacts of COVID-19 on the diverse stakeholders of South African HEIs (see DHET, 2021c; Hedding et al., 2020; Human Sciences Research Council, HSRC, 2021; Kanyumba & Shabangu, 2021; Universities South Africa, USAf, 2020; Wangenge-Ouma & Kupe, 2020). Moreover, emerging sectoral studies broadly assessed the impact of COVID-19 on the South African private student housing sector, and found negative effects thereto (see International Finance Corporation, IFC, 2020; Jones Lang

LaSalle, 2021). However, there is no empirical evidence on the effect of COVID-19 on the spatial dimension of South African university towns, particularly in Johannesburg.

1.2 Background to the study

The study herein investigates the effect of COVID-19 on the spatial dimension of a university town in Johannesburg, the largest city in South Africa. Notably, this dimension comprises the social, cultural, economic and physical factors attributable to the student population therein, as defined in and predicated upon the literature in Chapter 2. The study is set in Westdene, a residential neighbourhood adjacent to the largest campus of the University of Johannesburg (UJ), the Auckland Park Kingsway (UJ APK) Campus. The choice of ‘the case’ is justified in Chapter 3. For further context, UJ was established through a merger of preexisting HEIs, as part of the postapartheid transformations of the South African higher education (HE) system (Akoojee & Nkomo, 2007; Bunting, 2006; Council on Higher Education, CHE, 2016; Jansen, 2004; Lange, 2017; UJ, 2006). Several studies linked observable factors of parts of Johannesburg to the UJ student population, particularly students residing in HMOs and PBSAs therein (see Gregory, 2020; 2019a; Gregory & Rogerson, 2019b; Ijasa & Ahmed, 2016; Khanyile et al., 2021). More specifically, a UJ student quoted by Gregory and Rogerson (2019a:96) stated: “Westdene is already known as a student neighbourhood”. Westdene was thus taken as being a university town.

In principle, the spatial dimension of cities and towns hosting major South African HEIs served as a guideline for the study herein. Notably, extant discourses on South African university towns, which were published prior to the COVID-19 pandemic, mirrored the concerns of the Global North, focusing primarily on ‘student population impact on residential areas and property markets’ (Mzileni, 2018; Mzileni & Mkhize, 2019). Gbadegesin et al. (2021) also noted ‘planning consequences of studentification’ as an emerging, albeit underexplored, theme in these studies. The advent of COVID-19 therefore presented a unique context in which to investigate the spatial dimension of South African university towns. In the case of Johannesburg, the advent of COVID-19 led to a sharp decrease in student housing occupancy rates, particularly in UJ-accredited privately owned student accommodation (POSAs) (UJ, 2021). Subsequently, UJ decided not to consider new POSA applications in 2021, due to low demand thereof (Mabuza, 2021). This change in the number of UJ students residing off campus in Johannesburg during the COVID-19 pandemic implied a subsequent effect on the spatial dimension thereto, particularly in the areas near to the UJ APK Campus. However, there is no empirical evidence thereto.

1.3 Towards the research problem

Whilst COVID-19 affected every aspect of society, student-dominated areas, termed university towns, faced unique challenges due to their target market and composition. Notably, studies on university towns conceptualised the associated social, cultural, economic and physical factors,

collectively referred to as the spatial dimension, through studentification and destudentification. More specifically, studentification and destudentification were used to describe transformations within university towns attributable to increasing and decreasing student populations, respectively. These concepts were widely explored in university towns in the Global North, with limited research in the Global South in general, and South Africa in particular. Moreover, there was a paucity of discourses on university towns that considered the impact of the COVID-19 pandemic. In the case of Johannesburg, the largest city in South Africa, several reports noted a decrease in off-campus student populations therein during the COVID-19 pandemic, particularly at UJ. This change implied a subsequent effect on the spatial dimension of areas inextricably linked to UJ's off-campus student population. However, there is no empirical evidence on the effect of COVID-19 thereto, particularly in Westdene, a residential neighbourhood adjacent to the largest campus of UJ, the UJ APK Campus, defined as a university town.

1.4 Problem statement

Although reports highlight effects of COVID-19 on various aspects of society, there is no empirical evidence on its effects on the spatial dimension of Westdene; Westdene, a residential neighbourhood adjacent to the largest campus of UJ, the UJ APK Campus, defined as a university town. This paucity thus warrants an investigation into the effect of COVID-19 on the spatial dimension of Westdene, through the conceptual lens of studentification and destudentification.

1.5 Research question

The specific question, for which answers were sought to address the research problem, is:

What was the effect of COVID-19 on the spatial dimension of Westdene?

1.6 Research aim

The aim of this research is to investigate the effect of the COVID-19 pandemic on the spatial dimension of Westdene.

1.7 Research proposition

The research proposition is:

The COVID-19 pandemic had a negative effect on the spatial dimension of Westdene.

1.8 Research objectives

Within the overall aim, the research objectives to be achieved are to:

- i) Explore the meaning and evolution of the spatial dimension of a university town.
- ii) Examine the role of the COVID-19 pandemic in the spatial dimension of Westdene attributable to the UJ student population therein.
- iii) Substantiate the effect of the COVID-19 pandemic on the spatial dimension of Westdene, through the conceptual lens of studentification and destudentification.

1.9 Overview of research method

The objectives of the study were achieved by adopting the research method as follows:

- i) Literature review of matters related to the spatial dimension of university towns.
- ii) Single-case study of Westdene, commencing with a review of literature and data related to the UJ student population therein, and associated spatial dimension.
- iii) Semi-structured interviews with key informants based in Westdene, including: owners of UJ-accredited private student housing (i.e. POSAs); owners/representatives of local businesses; and members of community engagement and policing forums.
- iv) Field observations through observational walkabouts of Westdene, with photographs and descriptive notes taken in the field.
- v) Collective analyses, and interpretation of the collected research data.
- vi) Conclusions and recommendations for further research.

1.10 Significance and practical applications of research

Scholarship on towns and cities that host HEIs is extremely diverse and widely applicable in the Global North. However, there are few cases where this topic is explored alongside the empirical realities of the Global South in general, and South Africa in particular. Moreover, there is no empirical evidence on the impact of the COVID-19 pandemic on the spatial dimension of South African university towns, particularly those in Johannesburg. This dimension comprises the social, cultural, economic and physical factors attributable to the UJ student population therein. There is thus sufficient scope for such research in urban studies in general, and discourses on studentification and destudentification in particular. This scope is further supported by the numerous measurable benefits that exist for researchers who adopt the results of this research. These benefits include new impetus for the creation (or enhancement) of a conceptual framework to unpack the spatial dimension of university towns, during a global crisis.

Over and above the benefits of this research to academia, it may also lead to the realisation of equitable and sustainable objectives within university towns. In the case where this research's findings are successfully interpreted, local governance bodies may apply them to their envisaged urban planning, development, management, and resilience goals. In addition, strategic stakeholders within HEIs and their host areas may be informed by sound research when navigating the emerging challenges of university towns. Essentially, this research will add to the informed basis whence post-COVID-19 decision-making involving all stakeholders of university towns stems. More specifically, congruency amongst stakeholders of university towns is viewed as a logical solution, both for the present and the foreseeable future. The long-term direct benefit of this research will thus be the realisation of various targets linked to desirable spatial dimensions of university towns in South Africa in general, and Johannesburg in particular. In light of these collective factors, it may be concluded that this research is timely in its exploration.

1.11 Limitations of research approach

The research limitations include:

- i) Findings of the single-case study may not lend themselves to results that are generalisable.
- ii) A truly representative sample from all the neighbourhoods and stakeholders located near UJ campuses posed a challenge due to resource and time constraints.
- iii) Accurately tracking the change in the spatial dimension of Westdene prior to and during the COVID-19 posed a challenge as there was insufficient secondary data thereto.
- iv) Data collection was hindered by the ongoing COVID-19 pandemic, which also rendered some sought research participants unreachable and parts of the study area inaccessible.
- v) A longitudinal 'in situ' approach to observing and gathering data on the study area (i.e. for a longer period of time) was hindered by the time and resources available for this research.
- vi) Some research participants were unwilling to share key information required by the study, particularly the business performance of private student housing and local businesses.
- vii) Information obtained through the semi-structured interviews may be subjective as research participants were providing their own opinions.

1.12 Scope of the study

This research explores the effect of COVID-19 on the spatial dimension of Westdene, a residential neighbourhood adjacent to the UJ APK Campus, defined as a university town. This dimension comprises the social, cultural, economic and physical factors attributable to the UJ student population therein. To provide answers to the theoretical concepts, an embedded single-case study approach, employing a multi-method qualitative research approach, was adopted for

the empirical exploration. Notably, this research approach leveraged the principles of pragmatism, which was deemed to be the most relevant research philosophy for this research. The chosen research design enabled the investigation of real-world contextual conditions within Westdene, using interviews and field observations. The first stage of the data collection involved semi-structured interviews with key informants, including: owners of UJ-accredited private student housing (i.e. POSAs); owners/representatives of local businesses; and members of local governance and community bodies. Field observations complemented the interviews as the second stage of the data collection, with the qualitative ‘data’ collected being photographs, accompanied by descriptive notes. Any other insights that may have been missed in the literature were solicited from the research participants and duly noted whilst in the field, including entry decisions to mitigate some of the highlighted issues.

1.13 Ethical implications

All necessary measures were taken to ensure that this research conformed to the guidelines for ethics in research and associated ethics clearance requirements stipulated by the Faculty of Engineering and the Built Environment at the University of Cape Town (UCT) (see UCT, 2018). As per these guidelines, informed consent was obtained from the research participants to participate in this research, with utmost care taken not to distort perspectives thereof. Similarly, consent was obtained from persons at or near photographed areas in the field; identifiers were concealed on applicable photographs. The subsequent uses of the research data was subject to standard data use policies, which protect anonymity of individuals and institutions. The confidentiality of the research participants was thus maintained by excluding identifiers of research participants from the research findings herein, and substituting pseudonyms for identifiers thereof. This measure, which entailed the use of sought to minimise threats to ‘internal confidentiality’ (i.e. identifying research participants) through deductive disclosure. From a data management perspective, the collective research data were stored in the researcher’s digital devices and UCT’s data repository services, with only the researcher having access to the data. Notably, the prevailing COVID-19 regulations were strictly adhered to whilst in the field.

1.14 Structure of the dissertation

This dissertation is organised into ten chapters, namely:

Chapter 1 (Introduction) presents a basis and purpose for the research and forms its overview, outlining the overarching questions, aim, proposition, objectives, methodology, significance, limitations and scope of the research.

Chapter 2 (Literature review) presents the secondary data of the research, with a comprehensive summary of the existing body of knowledge on the subject of the study.

Chapter 3 (Research methodology) serves as a guide to the research approach and data gathering and analysis process used in the study, and details the theoretical concepts of scientific research and research design, and rationale for the chosen research techniques and procedures.

Chapter 4 (Research results) presents the primary data of the research collected through the chosen research techniques and procedures employed in the field.

Chapter 5 (Discussion of findings) summarises the findings of the research, with a discussion of the mean of the case study results in relation to the theoretical body of knowledge, to answer the ‘so what?’ research question, congruent with the practical implications of the research.

Chapter 6 (Conclusions and recommendations) integrates the verdicts of each chapter into a global conclusion, enables the problem statement and proposition of the research to be reviewed, discussed and modified (where necessary), and presents proposals for further research in the area.

References presents a detailed list of references referred to or cited in the text.

Appendices serves as a repository of the subsidiary material that is too detailed to include in the main chapters, such as raw data (including photographs) and resources related to the case study.

The functions that assist the navigation of the electronic version of the dissertation are:

- Clicking on the text with the researcher’s name and dissertation course details at the bottom of any page returns the reader to the first page of the table of contents.
- Clicking on the chapter headings at the bottom of any page returns the reader to the first page of the indicated chapter.
- Clicking on the entries in the table of contents, tables and figures sends the reader to the indicated page, table and figure, respectively.
- Clicking on the cross-reference mentions of chapters, sections, tables and figures within the text sends the reader to the first page of the indicated chapter and section, and indicated table and figure, respectively.

2. Literature review

2.1 Introduction to literature review

In Chapter 1, a motivation was provided for an investigation into the effect of the coronavirus disease 2019 (COVID-19) on the spatial dimension of a university town in Johannesburg, the largest city in South Africa. Notably, this dimension comprises the social, cultural, economic and physical factors attributable to the student population therein. The introduction outlined the overarching questions, aim, proposition, objectives, methodology, significance, limitations and scope of this research. This current chapter sets the broad context of this research, within a scholarly and historical context. The literature review begins by defining ‘spatial dimension’, followed by overviews of the transformations within university towns attributable to both increasing and decreasing student populations. These overviews are followed by a discussion on the global impact of the COVID-19 pandemic on the various factors and stakeholders within university towns. The chapter then concludes by framing the case study, through extant literature on university towns in South Africa in general, and Johannesburg in particular.

2.2 Overview of the spatial dimension of university towns

The knowledge economy, to which higher education (HE) is an important factor, has been linked to novel transformations and phenomena associated with youthification—the concentration of young adults in high-density urban areas, and the concept of ‘forever young’ neighbourhoods (Moos, 2016; Revington et al., 2020). Furthermore, Zimpher (2012) saw higher education institutions (HEIs) as ‘anchor institutions’ within their locations, given their socioeconomic contribution therein. The rise of the knowledge economy therefore ushered in changes in the (social) geographies of urban areas, particular in neighbourhoods hosting major HEIs (Foote, 2017). Given the impacts of HEIs and their students on urban and neighbourhood change, researchers often refrained from isolating both from the urban context (Chatterton, 1999; 2010b). Notably, Revington (2018) argued for the continued examination of the place-based and spatial underpinnings of student pathways, and connections with various urban phenomena. This sentiment thus brings to the fore questions on how these spaces are formed and transformed.

2.2.1 Definition of spatial dimension

The term ‘urban spatial structure’ is frequently used to denote and discuss the distribution of activity within a metropolitan area (Krehl, 2015). Moreover, urban spatial structure is seen as a ‘morphological dimension’, given that the notion thereof is multifaceted and encompasses the distribution of population, land uses, built-up volumes, transportation networks and employment (Krehl, 2015; Parr, 2014). This understanding of urban spatial structure can be completed by functional features such as interactions between people and infrastructure, flows of goods and

services, and face-to-face engagements among people in the urban space (Farber & Li, 2013). Notably, the production of urban space is scarcely explored in urban and historical studies, with the urban setting (e.g. cities) still primarily seen as the frame in which activities and social relationships develop, not a produce in itself (Gauthiez, 2020). In the case of student-dominated areas, termed university towns, Donaldson et al. (2014) referred to the combination of the social, cultural, economic and physical factors attributable to student populations therein as the ‘spatial dimension’. This term, which was adopted throughout this research in reference to university towns, is underpinned by literature on ‘studentification’ and ‘destudentification’, which are discussed further in Section 2.2.3 and Section 0, respectively.

2.2.2 University towns and the student space

Globally, students often competed to enter the ‘best’ HEIs that they can, irrespective of location, geared by strongly hierarchical HE systems (Munro & Livingston, 2012). As a result, the majority of students often chose to study away from home, which necessitated being located nearer to their chosen HEIs (Smith & Hubbard, 2014). The life course of students attending HEIs was thus typified by their term-time stay in the neighbourhoods hosting their HEIs (i.e. university towns) (Heath, 2008; Smith & Hubbard, 2014). Becoming a student therefore interweaved a protected pathway of leaving home for ‘sheltered’ spells in university towns, often in private student housing (Holloway et al., 2010). Furthermore, Holloway et al. (2010) posited that students who remain in their parental homes throughout their studies often suffered diminished HE choices, independence and, ultimately, ‘authentic’ student life. Notably, students from suburban, middle-class households were often the primary beneficiaries of the long-term benefits of the pathway towards university towns (Bailey, 2009).

The spatial and temporal frameworks of HEIs created a student space or habitus (i.e. university towns), wherein student populations acted as a distinctive group with their own culture and lifestyle (Chatterton, 1999). Moreover, university towns saw the emergence of a diverse ethnic and religious profile of students (Kenna & Murphy, 2021). This diverse student profile stemmed primarily from the internationalisation and globalisation of the HE sector, marked by an increase in international students at HEIs globally (Bamberger, Morris & Yemini, 2019; Brooks & Waters, 2011; Calderon, 2018; Scott, 1998). Notably, student lifestyles were often constructed temporally (e.g. on weeknights) and spatially (in particular parts of cities) (Chatterton, 1999; Revington, 2018). Furthermore, the geographic concentration of students were sometimes encouraged by a ‘pub-culture’ (Sabri & Ludin, 2009). These constructs saw students involved in a “process (that) represents annual learning of student rites and a distancing from the student infrastructure as (they) acculturated into less ‘typical’ student activities within the city” (Chatterton, 1999:122). Overall, students living in university towns were seen as more easily integrated, academically and socially, and enjoyed fulfilling living and learning experiences (Tinto, 1993; 2010). Very seldom did students avoid socialising and adopting student lifestyles in university towns (Wattis, 2013).

One of the broad streams of demands derivatively meted out to HEIs was increasing student enrolment, as HEIs increasingly embraced entrepreneurial postures (Clark, 1998; Guerrero et al., 2016). Concurrently, the notion of ‘students-as-consumers’ intensified as HE was increasingly packaged as a private investment (Brooks, Byford & Sela, 2016), rather than “a public good and a strategic imperative” (United Nations Educational Scientific and Cultural Organization, UNESCO, 2009:1). As student populations grew around HEIs, they merged with post-student and young professionals in the ‘youth and consumer-oriented city’, and became the targets of various businesses (Chatterton, 2010a). Notably, international students’ lifestyles often mobilised economic sectors that differed from those targeting local residents (Calvo, 2018). University towns therefore saw the emergence of students who did not fit the “stereotypical, cash-restricted, student lifestyle” that Holton & Riley (2013:64) had previously argued (Kenna & Murphy, 2021; Kinton et al., 2018). This perspective on students led to the commodification of student lifestyles, a vibrant theme explored in extant literature on university towns (see Chatterton, 1999; 2010b; Holloway et al., 2010; Kenna & Murphy, 2021; Kinton et al., 2018).

2.2.3 Overview of studentification

The overflow of student populations into university towns, created by expansive HE policies (absent adequate student housing), was the root cause of studentification (Nakazawa, 2017; Smith, 2005). Smith (2005:74) defined studentification as the process that “engenders the distinct social, cultural, economic and physical transformations within university towns, which are associated with the seasonal, in-migration of HE students”. Moreover, Donaldson et al. (2014) referred to the combination of the resultant social, cultural, economic and physical factors as the spatial dimension of university towns. These neologisms initially conceptualised transformations within towns and cities that host HEIs in the United Kingdom (UK), resulting from increasing concentrations of students and housing thereof (Smith 1999; Smith, Sage & Balsdon, 2014). Notably, the relationship between ‘town and gown’ was well-recognised in prior research, primarily in the Global North, albeit with students relegated to the periphery thereof (Nakazawa, 2017). As studentification increasingly transcended its Anglophonic roots (Gu & Smith, 2020), studies emerged from the Global South, including: Zimbabwe (see Matamanda, Dube & Campbell, 2021); Latin America (see Prada, 2019); and Southeast Asia (see Dewi, Ristianti & Debby, 2019).

The ‘first wave’ of studentification was ushered in by the transformation of family housing adjacent to HEIs into houses in multiple occupation (HMOs), shared by students (Allinson, 2006; Rugg, Rhodes & Jones, 2000; 2002; Smith 2007; Smith, 2008). Nakazawa (2017) referred to this nascent stage of studentification as ‘HMO-isation’. The ‘second wave’ of studentification saw the rapid increase of purpose built student accommodation (PBSAs) (Smith, 2007; 2008). These new student housing developments were located on brownfield sites, away from preexisting ‘studentified’ areas, and thus acted as ‘de facto gated communities’ (Hubbard, 2009). The PBSA segment, which offered a more ‘exclusive student experience’, supported by additional

amenities, enjoyed wide-ranging discourse (see Hubbard, 2009; Reynolds, 2020; Sage, Smith & Hubbard, 2013; Smith, 2009; Smith & Hubbard, 2014). Notably, Holton and Mouat (2021) recently repurposed the term ‘vertical studentification’ to critically examine PBSAs; the term previously referred to converted shared flats in apartment blocks (Garmendia, Coronado & Ureña, 2012). Essentially, the identification of various ‘waves’ of studentification hinted at the sequencing of this urban phenomenon (Sage, Smith & Hubbard, 2012a; Smith, 2007; 2008).

As university towns grew, various capitalistic actions within the private student housing sector intensified, including: purchasing and converting property in neighbourhoods that could be studentified (thereby creating a ‘studentification frontier’) (Sage, Smith & Hubbard, 2012b); enticing existing residents to sell their homes (Munro & Livingston, 2012); converting vacant substandard properties designated for demolition into student housing (Debrunner & Gerber, 2020); and implementing student-targeted rental strategies (Miessner, 2021). Studies thereafter identified various forms of university towns, including: student villages (see Smith & Hubbard, 2014); ‘new student areas’ within former social-rented housing estates (see Sage, Smith & Hubbard, 2013); and all-inclusive residential communities (Kenna & Murphy, 2021). These student-dominated areas collectively contributed to the formation of an ‘urban dormitory’ (Revington et al., 2020). Essentially, the private student housing sector capitalised on the construct of student lifestyles and rapidly became a stable niche property market (Chatterton, 1999; 2000; 2010b; Chatterton & Hollands, 2002; Hollands, 2002; Hubbard, 2008). Furthermore, this sector demonstrated the strong economic incentive to provide student accommodation (Newell & Marzuki, 2018) amidst students’ increasing purchasing power (Chatterton, 2010b; Hubbard, 2009). Student accommodation was therefore rarely excluded from discourses on studentification (Reynolds, 2020; Simpeh & Akinlolu, 2020).

According to Chatterton (2010b), four key themes were crucial to understanding university towns and studentification therein, namely: (1) the role of neoliberal regulatory environments in shaping student life and the consumption-oriented student city; (2) the role businesses in the ‘student urban service sector’ targeting student populations; (3) students’ representation as a monetarised and commodified persona; and (4) the role of HEIs and students in the (re)shaping and (re)generation of urban landscapes. In a similar vein to the challenges of establishing a universal measure for gentrification and displacement in neighbourhoods (Atkinson, 2000), pinpointing when a neighbourhood was studentified (or not studentified) was not straightforward (Smith, Sage & Balsdon, 2014). Furthermore, Zasina and Antczak (2021) argued that a wide range of neighbourhoods were ‘potentially studentifiable’. Notably, these discourses on university towns and transformations therein encapsulated the broader relationship amongst student populations, consumerism and neoliberalism (Kinton et al., 2018). From an impact perspective, Kenyon (1997) warned against neglecting some crucial HEI and community relationships that are of real concern in urban environments. The social, cultural, economic and physical factors of areas that were affected by the conceptual process of studentification, and which still underpin literature thereof, are depicted in Table 2-1.

Table 2-1: Factors affected by the conceptual process of studentification (adapted from Smith & Holt, 2007:149)

Social	Cultural	Economic	Physical
<ul style="list-style-type: none"> • Demographic structure of the local population • Levels of population density • Levels of population stability/transience • Turnover of residents/property • Cohesion of local community and community interaction • Levels of neighbourliness • Meaning and symbolism of location • Supply and demand for schools and primary healthcare services • Supply and demand for public transport • Effectiveness of crime prevention strategies and self-policing • Trends of criminal activity • Levels of electoral voting and political affiliations • Effectiveness of car parking schemes and provision • Strength of local voluntary schemes/sector • Levels of alcohol/drug abuse • Health and well-being of local population 	<ul style="list-style-type: none"> • Supply and demand for specific leisure, recreational, and retail facilities • Levels of antisocial behaviour • Levels of noise nuisance from households, pedestrians, taxis/private vehicles • (In)compatibility of lifestyles • Supply and demands for levels of policing and emergency services 	<ul style="list-style-type: none"> • Supply and demand for housing • Buoyancy of housing market • Portfolio of housing stock • Flexibility of housing stock • Supply and demand for affordable housing • Condition of housing stock • Spending levels within local economy • Levels of inward capital investment • Supply and demand for services of letting/estate agents, property maintenance, and building contractors • Supply and demand for local retail, leisure, and recreational services • Seasonality of local economy and services • Levels of housing abandonment • Supply and demand for domestic services • Supply and demand for childcare services • Levels of council tax revenue • Local workforce 	<ul style="list-style-type: none"> • Levels of private vehicle use and cycling/walking • Levels of traffic congestion • Levels of visual pollution (e.g. 'toilet' signs) • Effectiveness of refuse and waste collection • Levels of litter and rubbish • Upkeep of gardens and driveways • Upkeep of external environment • Levels of graffiti and vandalism

University towns and students' residential status therein operated as a 'labelling device', distinguishing local and away students, and (re)constructed ideas of the 'typical student' (Holdsworth, 2006). University towns thus demanded specific sites of consumption akin to the conceptual issues of gentrification (Atkinson & Bridge, 2005; Chatterton, 1999; Smith, 2005; Warde, 1991). However, whilst the rate of gentrification differed substantially in different places (Smith, 2002), studentification could take root in new areas very rapidly (Sage, Smith & Hubbard, 2012a). Furthermore, students often understood the importance of appropriating the right spaces, and how their (social) involvement therein supported their trajectories (Holton, 2015). As a result of the 'enlightened self-interest' within university towns, stimulated by HEIs and the private sector, various concerns arose regarding increasing students populations within urban areas (Moos et al., 2019). Notably, established residents within university towns often criticised studentification, with studentified areas hyperbolically labelled as 'student ghettos' (Hubbard, 2009), and rarely 'heterotopias' (Brookfield, 2019; Foucault, 1986; 1998). The common hallmarks of studentified areas are depicted in Table 2-2.

Table 2-2: Predefined checklist to identify studentified neighbourhoods (adapted from Smith, Sage & Balsdon, 2014:117)

Changes in:	Evidence/effects on a neighbourhood
Local population	<ul style="list-style-type: none"> • High proportion of student residents • High levels of annual in- and out-migration of students • Replacement and/or displacement of established residential populations • High levels of population density • High levels of population transience • Depopulation during recessionary periods
Local housing markets	<ul style="list-style-type: none"> • Reduction in owner-occupied family housing • Increase in shared private-rented housing • Increase in short-term rented tenancies • Changed fabric and internal structure of housing • Escalation of property prices
Residential environments	<ul style="list-style-type: none"> • Increase in domestic refuse and litter environments • Fly-tipping of unwanted household items • Lack of parking spaces for private vehicles • Changing visual appearance of streetscapes and residential environs • Proliferation of 'to-let' boards • Unkempt gardens and yards
Local services and culture	<ul style="list-style-type: none"> • Closure of nurseries and schools and culture • Reorientation of retail, leisure and recreational services for student market • Closure of public and private services during recessionary periods • Relatively high levels of burglary and crime • Perception of 'student' sense of place

2.2.4 From studentification to destudentification

Holton and Riley (2013:61) recognised HE students as “agents of change in various geographical contexts”. Whilst university towns and transformations therein were often viewed in the context of studentification, Smith (2008) identified the converse phenomenon, termed ‘destudentification’. Destudentification was broadly defined as the reduction of the student population within a previously student-dominated or studentified neighbourhood, leading to the decline in social (e.g. population loss), cultural (e.g. closure of retail and other services), economic (devalorisation of property prices), and physical (e.g. abandonment of housing) attributes thereof (Smith, 2008). This reduction in the student populations within previously student-dominated areas was also referred to as ‘student exodus’ (Kinton, 2013; Kinton, Smith & Harrison, 2016). Notably, Power (1999), previously argued that “migration from inner cities is not new, but large tracts of viable empty property—both owner occupied and social housing—is a new problem”. Kinton (2013) thus considered this argument, alongside theories of urban abandonment and decline, and subsequently formulated a broad conceptual framework within which to understand destudentification and effects thereof. This conceptual framework is depicted on Figure 2-1.

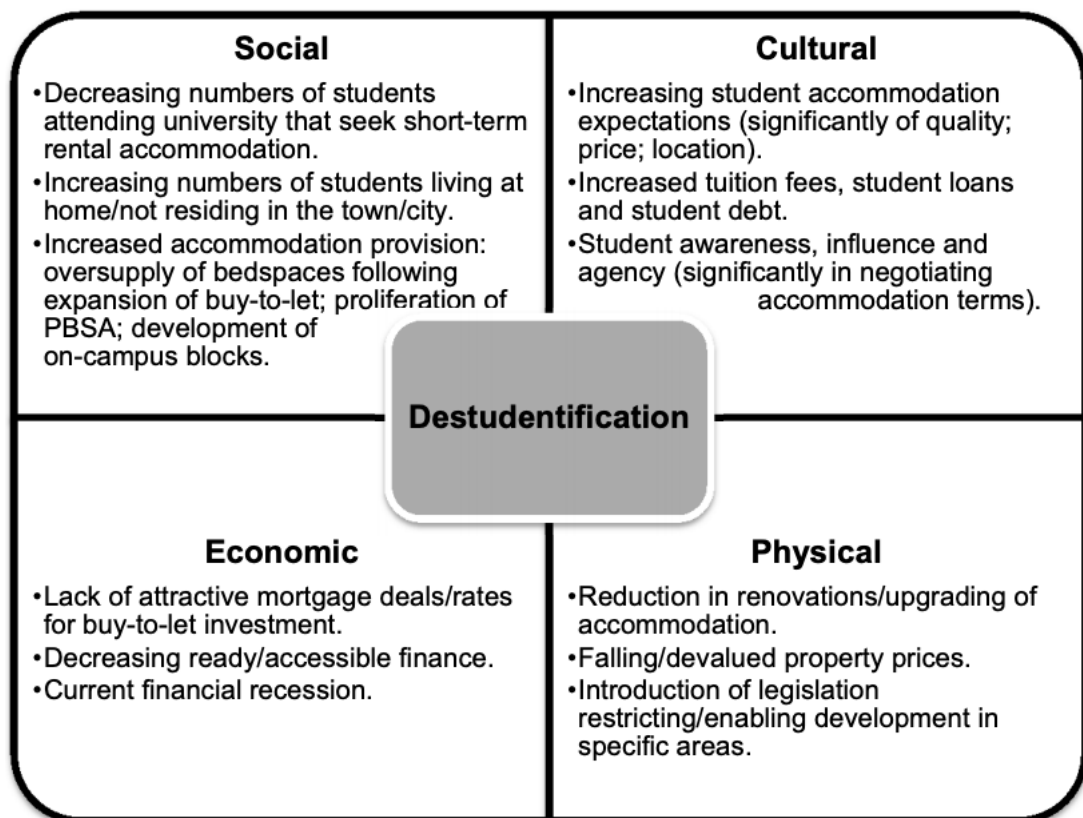


Figure 2-1: Model representation of the factors of destudentification (Kinton, 2013:229)

Notwithstanding its original conceptualisation, destudentification was also seen as a by-product of students being shuffled into alternative student housing (e.g. new PBSAs) and, in some cases, the decline in (local) student enrolment (Hubbard, 2009; Kinton, 2013; Kinton, Smith & Harrison, 2016; Kinton et al., 2018; Mulhearn & Franco, 2018; Sage, Smith & Hubbard, 2012a; 2013; Smith, 2008). Destudentification was therefore often juxtaposed against HMO-based studentification, with students seen to be moving out of proximate ‘student ghettos’, and the ‘studentification frontier’ rolled out across new urban neighbourhoods (Kinton, 2013; Kinton, Smith & Harrison, 2016; Kinton et al., 2018; Sage, Smith & Hubbard, 2012a; 2013; Smith, 2008). Arguing for a process-led definition of destudentification, with reference to the underlying private student housing, Kinton, Smith and Harrison (2016) identified three distinct stages thereto, namely: (1) emptying of bedspaces; (2) transitioning from full/partial occupancy to empty properties; and (3) complete emptying of streets or areas. This process-based conceptualisation of destudentification is depicted on Figure 2-2. Furthermore, Mulhearn and Franco (2018) considered the disorderly end of PBSAs, arguing that their funding models often generated hidden risks and carried a momentum that neglected wider market conditions.

Destudentification was seen as being typified by various occurrences, namely: diminished property occupancies; devalorised property prices; decreasing rentals; property divestments; abandoned properties; and subsequent deterioration of the urban environ thereafter (Kinton, 2013; Kinton, Smith & Harrison, 2016; Kinton et al., 2018; Mulhearn & Franco, 2018; Smith, 2008). Moreover, role-players in the student housing market and residual established residents in host areas thereof often contended with the repopulation of ‘destudentified’ areas, amidst concerns for the social (and rental) profile of the groups replacing students (Hubbard, 2009; Kinton, 2013; Kinton, Smith & Harrison, 2016; Kinton et al., 2018; Smith, 2008). In response to destudentification, some landlords and private developers in the student housing sector expanded their target market to a broader population range (Kinton, Smith & Harrison, 2016). However, Revington (2021) argued that this trend did not depend on destudentification per se, adding that a process of marginalisation called ‘post-studentification’ may occur, whereby residents lacking alternative options are forced to live in student precincts. Whilst destudentification proved itself as a critical phenomenon worthy of further empirical investigations, studies thereof were limited to university towns in the UK. Essentially, there is no empirical evidence on destudentification elsewhere.

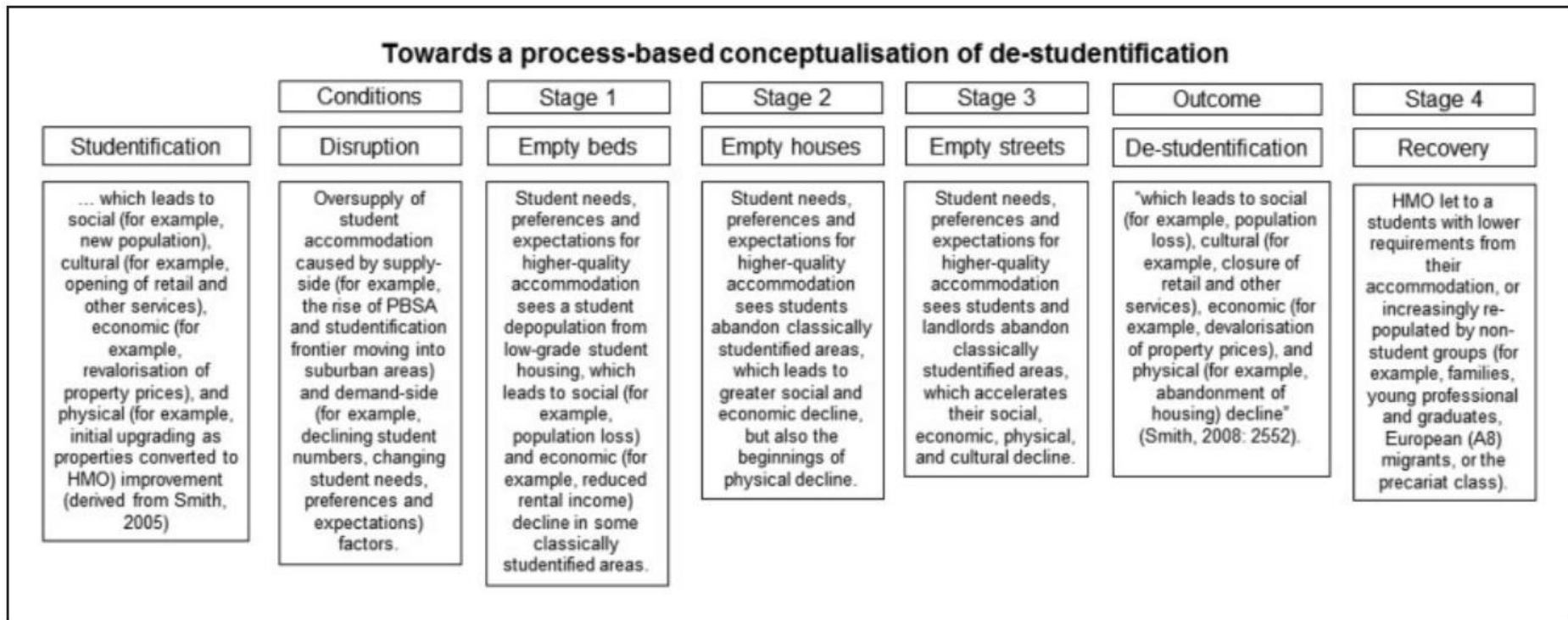


Figure 2-2: Process-based conceptualisation of destudentification (Kinton, Smith & Harrison, 2016:1632)

2.3 Intersections of COVID-19 and the global student space

On 11 March 2020, the coronavirus disease 2019 (COVID-19), an infectious respiratory disease caused by a novel coronavirus that emerged in Wuhan, China, was declared a pandemic as most continents confirmed their first cases thereof (WHO, 2020a; 2020b). A year into the pandemic, there were more than 119 million cumulative confirmed cases and 2.6 million related deaths globally (World Health Organisation, WHO, 2021). Notably, COVID-19 variants continued to circulate and cause further outbreaks even amidst vaccination efforts (Phillips, 2021). In response to the rapid spread of COVID-19 and its variants, many governments adopted strict measures to limit transmission thereof, namely: nationwide lockdowns; stay-at-home directives; social distancing; restrictions on the access and use of public space; and quarantines (Honey-Rosés et al., 2020; Salyer et al., 2021; Teslya et al., 2020). Moreover, economic disruptions were experienced globally (Jackson et al., 2021; OECD, 2020; Vitenu-Sackey & Barfi, 2021). The advent of COVID-19 thus presented unique challenges for HEIs, the university towns that host them, and ultimately, the associated spatial dimension.

2.3.1 Overarching impact of COVID-19 on HE stakeholders

The COVID-19 pandemic was not only a global health problem, as it also transformed the global HE landscape (UNESCO, 2021a; 2021b). According to Marinoni, van't Land and Jensen (2020), nearly 60% of HEIs surveyed globally stopped all campus activities and completely closed in 2020. These global HEI closures led to 220 million students having their academic careers significantly disrupted or ended, in 2020 alone (World Bank, 2020b). Notably, more than 91% of the total enrolled learners worldwide were affected by HEI and school closures (UNESCO, 2020a). The global HEI closures of 2020, in many cases accompanied by the adoption of online and hybrid modes of teaching and learning, persisted into 2021 (UNESCO, 2021b). This trend in the global HE sector is depicted in Figure 2-3. Other key functions of HEIs affected by COVID-19 included mobility; internationalisation; enrolment; funding; staff; and community engagement (see Marinoni & van't Land, 2020; Marinoni, van't Land & Jensen, 2020; Organisation for Economic Co-operation and Development, OECD, 2020; Parkin & Brown, 2020; UNESCO, 2020b; 2021b; World Bank, 2020a; 2020b). Furthermore, Papadimitriou and Boboc (2021) argued that the COVID-19 pandemic challenged the status of HEIs as anchor institutions and necessitated the reimagination of the spatial dimension thereto.

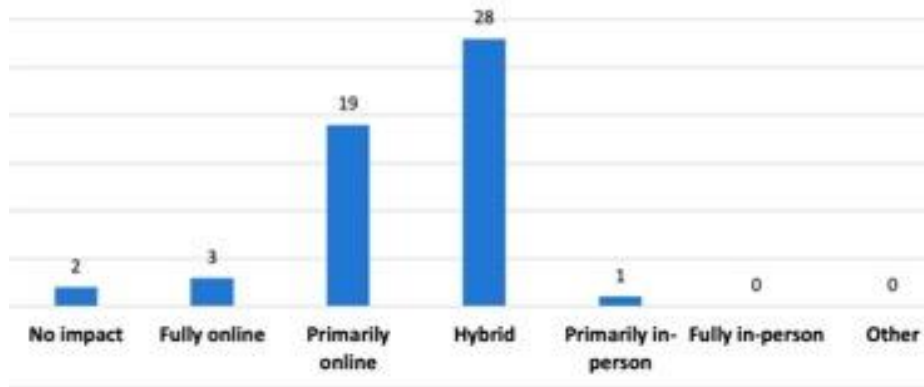


Figure 2-3: Shifts in the mode of HE teaching and learning in 53 surveyed countries during the COVID-19 pandemic (UNESCO, 2021b)

2.3.2 Broad impact of COVID-19 on global university towns

A professor quoted by Wong (2020:1) asked: “When a university sneezes, the town gets pneumonia. Now when the university has pneumonia, what does that mean for the town?”. This question underpinned the impact of COVID-19 on university towns, given that the risks to students and their host communities were inevitably intertwined (Walke, Honein & Redfield, 2020). Notably, off-campus student gatherings and congregate living settings were found to be linked to the rapid spread of COVID-19 in university towns (Jang, 2020; Wilson et al., 2020). This rapid spread of COVID-19 was in line with the noted relationship between the diffusion of the infectious disease and population density (Lall & Wahba, 2021; Teller, 2021). Moreover, established residents of university towns attributed the rising cases of COVID-19 within their communities to ‘reckless and risky’ student behaviours, particularly the flouting of social distancing measures therein (see Brulliard, 2020; Jang, 2020; Lumpkin, 2020; Soaita, 2021). This signalling out of students as ‘non-complying’ contributed to the broader literature on (enduring) friction between the stakeholders of university towns (Brulliard, 2020; Soaita, 2021). More specifically, the COVID-19 pandemic put new pressure on various factors within university towns and exposed notable power imbalances thereto (Hebel, 2021).

The global HEI closures during the COVID-19 pandemic resulted in the mass displacement and repatriation of students (World Bank, 2020a; 2020b). The forced decampment of students back to their homes, pursuant to study-at-home policies, affected student accommodation and other student services (UNESCO, 2020b). Notably, private student housing providers in the UK, United States (US), Canada, Australia and India reported decreasing leasing rates and revenues (see American Campus Communities, 2020; Evans, Rosewall & Wong, 2020; EY, 2020; Lam & Chen, 2021; Pomeroy, 2020; Putzier, 2020; Seltzer, 2020). These financial losses were exacerbated by refunds or reimbursements and ‘get-out’ or cancellation clauses provided to student tenants (Combe, 2021; EY, 2020; McKie, 2020; National Union of Students, 2020; Richardson, 2020; Seltzer, 2020). Increasingly, students struggled to meet their accommodation

costs (see Baksi, 2020; Packham, 2020), faced evictions (see Wu et al., 2021), partook in rent strikes (see Weale, 2020), and broke their leases (see Dougherty, 2020). Off-campus students thus experienced challenges akin to economically vulnerable populations (Addie, 2020). Where emergency social security benefits were promulgated to protect student consumers, international students were often precluded, which affected their private student housing providers (McKie, 2020; Morris, Mitchell & Ramia, 2020; Morris et al., 2021).

The decrease in student populations within university towns during the COVID-19 pandemic also led to revenue losses in local businesses reliant on student patronage and HE activities (Ha, 2020; Harris, 2020; Richmond, 2020; Sullivan, 2020; Wong, 2020). These dire financial and economic circumstances were exacerbated by further restrictions to business operations when some HEIs began reopening (Jackson Jr., 2020). Notably, some university towns were also faced with the possibility of permanent HEI closures, due to prolonged operational challenges thereof (Sullivan, 2020). Consequently, municipalities with university towns were unable to adequately scale public services thereto, with some municipalities (e.g. in the US) implementing budget cuts that triggered widespread socioeconomic impacts (see Ha, 2020; Harris, 2020; Richmond, 2020). The legacies of COVID-19 thus impacted everyday life and planning within university towns, and made the maintenance and nurturing of the symbiotic relationships therein difficult (Addie, 2020; Jackson Jr., 2020). Furthermore, Anigbogu (2021) argued that the idea of university towns being recession-proof faltered amidst COVID-19. Whilst some attention has been paid to the effect of COVID-19 on university towns in the Global North, there is no empirical evidence in the Global South in general, and South Africa in particular.

2.4 Discourses in the South African context

The study herein investigates the effect of COVID-19 on the spatial dimension of a social a university town in Johannesburg, the largest city in South Africa. The study is set in Westdene, a residential neighbourhood adjacent to the largest campus of the University of Johannesburg (UJ), the Auckland Park Kingsway (UJ APK) Campus, defined as a university town. The choice of ‘the case’ is justified in Chapter 3. Notably, UJ was established as part of the postapartheid transformations of the South African HE system (Akoojee & Nkomo, 2007; Bunting, 2006; Council on Higher Education, CHE, 2016; Jansen, 2004; Lange, 2017; UJ, 2006). Under the new South African HE policies, HEIs contended with a dramatic increase in student enrolments, albeit amidst a student housing backlog, which was met with recurring student protests (Booyesen, Susan et al., 2018; Commission of Enquiry into Higher Education and Training [Heher Commission], 2017; CHE, 2016; 2019; Department of Higher Education and Training, DHET, 2011; 2019; 2021d; Muswede, 2017; National Council of Provinces, NCOP, 2012). These factors underpinned the growth of South Africa university towns and the associated spatial dimension, which the study herein explores further, in the context of Johannesburg and amidst COVID-19.

2.4.1 Contributory factors to the growth of South African university towns

Several researchers argued that South Africa students, particular those from disadvantaged backgrounds, enjoyed various social benefits when residing closer to their HEIs (see Lewin & Mawoyo, 2014; Xulu-Gama, 2019). However, a ministerial report released in 2011 deduced that South African HEIs faced a student housing backlog and recognised the role of the private sector in filling that gap DHET (DHET, 2011; NCOP, 2012). Furthermore, the South African government was advised to develop more student accommodation, particularly near historically disadvantaged HEIs (Heher Commission, 2017). In the late-2010s, the DHET transformed the National Student Financial Aid Scheme (NSFAS) from loans to bursaries for students from poor households, covering full academic and accommodation costs (DHET, 2020b; 2021a; NSFAS, 2016; 2018; 2020). In the same period, the DHET also piloted the Ikusasa Student Financial Aid Programme (ISFAP), an alternative student funding model covering full academic and accommodation costs of ‘missing middle’ students (DHET, 2016; ISFAP, 2019). These projectable and guaranteed payments, particularly the off-campus student allowances, made university towns attractive to private sector investors (Gregory, 2020; Khanyile et al., 2021).

Research in the early 2010s had shown that South African university towns were predominantly populated with HMOs (known also as student communes) established around HEIs (see Benn, 2010; Ordor et al., 2010). Historically, the majority of these earlier HMOs were concentrated in low-density residential areas surrounding the HEIs (Gregory, 2020). However, the private sector’s intensified provision of student accommodation in South Africa saw a systematic shift to PBSAs in the mid-2010s, marketed and priced for a slightly higher-end market, in the areas surrounding HEIs (Ackermann & Visser, 2016; Gregory, 2020; Visser & Kisting, 2019). These developments were driven by large property investment firms and primarily implemented at historically white Afrikaans HEIs (e.g. in Bloemfontein, Johannesburg, Pretoria and Potchefstroom) (Visser & Kisting, 2019). This shift to PBSAs in South Africa signalled the embrace of a more formalised approach to student housing provision, marked by ‘PBSA franchises’ with national footprints (Ackermann & Visser, 2016; Jones Lang LaSalle, 2016; Visser & Kisting, 2019). Notably, the South African government also partook in this niche housing sector through its Public Investment Corporation (PIC), which further accelerated the growth of university towns (Booyesen, Joseph, 2018; Heher Commission, 2017; PIC, 2017).

2.4.2 Establishment and growth of the Johannesburg student space

In the 1980s and 1990s, the residential areas adjacent to the UJ APK Campus hosted minute (off-campus) student populations, mostly in parental homes or houses converted by early (smaller) private student housing investors (Gregory & Rogerson, 2019a). Notably, the UJ APK Campus was an almost exclusively white Afrikaner campus of the Rand Afrikaans University (RAU), prior to the establishment of UJ (UJ, 2006). The massification of South African HE in the 2000s saw increased student enrolments at UJ, particularly its UJ APK Campus, with the residential

areas adjacent to the campus rapidly emulating a university town (Gregory & Rogerson, 2019a). Furthermore, the increased student population extended to the inner-city area of Braamfontein, 3.5km east of the UJ APK Campus, where students from both UJ and the University of the Witwatersrand (Wits) congregated (Gregory & Rogerson, 2019b). The subsequent gap between student enrolments and on-campus student accommodation at UJ and Wits resulted in a relatively dense distribution of students near the HEIs (DHET, 2011; Gregory, 2020; Gregory & Rogerson, 2019a; 2019b; Hamann & Joseph, 2020; Ijasa & Ahmed, 2016; Khanyile et al., 2021).

The mid- to late-2000s saw the proliferation of unregulated/illegal HMOs in Johannesburg, particularly in the residential areas adjacent to the UJ APK Campus, with students often subjected to appalling living conditions (Cox, 2012; DHET, 2011; Fourie, 2018; n.d.; Gregory & Rogerson, 2019a; John, 2012). However, Johannesburg saw a shift in private student housing investments from HMOs to PBSAs in the early 2010s, particularly near and within inner-city areas (Ackermann & Visser, 2016; Gregory, 2020; 2019a; Gregory & Rogerson, 2019b; Thakali, 2014; Visser & Kisting, 2019). This shift was spurred by several actions of the City of Johannesburg (CoJ), including: establishment of the Johannesburg Development Agency (JDA) for urban renewal projects; introduction of the Urban Development Zone (UDZ) tax incentive encouraging inner-city renewal; and the establishment of City Improvement Districts (CIDs) providing additional urban management services through Public–Private Partnership (PPP) models (see Beavon, 2004; Didier, Peyroux & Morange, 2012; Garner, 2011; Gregory & Rogerson, 2019b; Mosselson, 2018; Murray, 2011). The CoJ also identified key areas of collaboration with major HEIs for the provision of affordable student housing (CoJ, n.d.-b). Moreover, the Gauteng Property Fund (GPF) funded select private student housing projects (GPF, n.d.; Moodley, 2014).

2.4.3 Spatial dimension of the Johannesburg student space

Various literature uncovered and/or discussed aspects of Johannesburg, in both the residential and inner-city areas thereof, that were able to be inked to the off-campus student populations therein (see Gregory, 2020; Gregory & Rogerson, 2019a; 2019b; Ijasa & Ahmed, 2016; Khanyile et al., 2021). More specifically, Gregory and Rogerson (2019a) found that the residential areas adjacent to the UJ APK Campus were sites of: student parties; excessive noise disturbances; negative association of students; conflict between students and established residents; and community resistance and objections to student neighbours. Similarly, Gregory and Rogerson (2019b) noted that the growth of the unregulated night-time economy within studentified districts in Johannesburg was a destabilising factor. Notwithstanding these negative associations of large student populations in Johannesburg, Gregory and Rogerson (2019b) acknowledged various benefits thereto, particularly in the inner-city, including: shifting areas from stagnating commercial nodes to growing student districts; stimulating private property investments; and contributing to urban renewal. Moreover, Ijasa and Ahmed (2016) found that local and international students in Johannesburg influenced divergent student consumer trends, marked by choices within the private student housing market.

The discourses on the Johannesburg student space were congruent with studies on other South African university towns, including: Cape Town (see Ordor et al., 2010); Stellenbosch (see Benn, 2010; Donaldson et al., 2014; Visser & Kisting, 2019); Bloemfontein (see Ackermann & Visser, 2016; Donaldson et al., 2014); Gqeberha (see Mzileni, 2018); Zululand (see Ndimande, 2018); and Kimberley (see Kleinsmith & Horn, 2015). More specifically, these discourses mirrored concerns of the Global North, focusing primarily on ‘student population impact on residential areas and property markets’ (Mzileni, 2018; Mzileni & Mkhize, 2019). Gbadegesin et al. (2021) also noted ‘planning consequences of studentification’ as an emerging, albeit underexplored, theme in these discourses. Essentially, the studies on South Africa university towns did not explore university towns in the context of the postapartheid reality and spatial geographies reproduced thereto (Mzileni, 2018; Mzileni & Mkhize, 2019). This dearth of a contextualised approach to studying university towns in South Africa is also evident in discourses from other African countries, including: Kenya (see Fedha, Murenga & Bor, 2017); Zimbabwe (see Matamanda, Dube & Campbell, 2021); and Nigeria (see Ghani, Sulaiman & Mohammed, 2018). Notably, destudentification has not been explored in the Global South.

2.4.4 Localised impact of COVID-19 considered in the case study

Since the advent of COVID-19 in early 2020, South African HEIs have been guided by vacillating regulations of a nationwide lockdown (see DHET, 2020a; 2021b; *Disaster Management Act, No. 57 of 2002. Amended regulations issued in terms of section 27(2)*, 2021; *Disaster Management Act, No. 57 of 2002. Directions on a national framework and criteria for the management of the 2021 academic year in public and private higher education institutions*, 2021). These regulations saw the physical closure of South African HEIs and embracement of ‘physically distanced learning’, marked by the rapid shift to online learning (Monama, 2021; Naidu, 2021). Furthermore, the South African government also targeted the NSFAS budget, particularly allowances for off-campus student accommodation, as part of its de facto austerity measures during the COVID-19 pandemic (DHET, 2021c; NCOP, 2021; NSFAS, 2021; Steinacker, 2021). Several studies therefore mapped the broad impacts of COVID-19 on the diverse stakeholders of South African HEIs (see DHET, 2021c; Hedding et al., 2020; Human Sciences Research Council, HSRC, 2021; Kanyumba & Shabangu, 2021; Universities South Africa, USAf, 2020; Wangenge-Ouma & Kupe, 2020).

In addition to the noted impact of COVID-19 on the stakeholders of HEIs, emerging sectoral studies also found that the South African private student housing sector was negatively impacted (see International Finance Corporation, IFC, 2020; Jones Lang LaSalle, 2021). This impact was exacerbated by revenue losses and rising rental arrears, amidst the forced decampment of students back to their homes and associated calls for ‘no stay, no pay’ policies (McKie, 2020; Muller, 2020). Essentially, the COVID-19 pandemic challenged the previous description of the South African private student sector as being ‘relatively resilient’ (Smith, Carin, 2020). Moreover, concerns arose that a preference and proliferation of online learning at

South African HEIs could affect student enrolment rates and dampen student accommodation demand (eProperty News, 2020; Richards, 2020). These concerns saw some large property companies in South African private student housing sector divesting themselves of their student accommodation businesses, to avoid further losses (Cransto, 2021; Muller, 2021). Similarly, the PIC sold off several of its student housing properties (Magubane, 2021). These events brought to the fore further questions on South African university towns and associated spatial dimension.

The advent of COVID-19 ushered in new variables worth considering when investigating the spatial dimension of South African university towns. In the case of Johannesburg, the advent of COVID-19 led to a sharp decrease in student housing occupancy rates, particularly in UJ-accredited privately owned student accommodation (POSAs) (UJ, 2021); POSAs conform to standards set by UJ (see UJ, 2015; 2016) and CoJ (see CoJ, 2009). Subsequently, UJ decided not to consider new POSA applications in 2021, due to low demand thereof (Mabuza, 2021). This change in the number of students residing off campus in Johannesburg during the COVID-19 pandemic implied a subsequent effect on the spatial dimension thereto. Despite various factors of parts of Johannesburg being inextricably linked to the UJ off-campus student population, particularly in the areas adjacent to the UJ APK Campus, there is no empirical evidence on the effect of COVID-19 thereto. This paucity thus warrants an investigation into the effect of COVID-19 on the spatial dimension of Westdene, through the conceptual lens of studentification and destudentification. Notably, the spatial dimension is the combination of the social, cultural, economic and physical factors within Westdene attributable to the UJ student population therein.

2.5 Summary of literature review

This chapter provided a review of established and emerging academic conceptualisations of student-dominated areas, termed university towns. Notably, literature on university towns conceptualised the associated social, cultural, economic and physical factors, collectively referred to herein as the spatial dimension, through studentification and destudentification. More specifically, studentification and destudentification were used to describe the spatial dimension of university towns attributable to increasing and decreasing student populations, respectively. Crucially, these studies illustrated that both processes unfold in different ways, depending on the local contingencies of particular neighbourhoods. Furthermore, this chapter intimated that there was a paucity of discourses on university towns that considered the impact of the COVID-19 pandemic. In the case of South Africa, discourses on university towns and associated spatial dimension were shown to be limited to few studies published prior to the advent of COVID-19. Importantly, there is no empirical evidence on the effect of COVID-19 on the spatial dimension of the Johannesburg student space, the largest city in South Africa, despite reports of decreasing off-campus student population at UJ. Chapter 3 presents and justifies the research approach and data gathering and analysis process employed in pursuit of this empirical evidence.

3. Research methodology

3.1 Introduction to research methodology

In Chapter 2, existing academic understandings of university towns and associated spatial dimension were comprehensively reviewed. These discourses subsequently highlighted the restrictions (principally, in terms of data constraints) that have hindered deeper analysis of the spatial dimension of South Africa university towns, particularly during the coronavirus disease 2019 (COVID-19) pandemic. This current chapter outlines the research methodology employed in this research, within a theoretical and practical context. The outlining of the chosen research methodology begins with an overview of the overarching components of the effective research methodology underpinning the study. This overview is followed by a more detailed discussion of the case study, with particular focus on the context, selection of research participants, and overall data collection and analysis techniques. The chapter then presents a critique of the strengths and limitations of the research approach, and concludes with a detailed discussion of the ethical considerations of the research in general, and research approach in particular.

3.2 Theoretical context of research approach

According to Creswell (2009:3), “research approaches are plans and the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation.” These plans involve several decisions, with the overall decision being the approach to be used to study a topic, and subsequent decisions taken in the order in which they make sense to researchers and the order of their presentation thereto (Creswell, 2009; 2014; 2018). Furthermore, Hammond and Wellington (2020) noted that the research methodology takes its place in the middle of a hierarchy of considerations when carrying out research. Notably, the epistemological and ontological assumptions about the research and particular research questions being posed lie at the top of this hierarchy, whilst the research methods, the tools for collecting research data, lie at the bottom (Hammond & Wellington, 2020). In a more explicit depiction, Saunders, Lewis and Thornhill (2007) employed a ‘research onion’ to visualise the stages through which a researcher must pass when developing an effective methodology, namely: philosophy, theory development, methodological choice, strategy(ies), time horizon, and techniques and procedures. This research onion framework therefore underpinned the chosen data collection and analysis techniques, which are discussed further in Section 3.3.

3.2.1 Overview of research approach framework

The research methodology employed in this research was carefully chosen to address the main aim of this research, which was to investigate the effect of COVID-19 on the spatial dimension of a university town in Johannesburg. The decision was taken to collect and analyse data on the

spatial dimension of Westdene, a residential neighbourhood adjacent to the largest campus of the University of Johannesburg (UJ), the Auckland Park Kingsway (UJ APK) Campus, defined as a university town. This university town is discussed further in Section 3.3.1. The spatial dimension of Westdene was explored through the social, cultural, economic and physical factors conceptualised in studentification and destudentification literature. Furthermore, the problem statement necessitated that the overarching critical period of analysis for the research coincide with the period of the COVID-19 pandemic—i.e. from early 2020. Using the concept of the research onion as a framework, the overarching components of the effective research methodology employed in this research were deduced, as depicted on Figure 3-1 (circled in red), and discussed further in Section 3.2.2 to Section 3.2.6. Notably, Ijasan and Ahmed (2016) also employed the research onion to unpack the framework of the methodological choice for a study on studentification in Johannesburg.

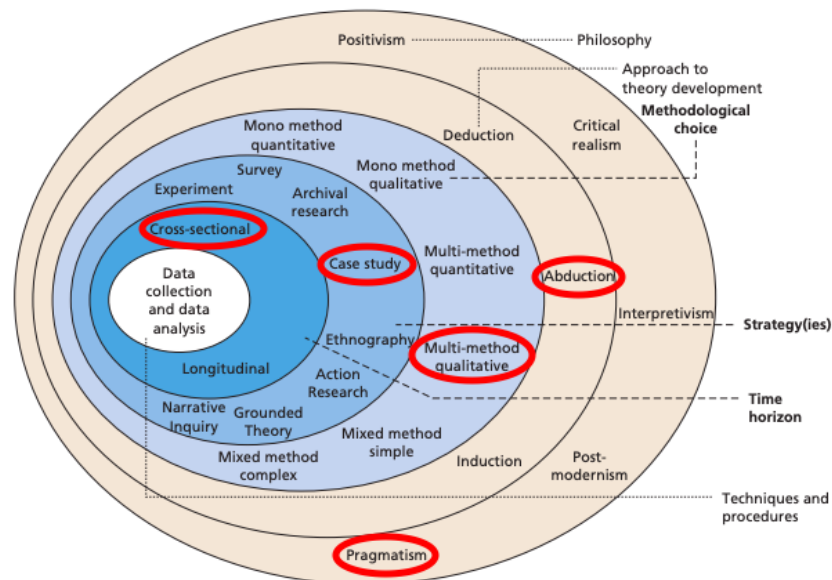


Figure 3-1: Framework of the effective research methodology (adapted from Saunders, Lewis & Thornhill, 2016:164)

3.2.2 Pragmatist research philosophy

Although philosophical ideas remain largely hidden in research (Slife & Williams, 1995), their influence on the practice of research necessitates the explicit identification of the larger philosophical ideas espoused by researchers (Creswell, 2003; 2009; 2014; 2018). According to Saunders, Lewis and Thornhill (2007), there are various research philosophies, namely: positivism; realism; interpretivism; subjectivism; pragmatism; functionalism; interpretivism; radical humanism; and radical structuralism. Pragmatism was deemed to be the most relevant research philosophy for this research. This research philosophy is a way of looking at the world,

rather than a coherent research practice (Hammond & Wellington, 2020). As a result, “pragmatist researchers look to the ‘what’ and ‘how’ to research based on its intended consequences—where they want to go with it” (Creswell, 2003:14). More attention is thus devoted to the ways of life chosen and lived when questions are asked rather than reality and the laws of nature (Cherryholmes, 1992). This research philosophy therefore necessitated that the theories, concepts, ideas, hypotheses and findings on university towns and associated spatial dimension be considered in terms of the roles they play as instruments of thought and action, and not just as abstract forms. More specifically, these roles were considered in the Johannesburg context.

3.2.3 Abductive theory development

The main approaches to theory development are deduction, induction and abduction (Saunders, Lewis & Thornhill, 2016; 2019). Abduction was deemed to be the most relevant approach to theory development for this research. According to Tashakkori and Teddlie (2010), abductive logic is essentially a third type of logic where a researcher observes a ‘surprising event’ and then attempts to determine its causes by generating a hypothesis. This process, which oscillates between (and combines) deductive and inductive approaches, is therefore an alternative to hypothetico-deductive and inductive logics (Tashakkori & Teddlie, 2010). Furthermore, this oscillation between research activities, and between empirical observations and theory, enables researchers employing abduction to expand their understanding of theory and empirical phenomena (Dubois & Gadde, 2002). Where some plausible theories account for what is observed during the research better than others, these help uncover more ‘surprising facts’ (van Maanen, Sorensen & Mitchell, 2007). Notably, Morgan (2007) also linked abduction to pragmatism in research approaches. This research therefore lent itself to abduction, with conclusions able to be drawn by comparing the themes induced from the collected data to those established deductively from studentification and destudentification literature. This analysis technique, known as pattern matching, is discussed further in Section 3.3.5.

3.2.4 Multi-method qualitative approach

The knowledge claims, strategies, and method of research all contribute to a research approach that tends to be more quantitative, qualitative or mixed (Creswell, 2003). The qualitative approach in general, and multi-method qualitative approach in particular, was deemed to be the most relevant overarching research design for this research. According to Given (2008:311), “qualitative research is a situated activity that locates the observer in the world (and) consists of a set of interpretive material practices that make the world visible”. Moreover, Patton (2015:40) asserted that “qualitative inquiry is personal”. Notably, the middle ground offered by a pragmatist worldview has greater adaptability for conducting a qualitative study (Yin, 2015). Given that a qualitative research design may employ more than one data collection technique and corresponding analytical procedure, variations of multi-method qualitative studies may arise

(Creswell, 2015; Saunders, Lewis & Thornhill, 2007; 2016; 2019). This multi-method qualitative approach facilitates better understanding of the meanings that everyday activities hold for people within the research setting (Marshall & Rossman, 2016). This research design therefore enabled the investigation of real-world contextual conditions within Westdene, using two complementary data collection methods, interviews and field observations, and counterpart analyses. These techniques are discussed further in Section 3.3.

3.2.5 Case study research strategy

A research strategy is the methodological link between the chosen research philosophy and data collection and analysis methods, and includes: experiment; survey; archival and documentary research; case study; ethnography; action research; grounded theory; and narrative inquiry (Saunders, Lewis & Thornhill, 2016; 2019). The case study approach was deemed to be the most relevant research strategy for this research. According to Yin (1994:13), “a case study is an empirical method that investigates a contemporary phenomenon within its real-world context, especially when the boundaries between phenomenon and context are not clearly evident”. Conversely, Woodside (2010) argued that case study research is not limited to contemporary phenomenon or real-life contexts, and is thus appropriate for several research objectives. Notably, subunits of analyses may be embedded within a single-case study, in a specific context, embedded single-case study strategy resulting in a more detailed level of inquiry (Scholz & Tietje, 2002; Yin, 1994; 2009; Yin & Campbell, 2018). This research strategy therefore enabled the exploration of the spatial dimension of Westdene, with the embedded units of analysis being the associated social, cultural, economic and physical factors therein.

3.2.6 Cross-sectional time horizon

According to Saunders, Lewis and Thornhill (2007), the time horizons available to a researcher are largely either cross-sectional (i.e. ‘snapshot’) or longitudinal (i.e. ‘diary’). The cross-sectional perspective was deemed to be the most relevant time horizon for this research. Cross-sectional research design involves the collection of data at one time period only, with the aim being to access, at one time point, a representation of the population of interest (Mills, Durepos & Wiebe, 2010). Although time is not considered one of the study variables in cross-sectional research, a repeated cross-sectional research design enables the estimation of changes or movements in values of variables and in relationships among variables (between regular or irregular intervals), at the aggregate or population level, without following respondents over time (Lavrakas, 2008; Menard, 2008). Notably, Menard (2002) included repeated cross-sectional research designs in the description of longitudinal research. Conversely, Menard (2008), noted that much of the research involving repeated cross-sectional data was cross-sectional in nature. This time horizon therefore enabled the inference of changes in the spatial dimension of Westdene due to the COVID-19 pandemic, based on singular interactions with the research participants.

3.3 Data collection and analysis techniques

The embedded single-case study approach was deemed to be the most relevant research strategy for this research. Yin and Campbell (2018) argued that once ‘the case’ is clearly defined, other clarifications—sometimes called ‘bounding’ the case—become important. These clarifications entail the distinction between the phenomenon being studied and its context—i.e. between the conditions that fall within, as opposed to outside of, the case in a case study (Yin & Campbell, 2018). Moreover, sample boundaries may be defined thereto, that include the designated time and geographic limits for the case, activities to be included in the case, and explicit notations about the contextual conditions that lie outside of the case (Baxter & Jack, 2008). Notably, the correct definition of the case also leads to the selection of appropriate units of analysis (Yin, 2009). The case for this research was thus defined as the spatial dimension of Westdene, during the COVID-19 pandemic. Given that this dimension comprises social, cultural, economic and physical factors, as conceptualised in studentification and destudentification literature, these factors essentially became the units of analysis of the embedded single-case study approach. This definition and bounding of the case underpinned the data collection and analysis techniques.

3.3.1 Description and context of the case study area

There are several apposite reasons for the selection of Westdene as a case study location. Westdene is a residential neighbourhood within the City of Johannesburg (CoJ) Metropolitan Municipality. In 2019, the CoJ had an estimated population of about 4.9 million, making it the biggest metro by population size in South Africa (Statistics South Africa, Stats SA, 2019). Whilst census data at the neighbourhood level was not published, the ward in which Westdene lies (i.e. Ward 69) had an estimated population of 37 383 in 2011 (South African Cities Network, SA Cities, 2017). Notably, Westdene is one of the older, inner urban areas of Johannesburg where gentrification occurred and increased over time (CoJ, n.d.-c). This urban change led to increased attractions in the neighbourhood, with many targeting the influx of students therein (see SA-Venues, n.d.; TripAdvisor, n.d.; UJ, n.d.-c). In addition to the student attractors, the UJ APK Campus, which is technically located in the suburb of Rossmore, has an off-campus student residence and student sporting and recreation facilities in Westdene (UJ, n.d.-a; n.d.-b). Westdene thus provides an example of an (urban) area wherein a higher education institution (HEI) and its students are (or have been) very ‘apparent’—a university town.

Prior to the establishment of UJ, the UJ APK Campus was an almost exclusively white Afrikaner campus of the Rand Afrikaans University (RAU) (UJ, 2006). Between 2004 and 2005, RAU and two other preexisting HEIs, Vista University and Technikon Witwatersrand, merged to form UJ (UJ, 2006). This merger was part of the postapartheid transformations of the South African HE system, towards democratising and increasing access to HE for previously excluded and disadvantaged South Africans (Akoojee & Nkomo, 2007; Bunting, 2006; Council of Higher

Education, CHE, 2016; Jansen, 2004; Lange, 2017; UJ, 2006). By 2019, UJ had a contact student headcount of 50 021, 0.04% above its planned target, with the APK Campus accounting for just over 50% of this headcount (UJ, 2020b). Furthermore, UJ noted 100% occupancy rates at its student residences and accredited privately owned student accommodation (POSAs), with some students residing in non-accredited student accommodation (UJ, 2020b). Whilst data showing the UJ off-campus student population per campus was not published, an analysis of the listed capacity of the POSAs in Westdene allotted to the UJ APK Campus in 2019 (see UJ, 2019) revealed that, at full capacity, around 416 students would have been accommodated therein.

A UJ student quoted by Gregory and Rogerson (2019a:96) stated: “Westdene is already known as a student neighbourhood”. Furthermore, in 2018, the Westdene-Sophiatown Residents’ Association (WSRA) and nearby Brixton Police Station planned “to create a students forum in a bid to make them feel more part of the community but also to get them to participate in community safety activities” (Northciff Melville Times, n.d.:1). These sentiments further contributed to the description of Westdene as a university town. Whilst the exact socioeconomic profile of students in Westdene was not published, UJ’s strategic intent of providing access to students from working-class parents often resulted in the admission of a less affluent cohort of students reliant on the National Student Financial Aid Scheme (NSFAS) (UJ, 2020b). This student enrolment pattern notwithstanding, Hamann and Joseph (2020) found that students throughout Johannesburg, majority of whom hailed from low income and ‘missing middle’ households, had a higher socioeconomic status than non-students. Notably, Gregory and Rogerson (2019a) found that off-campus student populations in areas in close proximity to the UJ APK Campus (including Westdene), contributed to studentification therein, characterised by houses in multiple occupation (HMOs) and purpose built student accommodation (PBSAs).

Several studies found that segments of the local economy of Johannesburg were reliant on the off-campus student populations therein (see Gregory, 2020; 2019a; Gregory & Rogerson, 2019b; Ijasa & Ahmed, 2016; Khanyile et al., 2021). Contrastingly, the increase in the off-campus student populations in Johannesburg led to various concerns being voiced about the impacts of studentification, particularly the proliferation of unregulated/illegal student communes (i.e. HMOs) (see Cox, 2012; Department of Higher Education and Training, DHET, 2011; Fourie, 2018; n.d.; Gregory & Rogerson, 2019a; John, 2012). These contrasting reactions to off-campus student populations notwithstanding, any changes thereto would be apparent in Westdene, given its proximity to the UJ APK Campus. Notably, the advent of COVID-19 led to a sharp decrease in student housing occupancy rates at UJ, particularly in POSAs (UJ, 2021). Subsequently, UJ decided not to consider new POSA applications in 2021, due to low demand thereof (Mabuza, 2021). Despite the spatial dimension of parts of Johannesburg such as Westdene being inextricably linked to the UJ off-campus student population, there is no empirical evidence on the effect of COVID-19 thereto. The university town is thus an ideal location for such an investigation. Figure 3-2 depicts the case study location.

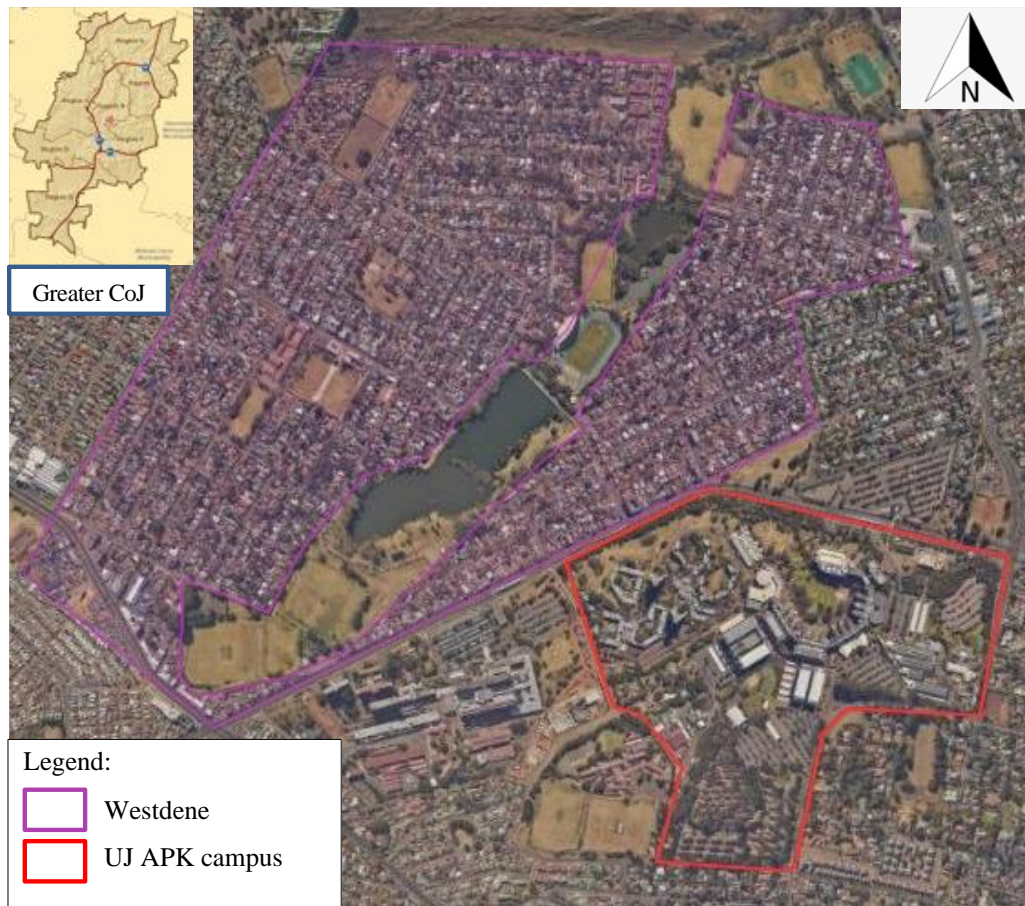


Figure 3-2: Aerial view of the case study location (adapted from map base of CoJ, n.d.-a)

3.3.2 Semi-structured interview schedule and procedure

According to Yin (2015), the researcher in qualitative research is the main research instrument and is often presented with four potential data collection methods, namely: interviewing; observing; collecting and examining; and feeling. Interviewing formed the first stage of the data collection; the second stage, observing, is discussed further in Section 3.3.4. Qualitative interviews are “a construction site of knowledge” (Kvale, 1996:2), where two (or more) individuals discuss a “theme of mutual interest” (Kvale & Brinkmann, 2009:2). In case study research, interviews often resemble guided conversations rather than structured queries (Yin & Campbell, 2018). These guided conversations may take the form of semi-structured interviews, which are more carefully ‘scripted’ and ask specific questions in a specific sequence (Marshall & Rossman, 2016). The arrangement of these questions into a protocol ensures the systematic and iterative gathering of rich data, and efficient analysis thereafter (Galletta & Cross, 2013). Moreover, this interview method in case study research enables deeper exploration of unexpected topics related to the study as opportunities occur (Woodside, 2010). Notably, shorter case study interviews may still remain open-ended and assume a conversational manner, while following a protocol, when required to corroborate established findings (Yin & Campbell, 2018).

The semi-structured interviews in this research were designed to gain insights into narratives of the spatial dimension of Westdene, prior to and during the COVID-19 pandemic, and any changes thereto. Given that the spatial dimension of Westdene comprises the social, cultural, economic and physical factors attributable to the UJ student population therein, these factors were explored through the conceptual lens of studentification and destudentification. Essentially, the interviews aimed to explore key variables in Westdene, including: private student housing market; local business activity; community issues and governance. Interview questions were thus identified and refined to ensure the key themes deduced from studentification and destudentification literature were well positioned. These questions, which were targeted at specific interviewees, were collated into the interview schedule contained in Appendix A, and able to be addressed in any order based on the experiences and preferences of the interviewees. Notably, academic terms such as ‘studentification’ and ‘destudentification’ were excluded from the interview schedule, to ensure such terminology would not be imposed on the interviewees and used to ‘lead’ them. However, ‘prompt’ questions and follow-up questions based around the identified themes were used to explore all the different angles conceptualised in studentification and destudentification literature with the interviewees.

As Valentine (2005:118) noted, engaging with participants in environments familiar to them may “facilitate a more relaxed conversation”. The interviews were thus held at locations and through mediums preferred by the research participants, namely: face-to-face interviews at the interviewees’ premises; virtual interviews using Microsoft Teams videoconferencing software enabled by the University of Cape Town (UCT); and telephonic interviews using either mobile phones or telephones (also known as ‘landlines’). According to Rapley (2007:25), it is also important to “allow interviewees the space to talk at length”, to elicit detailed information rather than imposing a rigid regime of questions and answers; rigidity may result in a daunting inquisitorial approach. A list of key themes was thus kept in mind when talking with the research participants, in order to keep the interviews focussed yet flexible, and enable the interviewees to raise issues that were important to them. Notably, new themes and (follow-up) questions were added to later interviews, based on what was learnt from earlier interviews. These enhancements were in accordance with the advice to “pick up on things said by interviewees” (Bryman, 2008:438); whilst an interview schedule should guide semi-structured interviews, it should allow other relevant themes to develop throughout (Choak, 2012).

As argued by Patton (2015), the purpose of each interview is to record as fully and fairly as possible that particular interviewee’s perspective, as nothing can substitute for the actual quotations spoken by interviewees—the raw data of interviews. Furthermore, audio recordings “create invaluable by-products because they represent literal replicas of field events, given the obvious caveat regarding the selectivity in deciding when, where, and what to record” (Yin, 2015:179). The interviews were thus recorded using either the recording functionality of Microsoft Teams or that of the researcher’s digital devices. These audio recordings were accompanied by comprehensive notes taken during and after the interviews that captured key statements and observations noted thereto. However, these comprehensive notes were not always

taken verbatim, as writing down every word said in an interview can interfere with listening attentively and observing during the interview (Patton, 2015). Notably, “one’s full attention must be focused upon the interviewee...therefore, if conceivably possible, record; then one can interview” (Lofland, 1971:89). Given the interviews were held in English, translation services were not required. The data extraction in respect of the audio recordings is discussed further in Section 3.3.5, whilst the associated ethical considerations are discussed further in Section 3.5.

3.3.3 Sampling and recruitment of research participants

Given that gathering all-encompassing research data within a population is impossible, a sampling frame is selected therefrom (Marshall & Rossman, 2016). In qualitative research, the samples (or instances) are often chosen in a deliberate manner, termed purposive sampling, to yield the most relevant and plentiful data (Yin, 2015). Essentially, qualitative research neither involves nor seeks random samples of research participants in the statistical sense (Galletta & Cross, 2013; Marshall & Rossman, 2016). This tendency is premised upon social processes having “a logic and coherence that random sampling can reduce to uninterpretable sawdust” (Miles & Huberman, 1994:27). Purposive sampling, also termed judgment sampling, thus entails selecting research participants based on qualities they possess (Etikan, Musa & Alkassim, 2016). Whilst sampling activities are often informed by theory (Denzin, 2017), purposive sampling does not require underlying theories, particularly on sample sizes (Etikan, Musa & Alkassim, 2016). This sampling flexibility notwithstanding, research participants should be recruited until the interview data reaches ‘saturation point’, where new thematic patterns are no longer produced (Galletta & Cross, 2013). Whilst research on quantifying saturation point is thin, Kuzel (1992) suggested a minimum sample size of between 5 and 25 for semi-structured/in-depth interviews.

A research design is faithful to the research question when research participants are selected on the basis of formulated criteria (Galletta & Cross, 2013). Such selection criteria often entails the use of ‘key informants’ or ‘expert witnesses’, who “are different from ‘ordinary’ informants to the extent that they have more information to impart, and are more visible” (Payne & Payne, 2004:135). Key informants in Westdene were thus identified and categorised into three groups, namely: (1) private student housing; (2) local businesses; and (3) community engagement and policing forums (originally listed as two separate key informant groups in the interview schedule). This choice of research participants was consistent with research on university towns, both locally (see Donaldson et al., 2014; 2019a; Gregory & Rogerson, 2019b; Ordor et al., 2010) and internationally (see Allinson, 2006; Hubbard, 2009; Kinton, 2013; Kinton, Smith & Harrison, 2016; Kinton et al., 2018; Munro & Livingston, 2012; Prada, 2019). Notably, UJ students were not considered as key informants in this research, given their shorter and/or temporary presence in Westdene. This deliberate exclusion of students’ perspectives from the research on a university town was also evident in a similar study by Prada (2019).

The absolute number of interviewees in this research was not predefined; the interviews continued until a saturation point was believed to have been reached, and sufficient data amassed. Ultimately, eleven key informants were interviewed from mid-May to mid-June 2022, including: three UJ-accredited private student housing (i.e. POSAs) owners; five local business owners/representatives (including two co-owners); and three members of community engagement and policing forums. Most key informants' contact details were available online, including those of POSA owners (see UJ, 2020a; 2022c). Where initial contact with potential research participants proved challenging or contact details thereof were unavailable, further assistance was solicited to reach out to/contact the sought persons. Notably, a local government official and a local business owner referred the researcher to persons who later partook in this research. Furthermore, some key informants with whom a connection was established suggested and assisted with contacting other persons whom they believed would add value to this research; two key informants were recruited in this manner. This method of recruiting research participants is known as snowball sampling, and is acceptable if purposeful and not done out of convenience (Yin, 2015). The breakdown of the groups of key informants are discussed further in Section 4.2.

Several potential research participants who were believed to be well-placed in Westdene to provide relevant and rich insights into the social dimension thereof, were unable to be included in this research, namely: two private student housing owners and two local business owners who indicated they ceased operations in Westdene during the COVID-19 pandemic, who did not attend their (repeatedly rescheduled) interviews; two municipal officials and four private student housing owners (two of whom owned non-UJ-accredited private student housing) who did not respond to requests for participation in this research; and active members of the WSRA, which experienced internal issues soon after its establishment and was thus presumed to have been disbanded (see Dlodlo, 2020; Mokoena, 2018). Notably, four key informants who were initially indifferent to this research, and so too did not attend their initial scheduled interviews, reached out to the researcher to reschedule their missed interviews. One such key informant even later indicated an interest in conducting similar research, after becoming better acquainted with the study. This 'dramatic' turn of events demonstrated that "the extent to which the people at a site or in a group welcome (a researcher) into their circle can change over time" (Yin, 2015:64).

3.3.4 Field observations

Qualitative researchers spend a considerable time in the natural setting gathering information (Creswell & Creswell, 2018). Field observations thus complemented the interviews as the second stage of the data collection, with the qualitative 'data' collected being photographs, accompanied by descriptive notes. Observations in quantitative research are often either part of a participant-observer role or made more serendipitously during interviews or other field activities (Yin, 2015). Notably, the relative emphasis on 'participating' and 'observing' in participant-observation produces variants ranging from active (participant) to passive (observer) orientations, including combinations of both (Gold, 1958; Schwartz & Schwartz, 1955). Given

that case studies often take place in the real-world setting of the cases, this creates the opportunity for direct observations, particularly in a passive observer role, with accompanying photographs (Yin & Campbell, 2018). These photographs are ordinarily considered forms of unobtrusive measures or nonreactive sources, whereby features in the physical world that nevertheless can be highly revealing about some prior human activity are observed (Webb, 1966; Webb et al., 1999). Essentially, photographs taken as part of the observational evidence in the fieldwork help convey important case characteristics to outside observers (Dabbs Jr, 1982; Yin & Campbell, 2018).

According to Becker et al. (2002:30), “any observation can ultimately become sociologically relevant”. The absolute number of field observations in this research was thus not predefined; the field observations continued until a saturation point was believed to have been reached, and sufficient data amassed. Ultimately, seven observational walkabouts occurred from mid-May to mid-June 2022, on weekdays and weekends, excluding when the researcher was attending interviews held at key informants’ premises. Notably, these field observations were undertaken in an overt manner, with the researcher’s presence known whilst taking the photographs and descriptive notes. The photographs depicted aspects of and within Westdene relevant to the study, including: UJ APK Campus and its associated student facilities; local businesses; public space and infrastructure; general state of the environment; and neighbourhood safety and security measures. These photographs aimed to complement the interview data, as the “relatively obvious value of photography is that it helps to overcome the typically fleeting nature of observation” (Basil, 2011:251). When choosing where and when to take photographs and descriptive notes whilst in the field, the researcher employed situational awareness, with due regard for safety and security. The photographs taken in the field are contained in Appendix E.

In addition to the opportunity to take photographs, the observational walkabouts also enabled informal (‘non-interview’) conversations with persons in Westdene, including: individuals exiting identifiable private student housing and communes; individuals sitting outside local businesses; stationary and patrolling private security officers; staff members at UJ APK Campus’ off-campus student residence and student sporting and recreation facilities; and parked e-hailing drivers. The interactions with these persons ranged from greetings, to casual conversations on aspects of Westdene, to explaining the researcher’s presence and actions in the field (particularly when the researcher was photographing areas with persons present). Notably, the later engagements occurred more often, as “participant-observers must justify and explain their presence to those being studied” (Becker et al., 2002:46). As with the photographs, descriptive notes were made of key points arising from the informal conversations, albeit audio recordings were not employed thereto. These notes helped shape and provide further (follow-up) questions for later interviews, which demonstrated that “real-life conditions and others’ perspectives help to define the subsequent study questions and design” (Yin, 2015:76). The ethical considerations in respect of the field observations are discussed further in Section 3.5.

3.3.5 Qualitative data analysis

Qualitative data, often in the form of words based on observations, interviews or documents, are not usually immediately accessible for analysis, and thus require some processing (Miles & Huberman, 1994). Whilst qualitative data analysis aims to transform collected data into findings, no formula exists for such transformation (Patton, 2015). However, although qualitative data analysis “does not follow any cookbook, neither is it totally undisciplined” (Yin, 2015:185). According to Yin (2015), most qualitative data analyses, irrespective of the type or variant of qualitative research, follow a general, five-phased non-linear (i.e. recursive and iterative) cycle, namely: (1) compiling and sorting the amassed data; (2) disassembling the compiled data into smaller fragments or pieces; (3) reassembling (and arraying) the fragments or pieces into different groupings and sequences; (4) interpreting the reassembled data to create a new narrative; and (5) concluding with conclusions drawn from the entire study. Essentially, the qualitative data analysis process typically centres on presentation of specific cases and thematic analysis across cases (Patton, 2015:571). Notably, Computer Assisted Qualitative Data Analysis (CAQDAS) software programs may facilitate rapid qualitative data analysis (Creswell, 2003; 2009; 2014; Creswell & Creswell, 2018; Marshall & Rossman, 2016; Patton, 2015; Yin, 2015).

The primary qualitative data analysed in this research stemmed from the interviews. The total average length of the interviews was 42 minutes; the shortest and longest interviews took 17 and 66 minutes, respectively. Given that the recordings of the face-to-face and telephonic interviews had poor audio quality, subsequent transcription thereof was primarily reliant on the comprehensive notes taken during and after the interviews. In the case of the virtual interviews, transcripts were initially autogenerated by the live speech recognition functionality of Microsoft Teams. Notably, the experimentation and use of such transcription software programs in research may significantly increase qualitative researchers’ effectiveness and efficiency, by eliminating costly transcription time (Marshall & Rossman, 2016; Tessier, 2012). Whilst the Microsoft Teams transcription functionality accurately transcribed parts of the audio recordings, significant manual corrections were made to correct most autogenerated words and sentences. Furthermore, all the transcripts were edited to remove irrelevant ‘fillers’ (e.g. “uhm”, “yeah” and “you know”) and fix grammar mistakes, broken sentences and long paragraphs, to improve readability. Essentially, this research employed ‘naturalised’ or ‘intelligent verbatim’ transcription (see Bucholtz, 2000; Guest & MacQueen, 2008; McMullin, 2021; Oliver, Serovich & Mason, 2005).

The collective qualitative data, comprising of the transcripts, notes and photographs, were imported to NVivo, a CAQDAS software program that supports a wide range of qualitative data formats. Essentially, NVivo facilitated various qualitative analysis tasks, including: classifying, sorting and arranging data; examining relationships in data to establish ‘themes’; and combining data analyses using linking, shaping, searching and modelling functionalities. Firstly, the transcripts, notes and photographs were grouped by key informant type, overall descriptions and overall depictions, respectively. Simple words and short phrases were thereafter used to capture the meaning of the larger portion of texts and photographs into chosen categories assigned

shorthand ‘codes’. This process, known as coding, aids pattern matching in single-case study research designs, where a predicted theoretical pattern is compared to an observed empirical pattern (Campbell, 1975; Yin & Campbell, 2018). Common themes were thus derived from the codes inductively and compared to the themes deduced from studentification and destudentification literature. Essentially, abductive theory development was employed by combining both deductive and inductive strategies, to draw conclusions. Notably, the social, cultural, economic and physical factors making up the spatial dimension of Westdene were the embedded units of analysis. The codes and themes are contained in Appendix B.

3.4 Strengths and limitations of the research approach

Qualitative studies attend to the contextual richness of real-world settings using broadly defined questions, where the social world is not coded according to preordained operational variables (Marshall & Rossman, 2016; Yin, 2015). Essentially, qualitative researchers “state research questions, not objectives...or hypotheses” (Creswell, 2003:12). Given that context matters in qualitative studies, “the study must be conducted in the setting where all this complexity operates over time and where data on the multiple versions of reality can be collected.” (Marshall & Rossman, 2016:206). The immersion of the researcher in Westdene, interviews with key informants and researcher’s field observations enabled multiple worldviews to form part of the collective qualitative data. This combination and confinement of multiple research techniques into a single study forces the techniques into an integrated mode, whereby they share the same research questions to collect complementary data and conduct counterpart analyses (Yin, 1994; 2006). More specifically, using multiple data collection methods and sources enhances the quality of the research by confirming, cross-validating, and/or corroborating the findings, also known as triangulation (Creswell, 2014; Davies, Hoggart & Lees, 2002; Patton, 2015). Notably, qualitative research designs are a vibrant and contested field with many contradictions and different perspectives (Kristiansen, Jacobsen & Brinkmann, 2014).

According to Yin (2015), the most common advice when starting a study is to ensure its scope falls within the anticipated time and resources, neither of which is unlimited. This research was particularly limited by the availability of time and resources (e.g. the researcher’s personal finances). More specifically, these constraints contributed to the decision to employ a cross-sectional perspective, as opposed to a longitudinal ‘in situ’ approach, for this research. This time horizon saw the data collection confined to a short period, and the research participants being selected key informants within Westdene, as opposed to all stakeholders located near UJ campuses. These constraints demonstrated that time and resource constraints also affect sample size, albeit knowing the universe of the possible population and its variability, and then sampling according to all the relevant variables is an impossible task (Marshall & Rossman, 2016). Notably, the sampling variance for (repeated) cross-sectional design is often still present, given that research participants’ characteristics may change (Lavrakas, 2008). In addition to the effect

of time and resource constraints on the sampling, the ongoing COVID-19 pandemic also rendered some sought research participants unreachable, and parts of the study area inaccessible.

Marshall and Rossman (2016) argued that some interviewees may be unwilling and/or uncomfortable sharing all that the interviewer wishes to explore, or they may not be completely truthful in the absence of trust in interviewer–interviewee relationships. Furthermore, some research participants believe that studies can become obtrusive and betray trusts, particularly when shared experiences are exposed in writing, requiring researchers to portray their authentic selves when nurturing field relationships (Yin, 2015). An unwillingness to provide deep personal insights was evident in this research, particularly when questions on the business performance of private student housing and local businesses were put to owners/representatives thereof. Whilst the building of trust between the researcher and research participants was found to be of high importance for the collection of quality data, this was also a time-bound exercise. This delicate relationship between time and research data quality thus proved that “time at your research site, time spent interviewing, and time building sound relationships with respondents all contribute to trustworthy data” (Patton, 2015:989). Notably, Lincoln and Guba (1985) described prolonged engagement in the research setting and persistent observation of elements most relevant to a study as being critical in attending to the credibility of the research.

Given that the process of recruiting key informants for research participation is not often detailed, the question of who identifies a person as a ‘key informant’ is sometimes difficult to answer (Kristensen & Ravn, 2015). Whilst key informants need to be objective and without bias, their recruitment is often influenced by the researcher’s positionality, which also shapes the research (Mauthner & Doucet, 1998). Subsequent to their recruitment, “the (key) informant is allowed considerable leeway in regard to the content of his answers... (and) encouraged to follow, by associative processes, from one thought to the other with relative freedom” (Tremblay, 1957:690). The information obtained thorough the semi-structured interviews in this research may thus be seen as being subjective, due to the research participants providing their own opinions, with no restrictions thereto. Notably, the “power and privilege surrounding key informants might inadvertently lead to key informant interviews being less participatory and more infused with vested interests than researchers might admit” (Lokot, 2021:1). Furthermore, the frequently subtle reflexive influence that the key informants may have over a researcher also necessitates caution against the overdependence on key informants (Yin & Campbell, 2018).

The ‘fear of finding nothing’ in a qualitative inquiry nestled in a case study is unfounded, as “the description of that case at that time and in that place is there... (which) is much more than nothing” (Patton, 2015:813). In order to assess the quality of conclusions drawn in research in general, and qualitative research in particular, Miles and Huberman (1994) proposed that five overlapping issues be considered, namely: (1) objectivity/confirmability of qualitative work; (2) reliability/dependability/auditability; (3) internal validity/credibility/authenticity; (4) external validity/transferability/fittingness; and (5) and utilisation/application/action orientation. Furthermore, Yin and Campbell (2018) suggested that the quality of case study research designs

be judged according to four logical tests, namely: (1) construct validity; (2) internal validity; (3) external validity; and (4) reliability. Notably, reliability refers to the replication and consistency of a research design (to achieve the same findings), whilst validity refers to the appropriateness of the measures used, accuracy of the analysis of the results and generalisability of the findings (Saunders, Lewis & Thornhill, 2016; 2019). Whilst Webb et al. (1999:2) argued that “no research method is without bias”, subjective personal introspections alone are unlikely to detect substantial biases in the employed method and accuracy of reported findings (Woodside, 2010).

3.5 Ethical considerations

Research ethics are a critical part of formulating a research design and it is thus crucial that researchers act ethically and are aware of ethical issues when designing research, gaining access to data sources and collecting data (Saunders, Lewis & Thornhill, 2016; 2019). Moreover, Marshall and Rossman (2016:120) advised that researchers “demonstrate that the study, as designed, is well thought out, responds to criteria or canons for good research practice (depending on the genre), and is likely to be implemented with an ethical mindfulness...(given) the intertwining of trustworthiness and ethics (in qualitative research)”. Notably, all research in UCT’s Faculty of Engineering and the Built Environment are required to conform to stipulated guidelines for ethics in research and associated research ethics clearance requirements (see UCT, 2018). These guidelines require researchers to “consider any and all potential harmful impacts of their research, treat their data sources with respect, and recognise the contributions of other scholars fairly” (UCT, 2018:6). Research ethics clearance was applied for in mid-April 2022, after the design of the interview schedule (prior to data collection), and subsequently approved in early May 2022. The evidence of the ethics clearance is contained in Appendix C.

A minimum requirement for research conducted under the aegis of most institutions is informed consent (from research participants) based on uniquely Western cultural assumptions and principles of individualism and free will (Marshall & Rossman, 2016). An informed consent form was thus developed and included as part of the research ethics clearance application. In addition to obtaining the informed consent for participation in the study and use of any secondary datasets, the informed consent form also explained how the anonymity of the research participants would be protected and how sensitive information (i.e. the research data) would be stored. Care was taken not to use too much legalistic jargon as this may exacerbate a (potential) research participant’s understanding of the purpose and nature of the research and their role in it (Yin, 2015). The researcher read the contents of the informed consent form prior to commencing each interview and thereafter requested consent to continue with and record the interview. Notably, the participants of the face-to-face interviews physically signed an informed consent form, whilst participants of the virtual and telephonic interviews gave oral/verbal consent thereto. The informed consent form employed in respect of the interviews is contained in Appendix D.

According to Marshall and Rossman (2016:138) “ethical practice is ongoing; obtaining a signature on an informed consent form is merely one observable indicator of the researcher’s sensitivity”. Consent was thus also obtained from persons at or near photographed areas in the field, with applicable photographs amended to conceal identifiers (e.g. personal information). Furthermore, personal and contextual identifiers of research participants were excluded from the research findings herein, with pseudonyms substituted for identifiers thereof, to minimise threats to ‘internal confidentiality’ through deductive disclosure (see Kaiser, 2009; Tolich, 2004). Essentially, any information obtained in connection with this study that may be identified with the research participants remained confidential and would be disclosed only with the research participants’ permission or as required by law. Despite the data cleaning measures employed to protect the anonymity of individuals and institutions, utmost care was taken not to distort perspectives of research participants. The collective research data were subsequently stored in the researcher’s digital devices and UCT’s data repository services; only the researcher had access to the data, whose later usage was subject to standard data use policies. Notably, the prevailing COVID-19 regulations were strictly adhered to whilst in the field.

3.6 Summary of research methodology

This chapter outlined and unpacked, in great detail, the components of the research approach employed in this research in general, and the data collection and analysis in particular. The decision was taken to collect and analyse data on the spatial dimension of Westdene, a residential neighbourhood adjacent to the largest campus of UJ, the UJ APK Campus, defined as a university town. More specifically, the research approach entailed the use of an embedded single-case study research strategy, employing a multi-method qualitative research approach. Essentially, semi-structured interviews with key informants and field observations were adopted for the empirical exploration of the social, cultural, economic and physical factors attributable to the UJ student population in Westdene. Notably, the rationale for the choice of the techniques and procedures encapsulated by the effective research methodology were underpinned by theoretical concepts of effective research designs and ethical research. Whilst the chosen research approach had its merits, a mandated critique thereof highlighted several limitations thereto, related to the research tools, sample size, research participants, and time horizon. These limitations notwithstanding, relevant and rich insights were solicited through this research approach. Chapter 4 thus presents these insights, with the discussion thereto conducted in Chapter 5.

4. Research findings

4.1 Introduction to research findings

In Chapter 3, the components of the research approach employed in this research in general, and the qualitative data collection and analysis techniques in particular, were outlined and unpacked in detail. Essentially, semi-structured interviews with key informants and field observations were adopted for the empirical exploration of the spatial dimension of Westdene, a residential neighbourhood adjacent to the largest campus of the University of Johannesburg (UJ), the Auckland Park Kingsway (UJ APK) Campus, defined as a university town. Notably, this dimension comprises the social, cultural, economic and physical factors attributable to the UJ student population therein, which formed the embedded units of analysis. This current chapter presents the findings from the data collected in the case study; these findings are discussed further in Chapter 5, with conclusions thereto drawn in Chapter 6. The presentation of the findings begins with the insights from the semi-structured interviews with each key informant group. These primary insights are followed by the insights gained from the field observations, based on the photographs and accompanying descriptive notes taken in the field. The chapter then concludes with a discussion of other key factors noted during the data collection and analysis periods for due consideration in further research.

4.2 Findings from semi-structured interviews

The semi-structured interviews employed in this research were designed to gain insights into narratives of the spatial dimension of Westdene, prior to and during the coronavirus disease 2019 (COVID-19) pandemic, and any changes thereto. More specifically, these interviews aimed to explore key variables in Westdene, including: private student housing market; local business activity; and community issues and governance. In order to solicit relevant and rich insights into these variables, the interviews focused and reflected on the experiences and interpretations of well-placed key informants in Westdene, who were identified and categorised into three groups, namely: (1) private student housing; (2) local businesses; and (3) community engagement and policing forums. Notably, the later key informant group was originally listed as two separate groups in the interview schedule contained in Appendix A, and the associated questions were later merged. Given the shorter and/or temporary presence of UJ students in Westdene, they were not considered as key informants in this research and their perspectives were thus excluded. Whilst key informant groups were defined in the effective interview schedule, some key informants provided insights and answers to questions specifically put to other key informant groups, due to their broad/diversified involvement within and knowledge of Westdene.

4.2.1 Insights from private student housing owners

Owners of private student housing were believed to be well placed in Westdene to be able to provide relevant and rich insights into the social dimension thereof. This belief was due to the private student housing market in Westdene being deemed as one of the key variables thereto. Ultimately, three owners of UJ-accredited privately owned student accommodation (POSAs) allotted to the UJ APK Campus in 2020 (see UJ, 2020a) and 2022 (see UJ, 2022c), were interviewed; one interview was conducted virtually and two interviews were conducted telephonically (one of which commenced virtually). The interviewees owned POSAs of varying capacities in Westdene; all interviewees owned multiple private student housing. Notably, these interviewees were chosen to represent the student communes/houses in multiple occupation (HMOs) and purpose built student accommodation (PBSAs) in Westdene, to give diverse perspectives on the private student housing therein. The total average length of the interviews was 36 minutes; the shortest and longest interviews took 22 and 45 minutes, respectively. The codes that emerged from the interview data are contained in Appendix B. The interviewees were assigned pseudonyms SH1, SH2 and SH3, to protect their anonymity.

Each interview commenced with scoping questions regarding the history and nature of the interviewee's private student housing offering. Two interviewees indicated that they had been supplying private student housing in Westdene for over ten years, whilst one interviewee had been supplying private student housing in Westdene for nearly five years. Notably, all the interviewees owned multiple POSAs; two interviewees had multiple POSAs in Westdene and surrounds, whilst one interviewee had a POSA in Westdene and an outlying neighbourhood. Furthermore, all the interviewees were aware of the private student housing market in Westdene prior to becoming suppliers thereto. More specifically, Interviewee SH1 stated that "private student accommodation in Westdene actually has a long history, but basically, it's been sort of 'undercover' for a long period of time, because...students were housed in communes (i.e. HMOs)". Interviewee SH2, who witnessed the transition of the Rand Afrikaans University (RAU) to the present UJ APK Campus, also noted that "there were always people who (historically) lent part of their properties to students". Interviewee SH3 echoed these insights on the history of the private student housing market in Westdene, noting that "(private student housing in Westdene has) been happening for a while".

All the interviewees mentioned private student housing policies promulgated by UJ (see UJ, 2015; 2016) and the City of Johannesburg (CoJ) (see CoJ, 2009). According to Interviewee SH1, these policies were "a 'game changer'...as many (previous private student housing) were legal...(but) there wasn't a good standard of safety or (student) facilities...hence it became a very lucrative business, because returns were pretty good but (their) capital outlay was low". With reference to the establishment of UJ and subsequent student housing demand, Interviewee SH2 observed that "a lot of unscrupulous (property owners) exploited the situation...without complying with any by-laws or municipal provisions...didn't go through the rezoning process...(and) made changes to the properties without approved building plans". Notably, all

the interviewees were aware of established residents of Westdene selling their properties to private student housing investors over time. In addition to the noted investor interest, Interviewee SH3 observed that “some residents sold their houses due to not being able to live (alongside) student populations”. Whilst the other interviewees concurred that such resident grievances were common, one interviewee noted that some complaints against students and private student housing were potentially racially-motivated, where the students and/or owners of the reported private student housing were Black.

Despite many UJ off-campus students returning to their homes in 2020 amidst study-at-home policies, all the interviewees confirmed that they still received their full payments for that year. These guaranteed payments were due to POSAs being paid directly from the National Student Financial Aid Scheme (NSFAS) budget administered through UJ; non-UJ-accredited private student housing providers, who tend to be ‘cash-based’, were not guaranteed NSFAS payments. Notably, Interviewee SH2 mentioned that “we were fully booked (for 2020) but only about half of the students stayed with us; the rest went home (for the remainder of 2020), but (UJ) asked students to keep on paying rent...so our overheads were lower...but we had 100% rental income”. Interviewee SH3 echoed this statement, stating that “when (the COVID-19 pandemic) started, there was obviously a bit of anxiety about what the effect is going to be, but once we settled into it, we kept on receiving our (NSFAS) payments...(COVID-19) had an effect on those landlords who aren’t NSFAS-accredited because of (their reliance on) cash (from) students”. Despite the guaranteed NSFAS payments earlier in the COVID-19 pandemic, the interviewees concurred that many POSAs faced cash flow issues due to late payments thereof.

Whilst POSAs were guaranteed full NSFAS payments for students who vacated their properties and thereafter studied from home in 2020, this was not the case in 2021 and 2022. Notably, Interviewee SH2 stated that “2021 was a nightmare, it was our worst year ever; we were probably not more than 55% occupied...the reason for that was (UJ) gave students (cellular) data per month to study from home...and hence our income was also around 60%”. Moreover, Interviewee SH1 noted that private student housing with shared student rooms and student facilities were affected by earlier strict COVID-19 regulations that necessitated the implementation of various measures therein, including: one student per shared room (where divisions and/or visors were not practical); micromanaged shared student facilities (e.g. timetables for the use of shared kitchens); and designated COVID-19 isolation and/or quarantine rooms. All the interviewees noted that socioeconomic factors played a crucial role in students’ term-time accommodation choices during the COVID-19 pandemic, particularly students from homes whose conditions were not conducive to studying and/or socialising. According to Interviewee SH1, some such students even broke earlier laws pertaining to allowable inter-provincial travel during the COVID-19 pandemic, to return to their private student housing.

Two of the interviewees were concerned by the sustained low occupancy rates in the private student housing sector, even as students were allowed to return to their term-time accommodation. More specifically, both interviewees mentioned that the overall private student

housing occupancy rates in 2022 were still low and had not returned to the levels noted prior to the COVID-19 pandemic; UJ student residences and POSAs had 100% occupancy rates in 2019 (UJ, 2020b). Furthermore, both interviewees suspected that the low private student housing occupancy rates in Westdene during the COVID-19 pandemic were exacerbated by the oversupply of beds by PBSAs in nearby areas. Notably, all the interviewees had observed a rapid increase in PBSAs locally, financed primarily by institutional investors. Interviewee SH3 therefore maintained that activity in the local private student housing market would increase, adding that “there’s still going to be opportunities for small, medium and large developers who have the financial capacity...and (risk) appetite...and mom-and-pop kind of developers”. Interviewee SH1 concurred that larger developer had an “eye for business risks”, and thus commended smaller private student housing providers, particularly Black businesspersons, who were resilient when faced with financial concerns and market shifts alongside COVID-19.

In concluding the interviews, the interviewees were provided an opportunity to speak about any other pertinent matters they felt needed to be considered in the research. All the interviewees noted increasing attention on the densification of Westdene, particularly through high-rise buildings and PBSAs. However, Interviewee SH1 was concerned about undue pushback from some established residents against some spatial development projects meant to improve the diversity and physical appearance of Westdene. Contrastingly, Interviewee SH2 was of the opinion that pushback from the established residents of Westdene was due to various concerns, including: incoherent spatial development visions; deterioration of the general environment; unresolved social problems (e.g. unemployment) in adjacent neighbourhoods leading to drugs, gangs and crime also targeted at students; inefficient policing evidenced by increasing private security; and collapse of municipal infrastructure. Interviewee SH3 concurred that the CoJ needed to improve municipal services in Westdene, as private student housing is often blamed particularly for electricity issues in the neighbourhood. In addition to the issues faced by residents of Westdene, Interviewee SH2 was concerned about the “mishandling of (private student housing) accreditation at UJ”, marked by undue cancellations, delays and refusals of POSA accreditation, with many investors considering leaving the sector.

4.2.2 Insights from local business owners/representatives

Owners/representatives of local businesses were believed to be well placed in Westdene to be able to provide relevant and rich insights into the social dimension thereof. This belief was due to the local business activity in Westdene, in relation to the UJ student population therein, being deemed as one of the key variables in the neighbourhood. Ultimately, five owners/representatives of local businesses were interviewed, with two business co-owners interviewed simultaneously; all interviews were conducted face-to-face at the interviewees’ premises. The interviewees included: two co-owners of a food supply business (interviewed simultaneously); owner of an academic resources retail business; owner of a fast-food restaurant and entertainment facility; and manager of a beauty salon. Notably, these interviewees were chosen to represent the

hospitality, retail, food and personal services industries in Westdene, to give diverse perspectives on the local business activity therein. The total average length of the interviews was 34 minutes; the shortest and longest interviews took 18 and 53 minutes, respectively. The codes that emerged from the interview data are contained in Appendix B. The interviewees were assigned pseudonyms LB1, LB2, LB3 and LB4, to protect their anonymity, with the co-owners who were interviewed simultaneously sharing a pseudonym.

Each interview commenced with scoping questions regarding the history and nature of the interviewee's business, and patronage of student consumers. One interviewee indicated that they bought their business, which was primarily patronised by non-student customers, during the COVID-19 pandemic, due to the established brand awareness amongst and proximity to local residents. Notably, this interviewee had been exploring ways to target UJ students, noting that very little student consumers patronised their business; the interviewee wished to diversify their customer profile to include students, due to their proximity to the UJ APK Campus. Another interviewee, whose business primarily targeted and was patronised by students, indicated that they moved their business from another area to Westdene, to be closer to the student consumers stemming from the UJ APK Campus, and had been operating for nearly four years. Similarly, another interviewee, whose business opened at the advent of COVID-19, catered primarily for student consumers; the purpose of opening this business was to extend the interviewee's preexisting business portfolio with a niche offering in Westdene. Another interviewee stated that they had been working in and managing their business, which serviced both student and non-student customers from Westdene and surrounding areas, for nearly ten years.

When describing Westdene in general, and the business landscape therein in particular, Interviewee LB1 made a clear distinction thereto: "The crime where we previously lived (in Westdene) was getting out of hand...as much as we love Westdene, we had to pack up for the safety of our family...but we like where (the business is) situated; it's much better". All the interviewees mentioned that the image of students in general and student consumers was not always well received by established resident. More specifically, Interviewee LB1 noted that, historically, some families living in the neighbourhood were put off by certain actions by students, which also deterred their customers, including: loud music (from private student housing and entertainment hotspots frequented by students); littering of alcohol bottles on the street; and rowdiness. Whilst some of the other interviewees acknowledged that such issues occurred, one interviewee noted that some complaints against students and businesses frequented by students were potentially racially-motivated, where the student consumers and/or owners of the said businesses were Black. Notwithstanding these issues, all the interviewees agreed that customers were also deterred by crime, and the vagrants and drug dealers sometimes seen loitering near some businesses in Westdene.

All interviewees' businesses closed for various periods during the COVID-19 pandemic, particularly in 2020, due to restrictions to their operations. Furthermore, the businesses were forced to adhere to strict health protocols, with Interviewee LB4 adding that "most shops had

sanitiser and (digital thermometers)...and everyone was wearing masks; even until now”. Interviewee LB3 noted that earlier COVID-19 regulations also had an effect on student consumer patterns: “there’s usually a dip (in students) during university closures but the (COVID-19) pandemic made it worse, especially in the beginning when students left.” Whilst Interviewee LB1 noted a slight increase in goods delivery requests amidst the stricter stay-at-home-directives in 2021, increasing food prices later affected their consumers. Similarly, Interviewee LB2 noted increased prices during the COVID-19 pandemic, which triggered significant decreases in their capital spending (on inventory) as well as retrenchments. Notably, some of Interviewee LB2’s larger suppliers and competitors also closed down, amidst a suspected shrinking consumer market. In addition to the ongoing global economic disruptions

of COVID-19 and associated government austerity measures, two of the interviewees attributed the rising economic challenges in 2022 to the prevailing Russian invasion of Ukraine (see Ellyatt, 2022; Kirby, 2022; Psaropoulos, 2022; United Nations, 2022a; World Bank, 2022).

Two of the interviewees were concerned by the continued decrease in the student customer traffic amidst the economic downturn and changing consumer behaviour (i.e. customers finding alternative offerings). Furthermore, Interviewee LB2 suspected that many students from poor households were spending less at local businesses due to sending portions of their NSFAS allowances to their families. Given these collective challenges, Interviewee LB2 stated that “agility is required in businesses to survive going forward”, amidst the consideration of options such as cost-cutting); the (student) consumer market would be the ultimate determiner of the appropriate actions. Similarly, Interviewee LB3 noted that “the (COVID-19) pandemic opened ‘new ways of doing business’ especially with technology...hence we opened online orders to draw new customers on top of students”. Moreover, Interviewee LB3 was certain that more business owners would consider moving into Westdene, particularly those with accommodation and hospitality businesses targeting students. Two of the other interviewees expressed similar sentiments, having observed residential properties and closed businesses in Westdene being bought by (new) business owners. However, Interviewee LB2 added that “some (new) businesses are coming (into Westdene) but don’t understand the dynamics ...(and) are desperate to open business and make money fast without learning”.

In concluding the interviews, the interviewees were provided an opportunity to speak about any other pertinent matters they felt needed to be considered in the research. Whilst the interviewees generally embraced new businesses entering Westdene, Interviewee LB1 raised concerns about perceptions thereto, stating that “other businesses make it hard for residents to accept new businesses coming into Westdene...(and) existing residents will be pushed out (of Westdene) more if it’s seen as a run-down area”. Interviewee LB2 made a similar statement: “the (electricity) grid is overloaded by (new) ‘slumlords’ who’re using illegal (electricity) connections...on top of poor infrastructure, water (supply) cuts and shortages faced in the area”. Two of the interviewees were aware of development plans promulgated by the CoJ, and stated that concerted efforts were required to improve Westdene. Notably, Interviewee LB1 made

reference to the Corridors of Freedom (CoF) initiative and suggested that residents, and local business and private student housing owners play a role in actioning it; the CoJ initiated the CoF in 2013 to tackle spatial segregation and facilitate equal access to economic opportunities (CoJ, 2013). Furthermore, Interviewee LB1 suggested that “industry bodies need to play a better role to understand (business) models that can work”.

4.2.3 Insights from community engagement and policing forum members

Members of community engagement and policing forums were believed to be well placed in Westdene to be able to provide relevant and rich insights into the social dimension thereof. This belief was due to the community issues and governance in Westdene, in relation to the UJ student population therein, being deemed as some of the key variables in the neighbourhood. Ultimately, three members of community engagement and policing forums were interviewed; one interview was conducted face-to-face at the interviewee’s premises, one interview was conducted virtually, and one interview was conducted telephonically. The interviewees included: affiliate of the local government; active member of a residents’ forum; and senior member of the jurisdictional police force. Notably, these interviewees were chosen to represent the active community members and civic authorities in Westdene, to give diverse perspectives on the community structure and governance therein. The total average length of the interviews was 36 minutes; the shortest and longest interviews took 17 and 67 minutes, respectively. The codes that emerged from the interview data are contained in Appendix B. The interviewees were assigned pseudonyms GC1, GC2 and GC3, to protect their anonymity.

Each interview commenced with scoping questions regarding the history and nature of the interviewee’s involvement in Westdene. Two of the interviewees indicated that they were established residents of Westdene, with both having resided therein for nearly 30 years. Another interviewee stated that they had been working in Westdene for four years, whilst residing in an outlying neighbourhood. Moreover, all the interviewees were involved in community engagement and policing forums in Westdene, which connect residents to the local government and police force, respectively. Notably, Westdene falls within the jurisdiction of the Sophiatown Police Station, whilst the UJ APK Campus, which is technically located in Rossmore, falls within the jurisdiction of the Brixton Police Station. All the interviewees were aware of the UJ student population in Westdene for several years, with Interviewee GC1 stating that “there’s been a university (adjacent to Westdene) for some time and there's always been students around”. Interviewee GC2 concurred with this sentiment, adding that as an established resident of Westdene, one “just had to (accept) it because there were all these students (in Westdene) anyways”. Interviewee GC3, echoed these insights on the considerable and observable increase in the off-campus student population in Westdene over time.

Whilst businesses and commercial developments exploited the increase in student enrolments at UJ from the early 2000s, Interviewee GC1 observed that the private student

housing sector in Westdene played a considerable role thereto, due to various factors, including: direct NSFAS payments as per UJ's private student housing policies (see UJ, 2015; 2016); and allowances for the development of private student housing (including on residential property footprints) as per the CoJ's policies in respect of private student housing (see CoJ, 2009) and land usage (see CoJ, 2018). According to Interviewee GC1, the subsequent developments within Westdene saw a shift in the demographics therein, with the percentage of erven hosting established residents becoming progressively less than that hosting students. Notably, two of the interviewees noted that not all communes (i.e. HMOs) in Westdene hosted students; some HMOs in Westdene operated illegally, despite policies thereto. In light of the subsequent increase in the private student housing properties in Westdene, Interviewee GC2 mentioned that "(Westdene residents) had problems with infrastructure in the neighbourhood...because (the infrastructure therein) hadn't catered for (the increase in the number of) students".

As the UJ student population increased over time, Interviewee GC1 noted that "there was quite a vibrant scene on the main road (adjacent to) Westdene (due to entertainment hotspots) patronised by students". In addition to the entertainment hotspots that attracted students, Interviewee GC2 noted that some students had "parties (in HMOs) until godforsaken hours...(leading to) mess in the streets and noise". Notwithstanding the noise pollution from some private student housing and entertainment hotspots, Interviewee GC1 affirmed that students were not always to blame for excessive noise in Westdene; some entertainment hotspots also attracted other youth (e.g. young professionals) amidst by-law infringements. From a safety and security perspective, all the interviewees stated that students in Westdene were often targets and/or victims of criminal activities in the neighbourhood, including: cell phone robberies; motor vehicle break-ins; drug peddling; and sexual violence (e.g. sexual harassment and rape). Furthermore, Interviewee GC3 observed that some HMOs were "'raided' (by police) after students accused each other of stealing cell phones". Notably, two of the interviewees cautioned that some of the criminal activities in Westdene were unduly attributed to students, noting that in many cases, (young) non-student residents from illegal communes therein and adjacent neighbourhoods were the perpetrators.

Despite concerns regarding COVID-19, Interviewee GC2 exclaimed sarcastically that "students are invincible!", adding that students "walked around (Westdene) without masks...(and) just do whatever they want...(therefore) I don't think that (COVID-19) had any effect (on student lifestyles)". Whilst Interviewee GC2 was quite concerned about students in Westdene not adhering to COVID-19 regulations, this behaviour was also noted amongst other residents therein. Notwithstanding the non-adherence to COVID-19 regulations in Westdene during the pandemic, two of the interviewees observed considerable changes in the neighbourhood, particularly amidst earlier study-at-home policies. More specifically, Interviewee GC1 stated that "it was a lot quieter because there was less activity in general (as) people (remained) in their properties (and) quite a lot of students were not (in Westdene as) they went home". Two of the interviewees also agreed that the decrease in general activity in Westdene during the COVID-19 pandemic, particularly amidst earlier restricted movement, also

led to a decrease in criminal activity therein. Notably, Interviewee GC3 stated that “low movement (during the COVID-19 pandemic) definitely helped decrease crime (in Westdene)”, adding that a concurrent increase in police visibility also assisted in dropping the crime rate.

Interviewee GC1 noted that the operations of many businesses, particularly popular places of entertainment, were significantly restricted by earlier COVID-19 regulations, leading some owners thereof to close temporarily and/or permanently, amidst prolonged financial challenges. Whilst some business closures were concerning, Interviewee GC1 reiterated that Westdene “is a primarily residential area, so it’s not the ideal place for (entertainment hotspots) that are active right through into the small hours”. Furthermore, two of the interviewees were aware that some private student housing providers also experienced similarly challenges to businesses that closed during the COVID-19 pandemic. Notwithstanding these observed challenges in the private student housing market in Westdene during the COVID-19 pandemic, Interviewee GC1 mentioned that “there is an oversupply of student accommodation”. As COVID-19 regulations were progressively eased, particularly in 2021 and 2022, Interviewee GC3 observed that criminal activity in Westdene also increased, stating that “now with increased movements (as allowed by COVID-19 regulations), crime is back up...(and) there are crime hotspots due to gangs”.

In concluding the interviews, the interviewees were provided an opportunity to speak about any other pertinent matters they felt needed to be considered in the research. Interviewee GC1 welcomed the densification of parts of Westdene, towards improving the diversity of the neighbourhood, however, noted various concerns thereto, including: ‘elimination’ of houses; failure of municipal services; and poor environmental management. Furthermore, Interviewee GC1 observed that the “maintenance (of some) buildings is starting to look a bit shabby...(and some owners thereof) are allowing tenants (to operate) illegal shebeens (i.e. unlicensed bars)...and a lot of students have been hassled (by patrons thereof)”. Interviewee GC2 echoed these concerns, adding that “crime has increased in (Westdene)”, and suggesting an increase in awareness thereof as “students are vulnerable (to crime) but they don’t recognise how vulnerable they are”. Whilst two of the interviewees acknowledged the work of community policing forums within Westdene, they noted the need for joint safety and security programmes with the UJ APK Campus in respect of students in Westdene. Notably, a senior officer of the Brixton Police Station contacted by the researcher confirmed that no joint safety and security programmes with the UJ APK Campus, in respect of students in Westdene, existed.

4.3 Results from field observations

The field observations employed in this research complemented the interviews as the second stage of the data collection. More specifically, observational walkabouts were conducted, with the qualitative ‘data’ collected thereto being photographs, accompanied by descriptive notes. The photographs depicted aspects of and within Westdene relevant to the study, including: UJ APK Campus and its associated student facilities; identifiable private student housing; local

businesses; public space and infrastructure; general state of the environment; and neighbourhood safety and security measures. In addition to the opportunity to take photographs, the observational walkabouts also enabled informal ('non-interview') conversations with persons in Westdene, including: individuals exiting identifiable private student housing and communes; individuals sitting outside local businesses; stationary and patrolling private security officers; staff members at UJ APK Campus' off-campus student residence and student sporting and recreation facilities; and parked e-hailing drivers. The average time spent collecting the data was 117 minutes; the shortest and longest observational walkabout took 32 and 256 minutes, respectively. The photographs taken in the field are contained in Appendix E, whilst the codes that emerged therefrom are contained in Appendix B.

4.3.1 Insights on observed UJ student facilities

The UJ APK Campus, which is technically located in the suburb of Rossmore, is separated from Westdene by Perth Road/Kingsway Avenue, an arterial road whose name changes halfway along the campus' road-side boundary. No pedestrian or vehicular access to the UJ APK Campus was observed along the section of Perth Road/Kingsway Avenue adjacent to Westdene; a previous pedestrian entrance colloquially referred to as the 'Last steps of UJ' (see Figure A-3; circled in red) appeared to be permanently closed. Notwithstanding this closed entrance, the UJ APK Campus has an access-controlled gate along the section of Perth Road/Kingsway Avenue adjacent to Auckland Park (see Figure A-4), just outside the boundary of Westdene. This entrance is linked to the UJ APK Campus' off-campus student parking facility, located adjacent to Westdene, by a pedestrian bridge above a Rea Vaya bus rapid transit (BRT) system station (see Figure A-5). Notably, the UJ APK Campus' off-campus student parking facility was relatively empty throughout the week, save for a few buses shuttling UJ students (and/or staff) thereto. Furthermore, some UJ students were seen alighting at the UJ APK Campus from e-hailing vehicles, taxis (see Figure A-6), and BRT and regular buses; whilst some walked to the campus.

Whilst the UJ APK Campus provides its own student housing primarily in on-campus student residences, the campus also has an off-campus student residence located in Westdene, known as Gloucester Female Residence (see Figure A-7). This off-campus student residence, which is nestled amongst residential properties, is also adjacent to the UJ Stadium (used for athletics and rugby). Notably, the UJ Athletics Stadium is at the southwest end of a chain of UJ sports facilities running diagonally to the northeast of Westdene, including netball, tennis, hockey and cricket venues (see Figure A-8). These facilities, which are all flanked by residential properties, have signage throughout Westdene directing visitors thereto. Whilst no sporting and/or leisure activities were observed in these facilities, signage at the entrances of each facility mandating the wearing of masks therein (see Figure A-9) indicated that the facilities may have been open to hosting activities at some point during the COVID-19 pandemic. Furthermore, some of the security personnel stationed at the UJ sports facilities engaged by the researcher confirmed

that the facilities were primarily closed during the COVID-19 pandemic, with very few activities occurring therein, even after the easing of COVID-19 regulations to allow outdoor activities.

4.3.2 Insights on observed identifiable private student housing

Various private student housing properties in Westdene, ranging from student communes/HMOs to PBSAs (see Figure A-10 and Figure A-11), were seen nestled amongst residential properties, with PBSAs primarily near or adjacent to arterial and collector/distributor roads. Many of these private student housing properties were identifiable by signage and/or marketing material indicating that they accommodated students (see Figure A-12). However, it was unclear as to whether all the identified private student housing properties were POSAs or unregulated/illegal private student housing. Similarly, other properties had signage indicating that they offered rental accommodation (see Figure A-13), albeit they did not specify whether they accommodated solely students, or whether they were POSAs or unregulated/illegal private student housing. Where the researcher was uncertain about the nature of some such properties, and persons were seen entering/exiting these properties, the researcher enquired as to whether the inhabitants of the properties were students and if the properties were operated as (accredited) private student housing. In many cases, these peculiar properties were found to be communes offering rental units primarily to young persons, irrespective of whether they were students or not. Notably, the capacity of most of the observed private student housing properties was unclear to the researcher.

Some of the identified private student housing properties were or had recently been on the market, based on 'For sale' signage noted thereto (see Figure A-14). Furthermore, some private student housing properties were undergoing extensions and/or refurbishments, given the construction material noted outside these properties (see Figure A-15). With the exception of HMOs that had visibly undergone recent extensions and/or refurbishments, the observed PBSAs seemed much newer and in better condition than the HMOs. Where persons were seen entering/exiting identified private student housing properties, the researcher enquired about their residential status and the nature of the private student housing amidst COVID-19. In most cases, these persons were found to be students, with many of them indicating that their private student housing properties had empty rooms or beds. Moreover, few private student housing properties still enforced preventative measures for COVID-19, albeit many had done so at the advent of COVID-19. Notably, parties/gatherings and music were heard from some private student housing properties, particularly on or close to weekends, with alcohol bottles also strewn outside such properties (see Figure A-16), albeit various signage prohibited such acts (see Figure A-17).

4.3.3 Insights on observed local businesses

Various local businesses in Westdene, particularly in the hospitality, retail, food and personal services industries (see Figure A-18), were seen nestled amongst residential properties near or

adjacent to arterial and collector/distributor roads. Many of these local businesses were identifiable by signage indicating their offerings; some local businesses co-opted trading names that employed terms such as “UJ” (see Figure A-19), presumably to attract student consumers. However, it was unclear as to whether all the local businesses were formal, informal or unregulated/illegal businesses. Notwithstanding mobile and street vendors (see Figure A-20), some seemingly residential properties had signage indicating that they hosted businesses, albeit it was unclear as to whether these businesses were formal, informal or unregulated/illegal. Where the researcher was uncertain about the nature of some such businesses, and persons were seen entering/exiting these establishments, the researcher enquired as to whether the patrons of the establishments were students and if the establishments were operated as (formal) businesses. In many cases, these peculiar establishments were found to be informal or unregulated/illegal businesses, offering goods and services to the general public. Notably, the percentage of most of the observed local businesses’ student patronage was unclear to the researcher.

Some of the identified local businesses appeared to be temporarily or permanently closed (and/or halted their opening) (see Figure A-21), whilst some businesses were or had recently been on the market, based on ‘For sale’ signage noted thereto (see Figure A-22). Notably, most of the identifiable local businesses, particularly in the hospitality and personal services industries, were relatively empty on weekdays and seemed to be patronised (by diverse consumers) primarily on weekends. Where persons were seen entering/exiting identified local businesses, the researcher enquired about their residential status and the nature of the local businesses amidst COVID-19. These persons were found to be students or established residents, equally, with many of them indicating that most of the local businesses they frequented in Westdene were relatively empty throughout the week. Similarly, drivers of e-hailing vehicles (see Figure A-23), taxis and tuk-tuk taxis (see Figure A-24) operating in and/or traversing Westdene that were engaged by the researcher noted fewer trips to/from Westdene during the COVID-19 pandemic. Moreover, few local businesses still enforced preventative measures for COVID-19, albeit many had done so at the advent of COVID-19. Notwithstanding these perspectives on business activity in Westdene, job-seekers were seen seeking casual employment in the neighbourhood.

4.3.4 Insights on observed general physical and environmental attributes

In general, the residential properties in Westdene were found to vary in sizes from single- to multi-storey, with some properties undergoing extensions and/or refurbishments, given the construction material noted outside these properties (see Figure A-25). Notably, numerous residential properties were or had recently been on the market, based on ‘For sale’ signage noted thereto, particularly those adjacent to UJ student facilities, private student housing, and communes (see Figure A-26). Similarly, numerous advertisements for property sales and management services were observed (see Figure A-27). Despite evidence of the maintenance and/or improvement of various properties in Westdene, some residential properties were quite dilapidated (see Figure A-28). Furthermore, graffiti was spotted on some properties’ walls (see

Figure A-29), albeit some such graffiti appeared to be ‘art’ whilst other graffiti was visibly vandalism; some UJ student facilities’ walls also had graffiti (see Figure A-30). In addition to the noted properties, several public spaces were also observed, including a park colloquially referred to as ‘UJ Exiles Park’ and the grounds of the Westdene Dam (see Figure A-31), both of which were relatively empty throughout the week, save for some vagrants resting therein.

Whilst essential public infrastructure such as brightly-coloured bollards and dropped curbs at street intersections (see Figure A-32) were evident throughout Westdene, so too were public infrastructure concerns, including: drains near private student housing and local businesses clogged by litter (some of which had water seeping therefrom) (see Figure A-33); damaged and unkept pedestrian walkways (see Figure A-34); and marketing material plastered on public infrastructure (see Figure A-35). Furthermore, some of the boxes atop utility power poles with connections leading to private student housing and local businesses appeared to have been vandalised/tampered with (see Figure A-36). Similarly, some free-standing electricity meter boxes close to local businesses and outside the Gloucester Female Residence (see Figure A-37) seemed to have been vandalised/tampered with. Notably, a security guard stationed at the Gloucester Female Residence confirmed to the researcher that some easily-accessible electricity meter boxes on the property were vandalised/tampered with at night. Notwithstanding these issues in the physical environment, there were signs of maintenance and/or improvement of public infrastructure, albeit some road excavations thereto were poorly fenced (see Figure A-38). Moreover, there were signs of recycling by some households (see Figure A-39).

4.3.5 Insights on observed neighbourhood safety and security measures

With the exception of where private student housing and local businesses are located, most of the streets within Westdene were found to be relatively empty, with very few established residents encountered therein; few students and other youth were seen walking and/or skating around (see Figure A-40). Notwithstanding this ‘emptiness’, the researcher felt relatively safe during the observational walkabouts; several persons encountered within the ‘quiet’ streets also confirmed to the researcher that they felt relatively safe, albeit many of them advocated for vigilance. Furthermore, some of the engaged private security guards and police officers (see Figure A-41) spotted patrolling in their vehicles within and adjacent to Westdene also advised the researcher to be cautious of potential criminals in the area, particularly when taking photographs and notes. Notably, several other crime prevention, deterrent and awareness measures were also observed throughout Westdene, including: community policing signage and public surveillance cameras (see Figure A-42); private security guardhouses on residential streets (see Figure A-43); and private security signage, electric fencing and cameras on properties’ walls (see Figure A-44). Despite the inherent safety and security concerns, and measures taken thereto, no conspicuous criminal behaviour and/or activity were noted by the researcher in Westdene.

4.4 Additional factors noted during data collection and analysis

The perspectives of UJ students were not considered in the data collection, given student's shorter and/or temporary presence in Westdene. Notwithstanding this deliberate exclusion of potential research participants, other sought persons were unable to be included as key informants in this research, namely: two private student housing owners and two local business owners who indicated they ceased operations in Westdene during the COVID-19 pandemic, who did not attend their (repeatedly rescheduled) interviews; two municipal officials and four private student housing owners (two of whom owned non-UJ-accredited private student housing) who did not respond to requests for participation in this research; and active members of the Westdene-Sophiatown Residents' Association (WSRA). Notably, the WSRA, which had planned to create a forum with the Brixton Police Station in 2018 geared towards students (Northciff Melville Times, n.d.), experienced internal issues and was presumed to have been disbanded (see Dlodlo, 2020; Mokoena, 2018). Whilst a saturation point was believed to have been reached in the collected data, these potential research participants may have provided relevant and rich insights into various matters discussed with the key informants, including: closed private student housing and local businesses; unregulated/illegal communes; and student-resident relationships.

The National State of Disaster declared in South Africa at the advent of COVID-19 in early 2020, was lifted in April 2022 (*Disaster Management Act, No. 57 of 2002. Amended regulations issued in terms of section 27(2)*, 2021). Although various strict COVID-19 regulations remained during the data collection in May and June 2022, the progressive easing thereof highlighted a shift in the South African government's stance on COVID-19 (Nicolson, 2022). Similarly, the mandatory COVID-19 vaccination policies implementing by UJ and other HEIs in early 2022 for access to campuses faced considerable criticism (Mokhoali, 2022; Mthethwa, Solomons & Brand, 2022; 2022a; UJ, 2022b). Notwithstanding these policy issues, COVID-19 still remained a cause for concern throughout Africa due to relatively low levels of COVID-19 vaccinations (Ebrahim, 2022; The Continent, 2022; United Nations, 2022b). Whilst these collective factors underpinned considerable uncertainties regarding the COVID-19 pandemic from mid-2022, they were primarily noted following the completion of the data collection. As a result, ambiguities relating to the COVID-19 pandemic in 2022 were unable to be fully unpacked in the study, which necessitates further research thereto. Notably, such further research may also consider the multi-country monkeypox outbreak that emerged in mid-2022 (see World Health Organisation, 2022).

4.5 Summary of research findings

This chapter presented the insights from the data collected through semi-structured interviews with key informants and field observations. The semi-structured interviews led to various insights into narratives of the spatial dimension of Westdene, prior to and during the COVID-19 pandemic, on the basis of key variables in the neighbourhood, including: private student housing market; local business activity; and community issues and governance. The field observations, which complemented the interviews as the second stage of the data collection, led to various insights into aspects of and within Westdene relevant to the study, including: UJ APK Campus and its associated student facilities; identifiable private student housing; local businesses; public space and infrastructure; general state of the environment; and neighbourhood safety and security measures. In addition to the presentation of the findings, due consideration of other key factors in further research was suggested, including: insights from other sought persons who were unable to be included as key informants in this research; ambiguities relating to the COVID-19 pandemic in 2022; and multi-country monkeypox outbreak that emerged in mid-2022. Chapter 5 discusses these findings within the framework of studentification and destudentification literature, and conclusions thereto are drawn in Chapter 6.

5. Discussion of findings

5.1 Introduction to discussion of findings

In Chapter 4, the insights from the data collected through semi-structured interviews with key informants and field observations were presented. Notably, qualitative data analysis was employed to derive codes and common themes in respect of the spatial dimension of Westdene, a residential neighbourhood adjacent to the largest campus of the University of Johannesburg (UJ), the Auckland Park Kingsway (UJ APK) Campus, defined as a university town. This current chapter summarises the findings of the research, by discussing the mean of the case study results in relation to the reviewed theoretical body of knowledge. More specifically, the chapter discusses the findings from the collected data within the framework of studentification and destudentification literature. The discussion of the findings is broken down into the common themes derived inductively from the codes, which were categorised into the social, cultural, economic and physical factors making up the social dimension of Westdene, and embedded units of analysis. Essentially, the discussion considers the state of these factors prior to and during the coronavirus disease 2019 (COVID-19) pandemic, to draw conclusions thereto in Chapter 6.

5.2 Demographic structure of Westdene

The demographic structure of Westdene was derived as a common theme and subsequently categorised as a social factor. Notably, Smith, and Holt (2007) also categorised the demographic structure of the local population of a university town as a social factor affected by the conceptual process of studentification. All of the interviewees had observed or were aware of a noticeable increase in the off-campus student population in Westdene from the early 2000s, amidst an increase in the student enrolments at UJ and lack of adequate on-campus student accommodation. Historically, the increase in the off-campus student population in Westdene contributed to the neighbourhood being known as a university town (Gregory & Rogerson, 2019a). Furthermore, Interviewee SH3 observed that “some residents sold their houses (to private student housing investors) due to not being able to live (alongside) student populations”, implying a decrease in the number of established residents over time. This replacement of established residents in Westdene by students corroborated with findings from studentification literature that rapid population and demographic restructuring are often observed in neighbourhoods that experience notable in-migration of students (see Sage, Smith & Hubbard, 2012a; Smith & Holt, 2007; Smith, Sage & Balsdon, 2014).

All of the interviewees observed that the advent of COVID-19 led to a dramatic decrease in the off-campus student population in Westdene, amidst study-at-home policies. These study-at-home policies saw the forced decampment of students back to their homes, as many vacated their term-time accommodation (UJ, 2021). This sudden decrease in the off-campus student population in Westdene mirrored other cases globally, wherein higher education institution (HEI)

closures during the COVID-19 pandemic resulted in the mass displacement and repatriation of students (see World Bank, 2020a; 2020b). Despite students being allowed to return to their term-time accommodation later in the COVID-19 pandemic, the off-campus student population in Westdene still remained low. Notably, two of the POSA owners suspected that purpose built student accommodation (PBSAs) in nearby areas also lowered the off-campus student population in Westdene. This decrease in the off-campus student population in Westdene during the COVID-19 pandemic corroborated with findings from destudentification literature that alternative student term-time accommodation preferences and choices can lead to the depopulation of and social decline in previously studentified areas (see Hubbard, 2009; Kinton, 2013; Kinton, Smith & Harrison, 2016; Kinton et al., 2018; Mulhearn & Franco, 2018; Sage, Smith & Hubbard, 2012a; 2013; Smith, 2008).

5.3 Safety and security within Westdene

Another common theme that was derived and subsequently categorised as a social factor was that of the safety and security within Westdene. Notably, Smith and Holt (2007) also categorised aspects relating to the safety and security within a university town, such as the effectiveness of crime prevention strategies and self-policing, and trends of criminal activity, as social factors affected by the conceptual process of studentification. All of the local business owners/representatives agreed that, historically, customers in Westdene were often deterred by crime, and the presence of vagrants and drug dealers near some businesses. Furthermore, one of the POSA owners attributed the drugs, gangs and crime in Westdene to unresolved social problems (e.g. unemployment) in adjacent neighbourhoods. However, two of the community engagement and policing forum members cautioned that criminal activities in Westdene were often committed by (young) non-student residents from illegal communes/houses in multiple occupation (HMOs) and adjacent neighbourhoods. Essentially, students were often victims of criminal activities, and rarely perpetrators thereof. These safety and security issues in Westdene corroborated with findings by Hubbard (2009) and Kenyon (1997) that criminal activities tend to be higher in university towns, particularly where private student housing are located.

Some of the interviewees observed that the advent of COVID-19 led to a dramatic decrease in criminal activities in Westdene, amidst a decrease in the off-campus student population therein. More specifically, Interviewee GC3 stated that “low movement (during the COVID-19 pandemic) definitely helped decrease crime (in Westdene)”, adding that a concurrent increase in police visibility also assisted in dropping the crime rate. Notably, the researcher observed several other crime prevention, deterrent and awareness measures throughout Westdene. These safety and security measures notwithstanding, several persons encountered by the researcher during the observational walkabouts in Westdene advocated for vigilance due to potential criminals abound. Similarly, one of the community engagement and policing forum members observed that criminal activity in Westdene began increasing as COVID-19 regulations were progressively eased, and increased movements were allowed. These fluctuating levels of criminal activities in

Westdene corroborated with findings by Kinton, Smith and Harrison (2016) that studentified and destudentified areas experience varying levels of crime. Furthermore, private student housing in Westdene, particularly HMOs, were prone to becoming targets for criminals when unoccupied during the COVID-19 pandemic, which corroborated with the findings by Kenyon (1997) regarding the vulnerability of private student housing during prolonged recess periods.

5.4 Lifestyle behaviours within Westdene

The lifestyle behaviours within Westdene were collectively derived as a common theme and subsequently categorised as cultural factors. Notably, Smith and Holt (2007) also categorised the activities, lifestyles and associated facilities within a university town as cultural factors affected by the conceptual process of studentification. One of the local business owners/representatives noted that, historically, some families living in Westdene were put off by certain actions by students, which also deterred their customers, including: loud music (from private student housing and entertainment hotspots frequented by students); littering of alcohol bottles on the street; and rowdiness. Similarly, Interviewee GC2 noted that some students had “parties (in HMOs) until godforsaken hours...(leading to) mess in the streets and noise”. Notwithstanding the noise pollution from some private student housing and entertainment hotspots, one of the community engagement and policing forum members also attributed excessive noise at some entertainment hotspots in Westdene to other youth (e.g. young professionals), amidst by-law infringements. These occurrences thus corroborated with the findings by Sabri and Ludin (2009) that the geographic concentration of students sometimes encourages a ‘pub-culture’ in an area, which serves as a pull factor for students to locate therein.

Most of the interviewees observed that the advent of COVID-19 led to a dramatic decrease in the student activities observed in Westdene, amidst a decrease in the off-campus student population and closure of UJ student facilities and entertainment hotspots therein. More specifically, Interviewee GC1 stated that “it was a lot quieter because there was less activity in general (as) people (remained) in their properties (and) quite a lot of students were not (in Westdene as) they went home”. Furthermore, the UJ sports facilities in Westdene hosted limited activities during the COVID-19 pandemic, even after the easing of COVID-19 regulations to allow outdoor activities. This decrease in student activities in Westdene corroborated with the findings from destudentification literature that the closure of student-oriented services and facilities can lead to cultural decline in previously studentified areas (see Hubbard, 2009; Kinton, 2013; Kinton, Smith & Harrison, 2016; Kinton et al., 2018; 2013; Smith 2008). Notably, the researcher observed signs of parties/social gatherings at some private student housing properties. These occurrences mirrored other cases globally, wherein rising cases of COVID-19 within university towns were attributed to ‘reckless and risky’ student behaviours observed therein (see Brulliard, 2020; Jang, 2020; Lumpkin, 2020; Soaita, 2021).

5.5 Business activity within Westdene

The business activity within Westdene was derived as a common theme and subsequently categorised as an economic factor. Notably, Smith and Holt (2007) also categorised the supply and demand for housing, products and services within a university town as economic factors affected by the conceptual process of studentification. Most of the interviewees had observed or were aware of a noticeable increase in the business activity in Westdene from the early 2000s, amidst an increase in the student enrolments at UJ. More specifically, all of the POSA owners noted the contribution of private student housing policies promulgated by UJ (see UJ, 2015; 2016) and the City of Johannesburg (CoJ) (see CoJ, 2009) to the business activity within their sector. Similarly, one of the local business owners/representatives indicated that they moved their business from another area to Westdene, to be closer to the student consumers stemming from the UJ APK Campus. This growth in student-orientated business activity within Westdene over time corroborated with the findings by Chatterton (2010b:511) regarding the growth of the student urban service sector, where “whole swathes of city centres become dedicated to servicing students, especially in terms of retail, entertainment and leisure.”

All of the POSA owners observed that the advent of COVID-19 led to a dramatic decrease in the business activity within their sector in Westdene, amidst study-at-home policies. Notably, POSAs were guaranteed full NSFAS payments for students who vacated their properties and thereafter studied from home, however, this allowance was only for 2020, and excluded non-UJ-accredited private student housing providers. Furthermore, Interviewee SH2 stated that “2021 was a nightmare, it was our worst year ever; we were probably not more than 55% occupied...the reason for that was (UJ) gave students (cellular) data per month to study from home...and hence our income was also around 60%”. These business challenges mirrored other cases globally, wherein study-at-home policies during the COVID-19 pandemic also led to decreasing leasing rates and revenues in private student housing (see American Campus Communities, 2020; Evans, Rosewall & Wong, 2020; EY, 2020; Lam & Chen, 2021; Pomeroy, 2020; Putzier, 2020; Seltzer, 2020). This decreased business activity corroborated with the findings from destudentification literature that decreasing student populations can lead to decreasing rentals and economic decline in previously studentified areas (see Kinton, 2013; Kinton, Smith & Harrison, 2016; Kinton et al., 2018; Mulhearn & Franco, 2018; Smith, 2008).

All of the local business owners/representatives observed that the advent of COVID-19 led to a dramatic decrease in the business activity within their industry in Westdene, amidst a decrease in the off-campus student population and restrictions to business operations. Furthermore, numerous local businesses in Westdene, including those of the interviewees, closed temporarily and/or permanently during the COVID-19 pandemic, as observed. These business interruptions mirrored other cases globally, wherein local businesses in university towns faced revenue losses during the COVID-19 pandemic, due to decreases in student populations and restrictions to business operations (see Ha, 2020; Harris, 2020; Jackson Jr., 2020; Richmond, 2020; Sullivan, 2020; Wong, 2020). Furthermore, Interviewee LB3 noted that “there’s usually a

dip (in students) during university closures but the (COVID-19) pandemic made it worse, especially in the beginning when students left.” This decreased business activity corroborated with the findings from destudentification literature that decreasing student populations can lead to business closures and economic decline in previously studentified areas (see Kinton, 2013; Kinton, Smith & Harrison, 2016; Kinton et al., 2018; Mulhearn & Franco, 2018; Smith, 2008). Notably, the local business owners/representatives noted that the COVID-19 pandemic sparked new/improved business models, with new businesses potentially entering Westdene.

5.6 Physical and environmental conditions within Westdene

The physical and environmental conditions within Westdene were collectively derived as a common theme and subsequently categorised as physical factors. Notably, Smith and Holt (2007) also categorised the properties and external environment within a university town as physical factors affected by the conceptual process of studentification. With reference to the establishment of UJ and subsequent student housing demand, Interviewee SH2 observed that “a lot of unscrupulous (property owners) exploited the situation...without complying with any by-laws or municipal provisions...didn’t go through the rezoning process...(and) made changes to the properties without approved building plans”. Furthermore, Interviewee GC2 mentioned that “(Westdene residents) had problems with infrastructure in the neighbourhood...because (the infrastructure therein) hadn’t catered for (the increase in the number of) students”. From an environmental perspective, one of the local business owners/representatives noted that, historically, some families and customers in Westdene were repulsed by alcohol bottles littered on the street by students. These physical and environmental issues in Westdene corroborated with findings from studentification literature that physical and environmental degradation are often observed in neighbourhoods with a high concentration of students (see Sage, Smith & Hubbard, 2012a; Smith & Holt, 2007; Smith, Sage & Balsdon, 2014).

None of the interviewees mentioned whether the advent of COVID-19 led to any significant change in the physical and environmental conditions within Westdene. Despite evidence of the maintenance and/or improvement of various properties in Westdene, the researcher observed that some residential properties were quite dilapidated, with graffiti spotted on some properties’ walls, including UJ student facilities. Furthermore, the researcher observed public infrastructure concerns throughout the neighbourhood, including: drains near private student housing and local businesses clogged by litter; damaged and unkept pedestrian walkways; vandalised/tampered utility power poles and electricity meter boxes; and marketing material plastered on public infrastructure. These infrastructure challenges mirrored other cases globally, wherein municipalities with university towns were unable to adequately scale public services thereto during the COVID-19 pandemic, with budget cuts therein triggering widespread socioeconomic impacts (see Ha, 2020; Harris, 2020; Richmond, 2020). Notably, some of the interviewees raised concerns about Westdene becoming/being perceived as a run-down area.

These recurring concerns corroborated with the findings from destudentification literature that decreasing student populations and neighbourhood maintenance can lead to physical and environmental decline in previously studentified areas (see Kinton, 2013; Kinton, Smith & Harrison, 2016; Kinton et al., 2018; Mulhearn & Franco, 2018; Smith, 2008).

5.7 Summary of discussion of findings

This chapter provided a discussion of the findings from the collected data, within the framework of the reviewed literature on studentification and destudentification. More specifically, the discussion focused on the common themes derived inductively from the codes, namely: demographic structure; safety and security; lifestyle behaviours; business activity; and physical and environmental conditions. Notably, these themes were categorised into the social, cultural, economic and physical factors making up the spatial dimension of Westdene, and embedded units of analysis. The findings in respect of the spatial dimension of Westdene prior to the COVID-19 pandemic primarily supported studentification literature, given various occurrences noted in Westdene, including: rapid population and demographic restructuring; increased criminal activities; incompatible lifestyles; increased business activity; and increased physical and environmental issues. Contrastingly, the advent of COVID-19 led to various occurrences noted in Westdene that primarily supported destudentification literature, including: student depopulation; fluctuating levels of criminal activities; decrease in student activities; decreased business activity; and decreasing neighbourhood maintenance. Chapter 6 thus draws conclusions on the basis of this discussion and presents proposals for further research.

6. Conclusions and recommendations

6.1 Introduction to conclusions and recommendations

Chapter 1 outlined the motivation for the research, following which the existing academic understandings of the subject of the study were comprehensively reviewed in Chapter 2. Thereafter, Chapter 3 clarified the research methodology, describing the chosen data collection and analysis techniques, associated ethical considerations, and strengths and limitations of the research approach. The insights from the collective data that were accumulated and analysed through the prescribed techniques were subsequently presented in Chapter 4, and discussed further in Chapter 5. This current chapter formulates a global conclusion from the research, by integrating the verdicts of each chapter in a coherent fashion. The formulation of a global conclusion commences with the reiteration of the background to the research and a recap on how the defined research objectives were met. This recap is followed by responses to the research question and proposition, and a discussion of the implications of the research findings thereafter. The chapter then acknowledges the limitations of the research, and concludes with recommendations of possible directions for future research.

6.2 Research background and purpose

As highlighted in Chapter 1, and discussed further in Chapter 2, the coronavirus disease 2019 (COVID-19) affected every aspect of society. However, the areas hosting higher education institutions (HEIs) and their students, termed university towns, faced unique challenges due to their target market and composition. Whilst several studies conceptualised the transformations within university towns, these explorations were primarily based on university towns in the Global North, with limited research in the Global South in general, and South Africa in particular. Furthermore, there was no empirical evidence on the effect of COVID-19 on the spatial dimension of South African university towns, particularly in Johannesburg, the country's largest city. The aim of this research was thus to explore the effect of COVID-19 on the spatial dimension of Westdene, a residential neighbourhood adjacent to the largest campus of the University of Johannesburg (UJ), the Auckland Park Kingsway (UJ APK) Campus, defined as a university town, through the conceptual lens of studentification and destudentification. Within the overall aim, the research objectives to be achieved were:

- i) Explore the meaning and evolution of the spatial dimension of a university town.
- ii) Examine the role of the COVID-19 pandemic in the spatial dimension of Westdene attributable to the UJ student population therein.
- iii) Substantiate the effect of the COVID-19 pandemic on the spatial dimension of Westdene, through the conceptual lens of studentification and destudentification.

6.2.1 Exploration of meaning and evolution of spatial dimension

The first objective of this research was to explore the meaning and evolution of the spatial dimension of a university town. This objective was achieved through a comprehensive review of existing understanding of university towns and associated spatial dimension in Chapter 2. This literature review commenced with the definition of the term ‘spatial dimension’. Notably, Donaldson et al. (2014) referred to the combination of the social, cultural, economic and physical factors attributable to student populations in student-dominated areas, termed university towns, as the ‘spatial dimension’. Furthermore the social, cultural, economic and physical factors attributable to increasing student populations in university towns was conceptualised through ‘studentification’ (see Smith, 2005; Smith & Holt, 2007; Smith, Sage & Balsdon, 2014). Conversely, Smith (2008) identified a phenomenon termed ‘destudentification’, which was defined it as the reduction of the student population within a previously student-dominated or studentified neighbourhood, leading to the decline in social, cultural, economic, and physical attributes thereof. Despite their significance, these concepts were widely explored in university towns in the Global North, with limited research in the Global South in general, and South Africa in particular.

6.2.2 Examination of role of COVID-19 in spatial dimension of Westdene

The second objective of this research was to examine the role of the COVID-19 pandemic in the spatial dimension of Westdene attributable to the UJ student population therein. This objective was achieved through an embedded single-case study research strategy, employing a multi-method qualitative research approach. Essentially, semi-structured interviews with key informants and field observations were adopted for the empirical exploration of the social, cultural, economic and physical factors making up the social dimension of Westdene, and embedded units of analysis. The interviews focused and reflected on the experiences and interpretations of owners of UJ-accredited privately owned student accommodation (POSAs), owners/representatives of local businesses, and members of community engagement and policing forums. Photographs taken in the field complemented the interviews by depicting various aspects of and within Westdene relevant to the study, including: UJ APK Campus and its associated student facilities; identifiable private student housing; local businesses; public space and infrastructure; general state of the environment; and neighbourhood safety and security measures. The collective data were subsequently analysed for discussion thereto. Notably, the rationale for the choice of the techniques and procedures encapsulated by the effective research methodology were underpinned by theoretical concepts of effective research designs and ethical research.

6.2.3 Substantiation of effect of COVID-19 on spatial dimension Westdene

The third objective of the research was to substantiate the effect of the COVID-19 pandemic on the spatial dimension of Westdene, through the conceptual lens of studentification and destudentification. This objective was achieved through a discussion of the findings from the collected data within the framework of studentification and destudentification literature. To aid this discussion, common themes were derived inductively from codes representing insights from the collected data, namely: demographic structure; safety and security; lifestyle behaviours; business activity; and physical and environmental conditions. These themes were categorised into the social, cultural, economic and physical factors making up the social dimension of Westdene, and embedded units of analysis. Pattern matching was subsequently employed in the discussion of the findings, whereby the common themes derived inductively from the codes were compared to the themes deduced from studentification and destudentification literature. Notably, the findings in respect of the broad impact of COVID-19 on other university towns, which were discussed in Chapter 2, were also employed in the discussion of the findings of the case study. Essentially, the discussion considered the state of the social, cultural, economic and physical factors making up the social dimension of Westdene, prior to and during the COVID-19 pandemic.

6.3 Ripostes to the research question and preliminary proposition

As outlined in Chapter 1, the research question for which answers were sought was:

What was the effect of COVID-19 on the spatial dimension of Westdene?

The preliminary research proposition advanced in Chapter 1 was:

The COVID-19 pandemic negatively affected the spatial dimension of Westdene, on the basis of the resultant social, cultural, economic and physical factors attributable to the UJ student population therein.

The research proposition was underpinned by the literature reviewed in respect of the introduction and subject of this research, prior to the case study. More specifically, the literature reviewed earlier revealed that whilst every aspect of society was affected by COVID-19, the areas hosting higher education institutions (HEIs) and their students, termed ‘university towns’, faced unique challenges due to their target market and composition. These challenges were underpinned by global HEI closures, which led to the mass displacement and repatriation of students (World Bank, 2020a; 2020b). The forced decampment of students back to their homes, pursuant to study-at-home policies, affected student accommodation and other student services (United Nations Educational, Scientific and Cultural Organization, UNESCO, 2020b). In the case of Johannesburg, the advent of COVID-19 led to a sharp decrease in student housing occupancy rates, particularly in POSAs (UJ, 2021). Subsequently, UJ decided not to consider

new POSA applications in 2021, due to low demand thereof (Mabuza, 2021). This change in the number of UJ students residing off campus in Johannesburg during the COVID-19 pandemic implied a subsequent effect on the spatial dimension thereto, particularly in the areas near to the UJ APK Campus. However, there was no empirical evidence thereto.

To answer the research question, this study set out to explore the effect of COVID-19 on the spatial dimension of Westdene through the conceptual lens of studentification and destudentification. The findings in respect of the spatial dimension of Westdene prior to the COVID-19 pandemic primarily supported studentification literature, given various occurrences noted in Westdene, including: rapid population and demographic restructuring; increased criminal activities; incompatible lifestyles; increased business activity; and increased physical and environmental issues. These occurrences that corroborated with the findings from studentification literature were primarily influenced by the noticeable increase in the off-campus student population in Westdene from the early 2000s. Contrastingly, the advent of COVID-19 led to various occurrences noted in Westdene that primarily supported destudentification literature, including: student depopulation; fluctuating levels of criminal activities; decrease in student activities; decreased business activity; and decreasing neighbourhood maintenance. These occurrences that corroborated with the findings from destudentification literature were primarily influenced by the dramatic decrease in the off-campus student population in Westdene, amidst study-at-home policies, and the closure of student-oriented services and facilities.

The findings of the case study established that the occurrences noted in Westdene during the COVID-19 pandemic mirrored other cases of university towns globally. Notwithstanding the occurrences noted in Westdene during the COVID-19 pandemic that corroborated with the findings from destudentification literature, some current and potential ‘positive’ occurrences therein were also noted, including: new opportunities for developers in the local private student housing market; new/improved business models (i.e. ‘new ways of doing business’); opportunities for new businesses to enter Westdene; collaborative safety and security programmes; spatial development projects geared towards improving diversity and physical appearance of Westdene. In light of these positive occurrences, which may be spurred by the progressive easing of COVID-19 regulations, the proposition that COVID-19 (only) negatively affected the spatial dimension of Westdene was not validated. However, the spatial dimension of Westdene may take time to (or never) return to the state noted prior to the COVID-19 pandemic, given other ongoing changes in and/or near the neighbourhood. These findings thus bring to the fore two further critical propositions, buttressed by the existing body of knowledge:

- i) Westdene may have experienced (and continues to experience) ‘pandemic-induced destudentification’, given the social, cultural, economic and physical factors noted therein, and the duration of the COVID-19 pandemic being longer than typical recess periods.
- ii) Westdene may experience ‘POSA-induced destudentification’, given the rapid increase in POSAs in general, and purpose built student accommodation (PBSAs) in particular, noted in nearby areas, which threaten student communes/houses in multiple occupation (HMOs).

6.4 Implications of the research findings

This research was justified in Chapter 1 on the basis of its contribution to knowledge and practical importance, with various discussed factors leading to the conclusion that this research was timely in its exploration. Notably, there are few cases where scholarship on towns and cities that host HEIs was explored alongside the empirical realities of the Global South in general, and South Africa in particular. Moreover, there is no empirical evidence on the impact of the COVID-19 pandemic on the spatial dimension of South African university towns, particularly those in Johannesburg. There was thus sufficient scope for such research in urban studies in general, and discourses on studentification and destudentification in particular. This scope was further supported by the numerous measurable benefits that exist for researchers who adopt the results of this research. These benefits include new impetus for the creation (or enhancement) of a conceptual framework to unpack the spatial dimension of university towns, during a global crisis.

Over and above the benefits of this research to academia, it may also lead to the realisation of equitable and sustainable objectives within university towns. In the case where this research's findings are successfully interpreted, local governance bodies may apply them to their envisaged urban planning, development, management, and resilience goals. In addition, strategic stakeholders within HEIs and their host areas may be informed by sound research when navigating the emerging challenges of university towns. Essentially, this research will add to the informed basis whence post-COVID-19 decision-making involving all stakeholders of university towns stems. More specifically, congruency amongst stakeholders of university towns is viewed as a logical solution, both for the present and the foreseeable future. The long-term direct benefit of this research will thus be the realisation of various targets linked to desirable spatial dimensions of university towns in South Africa in general, and Johannesburg in particular. Notably, these targets may consider other pertinent matters that the key informants were provided an opportunity to speak about, including: densification of Westdene; inadequate/poor municipal services; incoherent spatial development visions; inadequate/poor environmental management; unresolved social problems; inefficient policing; collapse of municipal infrastructure; inconsistent POSA accreditation; and unregulated/illegal private student housing and businesses.

6.5 Research limitations

This research was particularly limited by the availability of time and resources (e.g. the researcher's personal finances). More specifically, these constraints contributed to the decision to employ a cross-sectional perspective, as opposed to a longitudinal 'in situ' approach, for this research. This time horizon saw the data collection confined to a short period, and the research participants being selected key informants within Westdene, as opposed to all stakeholders located near UJ campuses. In addition to the effect of time and resource constraints on the sampling, the ongoing COVID-19 pandemic also rendered some sought research participants unreachable, and parts of the study area inaccessible. Furthermore, an unwillingness to provide

deep personal insights was evident in this research, particularly when questions on the business performance of private student housing and local businesses were put to owners/representatives thereof. Whilst the key informants were required to be objective and without bias, the information obtained through the semi-structured interviews in this research may be seen as being subjective, due to the research participants providing their own opinions, with no restrictions thereto. Notwithstanding that the findings of the single-case study may not lend themselves to results that are generalisable, they may inform similar research in future.

6.6 Suggested further research

The primary limitations noted in this study can be addressed by future studies, including:

- i) Employing a larger and truly representative sample from all the neighbourhoods and stakeholders located near UJ campuses, to increase the generalisability of the results.
- ii) Using a longitudinal 'in situ' approach to observe and gather data on Westdene for a longer period of time, to more accurately deduce the change in the spatial dimension thereof.
- iii) Utilising additional data collection methods and sources, to cater for key information not shared by the research participants and reduce the (inherent) subjectivity of the findings.

Given the shorter and/or temporary presence of UJ students in Westdene, they were not considered as key informants in this research and their perspectives were thus excluded. However, the needs, preferences and expectations of students could be considered in future research, given the rapid increase in POSAs in general, and PBSAs in particular, noted in nearby areas, which may lead to (further) destudentification in Westdene. Whilst a saturation point was believed to have been reached in the collected data, other sought persons who were unable to be included as key informants in this research may be considered in future studies, including: private student housing owners and local business owners who ceased operations in Westdene during the COVID-19 pandemic; other municipal officials; and (previous) members of the (presumably disbanded) Westdene-Sophiatown Residents' Association (WSRA). These potential research participants may provide relevant and rich insights into various matters discussed with the key informants, including: closed private student housing and local businesses; unregulated/illegal communes; and student–resident relationships. In addition to addressing the limitations relating to the sampling of this study, future studies may also consider the ambiguities relating to the COVID-19 pandemic in 2022 and multi-country monkeypox outbreak that emerged in mid-2022.

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Appendices

Appendix A: semi-structured interview questions

Macua, K, 2022, MPhil Urban Infrastructure: Design and Management (University of Cape Town) minor dissertation: “An investigation into the effect of COVID-19 on the spatial dimension of a South African university town: the case of Westdene”.

A: Questions for private student housing providers (with follow-up questions if needed):

- 1.) How long have you been supplying student accommodation in Westdene?
- 2.) When did private student accommodation within Westdene become noticeable?
- 3.) With reference to the period mentioned in question 1, how would you describe the student housing market within Westdene between that period and 2020? Answer in relation to:
 - Growth of private student housing developments.
 - Students’ off-campus accommodation patterns.
- 4.) How would you describe the student housing market within Westdene between 2020 and 2021? Answer in relation to:
 - Growth of private student housing developments.
 - Students’ off-campus accommodation patterns.
- 5.) If there was a difference between what you mentioned in question 2 and question 3, what do you think might be responsible for this?
- 6.) How is the student housing market within Westdene currently? Answer in relation to:
 - Growth of private student housing developments.
 - Students’ off-campus accommodation patterns.
- 7.) If there was a difference between what you mentioned in question 4 and question 6, what do you think might be responsible for this?
- 8.) What do you foresee occurring in the student housing market within Westdene from 2023 and onwards, and why? Answer in relation to:
 - Growth of private student housing developments.
 - Students’ off-campus accommodation patterns.
- 9.) Thank you for your time and participation; is there anything else you would like to say?

Macua, K, 2022, MPhil Urban Infrastructure: Design and Management (University of Cape Town) minor dissertation: “An investigation into the effect of COVID-19 on the spatial dimension of a South African university town: the case of Westdene”.

B: Questions for local businesses (with follow-up questions if needed):

- 1.) How long have you been operating your businesses in Westdene?
- 2.) When did businesses that target student consumers within Westdene become noticeable?
- 3.) With reference to the period mentioned in question 1, how would you describe the local economy within Westdene between that period and 2020? Answer in relation to:
 - Growth of local businesses targeting student consumers.
 - Students’ consumer patterns.
- 4.) How would you describe the local economy within Westdene between 2020 and 2021? Answer in relation to:
 - Growth of local businesses targeting student consumers.
 - Students’ consumer patterns.
- 5.) If there was a difference between what you mentioned in question 2 and question 3, what do you think might be responsible for this?
- 6.) How is the local economy within Westdene currently? Answer in relation to:
 - Growth of local businesses targeting student consumers.
 - Students’ consumer patterns.
- 7.) If there was a difference between what you mentioned in question 4 and question 6, what do you think might be responsible for this?
- 8.) What do you foresee occurring in the local economy within Westdene from 2023 and onwards, and why? Answer in relation to:
 - Growth of local businesses targeting student consumers.
 - Students’ consumer patterns.
- 9.) Thank you for your time and participation; is there anything else you would like to say?

Macua, K, 2022, MPhil Urban Infrastructure: Design and Management (University of Cape Town) minor dissertation: “An investigation into the effect of COVID-19 on the spatial dimension of a South African university town: the case of Westdene”.

C: Questions for community bodies (with follow-up questions if needed):

- 1.) How long have you been based in Westdene?
- 2.) When did off-campus student residents within Westdene become noticeable?
- 3.) With reference to the period mentioned in question 1, how would you describe the student-populated areas within Westdene between that period and 2020? Answer in relation to:
 - Concerns and/or turnover of established residents.
 - Growth of student lifestyles and nightlife.
- 4.) How would you describe the student-populated areas within Westdene between 2020 and 2021? Answer in relation to:
 - Concerns and/or turnover of established residents.
 - Growth of student lifestyles and nightlife.
- 5.) If there was a difference between what you mentioned in question 2 and question 3, what do you think might be responsible for this?
- 6.) How is the student-populated areas within Westdene currently? Answer in relation to:
 - Concerns and/or turnover of established residents.
 - Growth of student lifestyles and nightlife.
- 7.) If there was a difference between what you mentioned in question 4 and question 6, what do you think might be responsible for this?
- 8.) What do you foresee occurring in the student-populated areas within Westdene from 2023 and onwards, and why? Answer in relation to:
 - Concerns and/or turnover of established residents.
 - Growth of student lifestyles and nightlife.
- 9.) Thank you for your time and participation; is there anything else you would like to say?

Macua, K, 2022, MPhil Urban Infrastructure: Design and Management (University of Cape Town) minor dissertation: “An investigation into the effect of COVID-19 on the spatial dimension of a South African university town: the case of Westdene”.

D: Questions for local authorities (with follow-up questions if needed):

- 1.) How long have you been serving the community of Westdene?
- 2.) When did the overall student space within Westdene become noticeable?
- 3.) With reference to the period mentioned in question 1, how would you describe the student-populated areas within Westdene between that period and 2020? Answer in relation to:
 - Trends of criminal activity and/or public ‘nuisance’ involving students.
 - Growth of public services catering for the student population.
- 4.) How would you describe the student-populated areas within Westdene between 2020 and 2021? Answer in relation to:
 - Trends of criminal activity and/or public ‘nuisance’ involving students.
 - Growth of public services catering for the student population.
- 5.) If there was a difference between what you mentioned in question 2 and question 3, what do you think might be responsible for this?
- 6.) How is the student-populated areas within Westdene currently? Answer in relation to:
 - Trends of criminal activity and/or public ‘nuisance’ involving students.
 - Growth of public services catering for the student population.
- 7.) If there was a difference between what you mentioned in question 4 and question 6, what do you think might be responsible for this?
- 8.) What do you foresee occurring in the student-populated areas within Westdene from 2023 and onwards, and why? Answer in relation to:
 - Trends of criminal activity and/or public ‘nuisance’ involving students.
 - Growth of public services catering for the student population.
- 9.) Thank you for your time and participation; is there anything else you would like to say?

Appendix B: codes and themes from qualitative data analysis

Table A-1: Codes and common themes derived inductively from the collected data

Source	Code	Common theme
POSA owners	History of private student housing	Business activity
	Quality of private student housing offerings	Physical and environmental conditions
	Influence of policies on private student housing growth	Business activity
	Complaints against private student housing	Lifestyle behaviours
	Guaranteed NSFAS payments during COVID-19 pandemic	Business activity
	Private student housing occupancy rates during COVID-19 pandemic	Business activity
	Students' term-time accommodation choices during COVID-19 pandemic	Demographic structure
	Future spatial development projects	Business activity
	Safety and security concerns	Safety and security
	State of public infrastructure	Physical and environmental conditions
Local business owners/representatives	History of local businesses	Business activity
	Patronage of student consumers	Business activity
	Complaints against local businesses	Lifestyle behaviours
	Safety and security concerns	Safety and security
	Business closures during COVID-19 pandemic	Business activity
	Patterns of consumption during COVID-19 pandemic	Business activity
	External economic disruptions during COVID-19 pandemic	Business activity
	'New ways of doing business' during COVID-19 pandemic	Business activity
	State of public infrastructure	Physical and environmental conditions
Community engagement and policing forum members	History of off-campus student population presence	Demographic structure
	History of demographic change	Demographic structure
	Legality of private student housing	Business activity

Source	Code	Common theme
	History of entertainment hotspots	Lifestyle behaviours
	Complaints against student entertainment	Lifestyle behaviours
	Safety and security concerns	Safety and security
	Adherence to COVID-19 regulations	Lifestyle behaviours
	Student activities during COVID-19	Lifestyle behaviours
	Business closures during COVID-19 pandemic	Business activity
	State of public infrastructure	Physical and environmental conditions
	State of external environment	Physical and environmental conditions
	Safety and security programmes	Safety and security

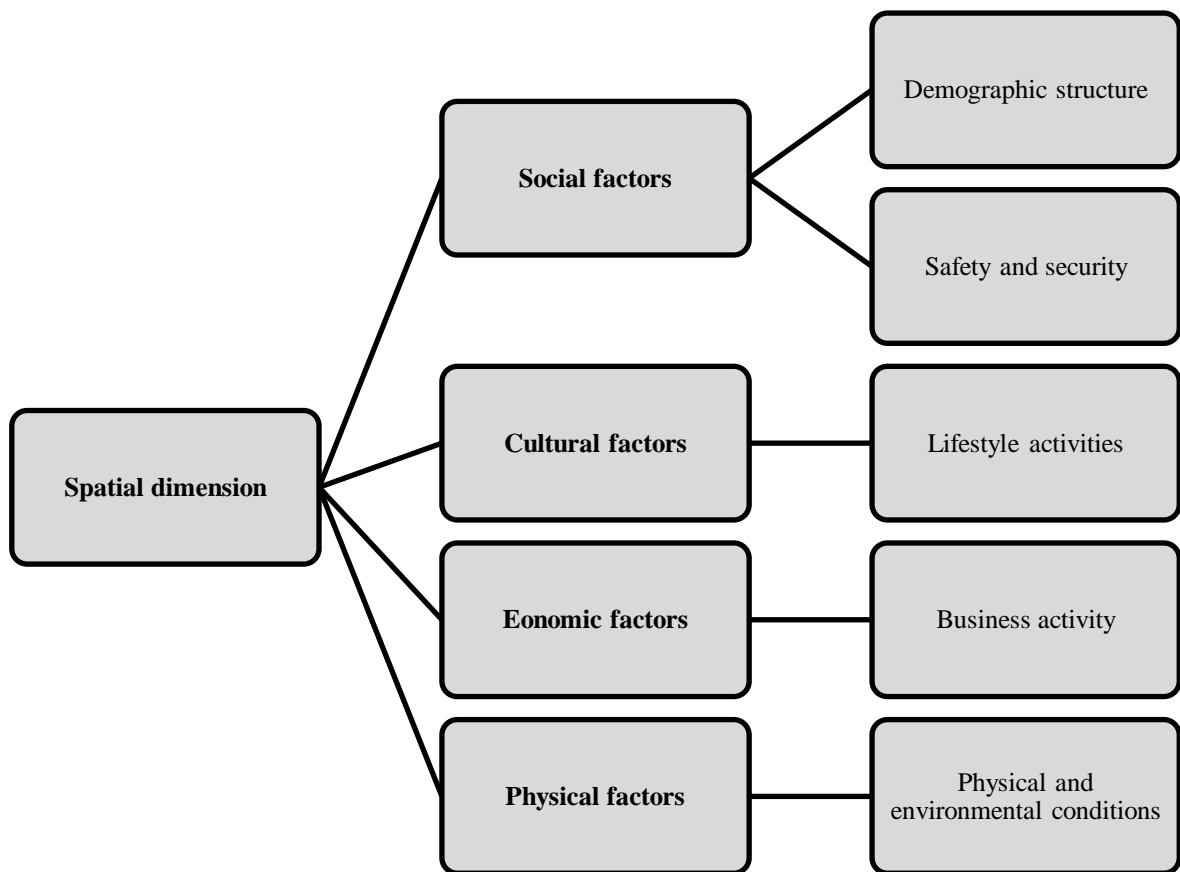


Figure A-1: Final theme structure for the spatial dimension of Westdene

Appendix C: evidence of ethics clearance

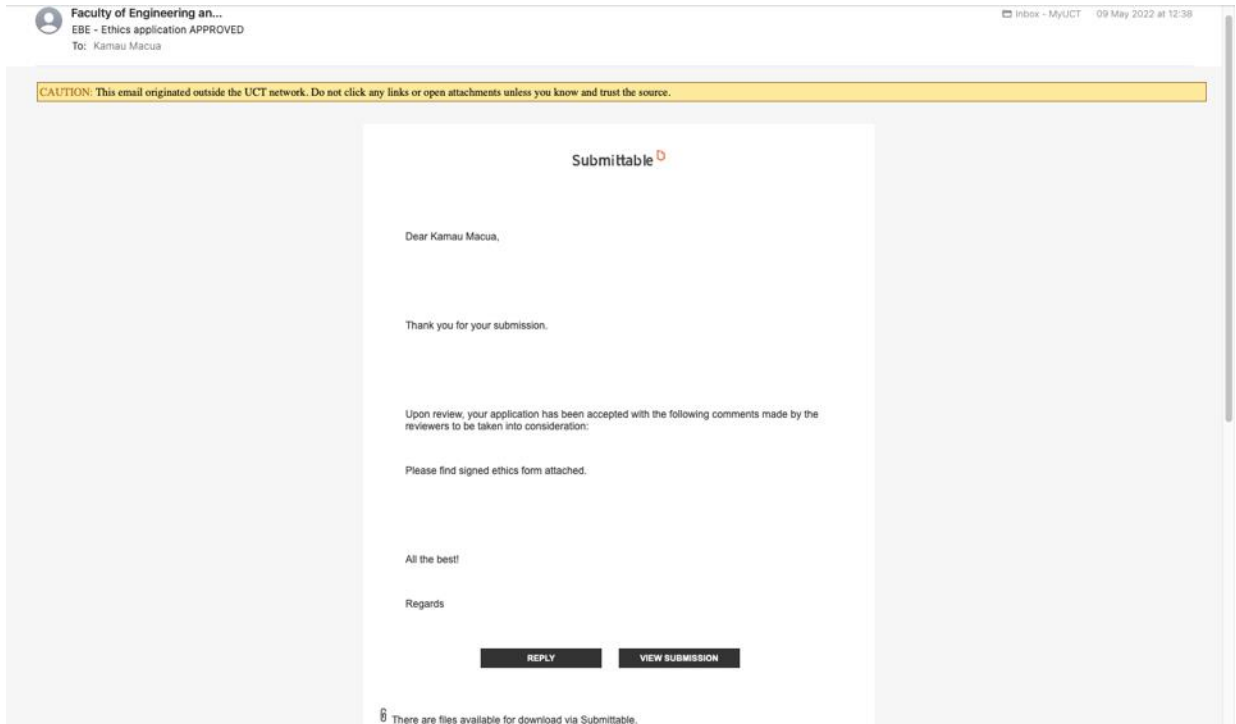


Figure A-2: Received confirmation email in respect of ethics clearance

Appendix D: informed consent form



CONSENT TO PARTICIPATE IN RESEARCH

An investigation into the effect of COVID-19 on the spatial dimension of a South African university town: the case of Westdene.

You are asked to participate in a research study conducted by Kamau Macua, from the Department of Civil Engineering at University of Cape Town (UCT), with supervision from the Department of Construction Economics and Management. The research is in partial fulfilment of the requirements for the degree Master of Philosophy in Urban Infrastructure: Design and Management. The results of this research study will contribute to a minor dissertation and may potentially contribute to a research paper, if so required. You were selected as a possible participant in this study because you are in a position to give meaningful insight into the social, cultural, economic and physical factors within Westdene attributable to the University of Johannesburg (UJ) student population therein, as a key stakeholder of the neighbourhood.

1. PURPOSE OF THE STUDY

The purpose of the study is to explore the effect of COVID-19 on the spatial dimension of Westdene in Westdene, a residential neighbourhood adjacent to the UJ Auckland Park Kingsway (APK) campus. This dimension comprises the social, cultural, economic and physical factors within Westdene attributable to the UJ student population therein.

2. PROCEDURES

If you volunteer to participate in this study, I would ask you to do the following things:

- Avail yourself for a short semi-structured interview.
- Answer interview questions posed to you as fully and honestly as possible.
- Share any supporting material that you feel may be beneficial to the study.

You will only be required to participate in one semi-structured interview, which will take approximately 45 minutes. The interview will be conducted either in person or virtually, via video or voice call, to alleviate any health and safety concerns you may have during the ongoing COVID-19 pandemic. Notably, the interview may also take place at any other location that may be more convenient for you, provided that COVID-19 measures are in place and adhered to.

3. POTENTIAL RISKS AND DISCOMFORTS

No foreseeable risks, discomforts or inconveniences that might affect you or the study were identified. Should any such concerns arise, you shall be notified promptly, prior to your interview.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

The benefits to you, expected from the research, include:

- Better understanding of the effect of COVID-19 on the various factors within Westdene making up the spatial dimension thereof.
- Alternative perspectives of the role of the UJ student population within Westdene in various factors within Westdene making up the spatial dimension thereof, and changes thereto.
- Informed basis from which to engage other key stakeholders of Westdene regarding the realisation of equitable and sustainable objectives within the neighbourhood.

Other benefits to science and society, expected from the research, include:

- Expansion of the research in urban studies in general, and discourses on studentification and destudentification in particular.
- New impetus for the creation (or enhancement) of a conceptual framework to unpack the spatial dimension of university towns, during a global crisis.
- Realisation of various targets linked to desirable spatial dimensions of university towns in South Africa in general, and Johannesburg in particular.

5. PAYMENT FOR PARTICIPATION

Your participation in this study is voluntary and you will not receive any payment for your participation.

6. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of substituting codes for participant identifiers and storing data in secured devices and on UCT's secure, access-controlled data repository services. Only the researcher will have access to these data storage locations.

Administrative and other teaching staff at UCT will neither be present during the interview nor have access to raw notes or transcripts of the interview. This precaution will prevent any of the findings having personal negative repercussions for you.

You will not be identified by name in the minor dissertation to be submitted, or any subsequent research paper or reports to be published using the information obtained from the interview. Your confidentiality as a research participant will remain secure.

Notes will be written during the interview and/or an audio taped, and you can decline to be recorded. You will also have the right to view and comment on the transcribed interview data before the findings are analysed. Subsequent uses of recordings and data will be subject to standard data use policies, which protect anonymity of individuals and institutions.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact the research supervisor, Mr. Uche Ordor, on +27 21 650 2453 or Uche.Ordor@uct.ac.za.

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, please feel free to contact the administrator of the UCT Faculty of Engineering & the Built Environment Ethics in Research (EBE EiR) Committee, Ms.Carlyn Hewitson, on Carlyn.Hewitson@uct.ac.za.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to [me/the subject/the participant] by _____ [name of relevant person] in [Afrikaans/English/Xhosa/other] and [I am/the subject is/the participant is] in command of this language or it was satisfactorily translated to [me/him/her]. [I/the participant/the subject] was given the opportunity to ask questions and these questions were answered to [my/his/her] satisfaction.

[I hereby consent voluntarily to participate in this study/I hereby consent that the subject/participant may participate in this study.] I have been given a copy of this form.

Name of Subject/Participant

Name of Legal Representative (if applicable)

Signature of Subject/Participant or Legal Representative **Date**

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ [name of the subject/participant] and/or [his/her] representative _____ [name of the representative]. [He/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in [Afrikaans/*English/*Xhosa/*Other] and [no translator was used/this conversation was translated into _____ by _____].

Signature of Investigator

Date

Appendix E: field observation photographs



Figure A-3: Permanently-closed ‘Last steps of UJ’



Figure A-4: Entrance to the UJ APK Campus on Perth Road/Kingsway Avenue



Figure A-5: UJ APK Campus off-campus student parking facility (left) with a pedestrian bridge (background) leading to the campus (right)



Figure A-6: Taxi (left) and e-hailing vehicles (right) dropping off UJ students



Figure A-7: Gloucester Female Residence (foreground) and UJ Stadium (background)



Figure A-8: UJ venues for netball and tennis (left), hockey (middle) and cricket (right)



Figure A-9: COVID-19 signage at the entrance to UJ student facilities



Figure A-10: Student commune/HMO (left) and a PBSA (right) opposite UJ on-campus residences (background)



Figure A-11: Series of student communes/HMOs (left) and a PBSA (right)

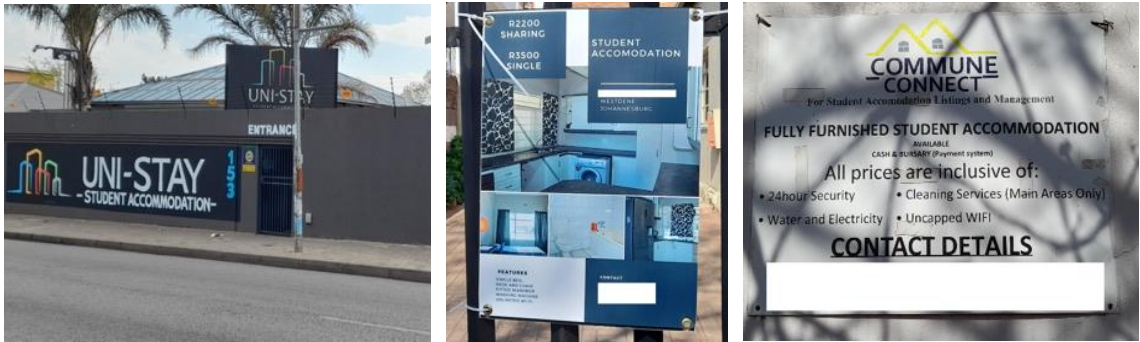


Figure A-12: Signage and marketing material advertising student accommodation



Figure A-13: Signage and marketing material advertising rental accommodation



Figure A-14: Student housing property (background) that was on the market



Figure A-15: Construction material outside private student housing properties



Figure A-16: Alcohol bottles discarded outside private student housing properties

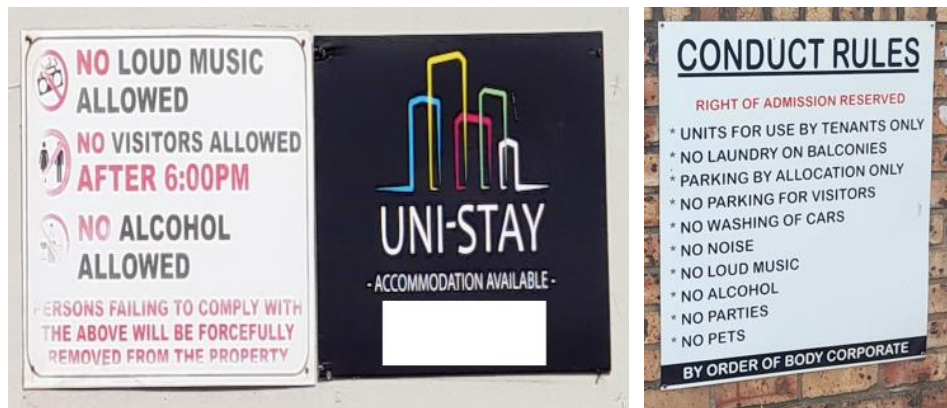


Figure A-17: Signage with conduct rules on private student housing and rental properties



Figure A-18: Local businesses near or adjacent to arterial and collector/distributor roads



Figure A-19: Local business with a trading name that includes the term “UJ”



Figure A-20: Mobile (left) and street (right) vendors



Figure A-21: Temporarily- and/or permanently-closed local businesses



Figure A-22: Local business premises that was on the market



Figure A-23: E-hailing drivers transporting passengers (left) and delivering food (right) to private student housing



Figure A-24: Taxis and tuk-tuk taxis transporting passengers to/from local businesses



Figure A-25: Construction material outside residential properties



Figure A-26: Residential property adjacent to UJ student facilities and private student housing that was on the market



Figure A-27: Advertisements for property sales and management services



Figure A-28: Dilapidated residential property

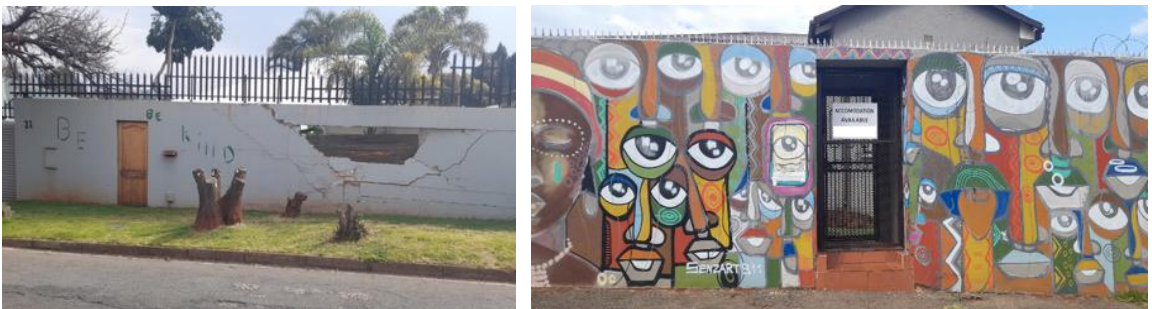


Figure A-29: Graffiti on residential properties' walls



Figure A-30: Graffiti on UJ student facilities' walls



Figure A-31: UJ Exiles Park (left) and the grounds of the Westdene Dam (right)



Figure A-32: Brightly-coloured bollards and dropped curbs at street intersections



Figure A-33: Drains clogged by litter (with water seeping on the right)



Figure A-34: damaged and/or unkept pedestrian walkways



Figure A-35: Marketing material plastered on public infrastructure



Figure A-36: Vandalised/tampered boxes atop utility power poles with connections leading to private student housing (left) and local businesses (right)



Figure A-37: Vandalised/tampered free-standing electricity meter boxes close to local businesses (left) and outside the Gloucester Female Residence (right)



Figure A-38: Road excavations that were fenced adequately (left) and poorly (right)



Figure A-39: Recycling sorted by a household (left) for on-demand collection (right)



Figure A-40: Students walking (left) and other youth skating (right) in quiet streets



Figure A-41: Private security guards (left) and police (right) vehicular patrols



Figure A-42: Community policing signage and public surveillance cameras



Figure A-43: Private security guardhouses on residential streets



Figure A-44: Private security measures at properties